■ TypeScript Project Code Export

■ TypeScript/TSX Files & Safe Config:

- [TSX] app\admin\comprehensive-admin.tsx - [TSX] app\admin\page.tsx - [TS] app\api\comprehensive-report-data\route.ts - [TS] app\api\report-data\route.ts - [TS] app\api\upload-image\route.ts - [TSX] app\layout.tsx - [TSX] app\page.tsx - [TSX] app\report\[id]\page.tsx - [TSX] app\report\pdf\page.tsx - [TSX] app\report\preview\page.tsx - [TSX] components\admin\allergies-sensitivity-admin.tsx - [TSX] components\admin\content-admin.tsx - [TSX] components\admin\diet-analysis-admin.tsx - [TSX] components\admin\digestive-health-admin.tsx - [TSX] components\admin\dynamic-diet-field-admin.tsx - [TSX] components\admin\dynamic-field-helpers.tsx - [TSX] components\admin\family-genetic-impact-admin.tsx - [TSX] components\admin\gene-results-admin.tsx - [TSX] components\admin\genes-addiction-admin.tsx - [TSX] components\admin\genetic-parameters-admin.tsx - [TSX] components\admin\import-export-admin.tsx - [TSX] components\admin\lifestyle-conditions-admin.tsx - [TSX] components\admin\metabolic-core-admin.tsx - [TSX] components\admin\nutrition-admin.tsx - [TSX] components\admin\patient-info-admin.tsx - [TSX] components\admin\pdf-generator.tsx - [TSX] components\admin\preventive-health-admin.tsx - [TSX] components\admin\report-content-admin.tsx - [TSX] components\admin\report-settings-admin.tsx - [TSX] components\admin\report-summaries-admin.tsx - [TSX] components\admin\settings-admin.tsx - [TSX] components\admin\sleep-rest-admin.tsx - [TSX] components\admin\sports-fitness-admin.tsx - [TSX] components\admin\summaries-admin.tsx - [TSX] components\comprehensive-report-viewer.tsx - [TSX] components\report-viewer.tsx - [TSX] components\theme-provider.tsx - [TSX] components\ui\accordion.tsx - [TSX] components\ui\alert-dialog.tsx - [TSX] components\ui\alert.tsx - [TSX] components\ui\aspect-ratio.tsx - [TSX] components\ui\avatar.tsx - [TSX] components\ui\badge.tsx - [TSX] components\ui\breadcrumb.tsx - [TSX] components\ui\button.tsx - [TSX] components\ui\calendar.tsx - [TSX] components\ui\card.tsx - [TSX] components\ui\carousel.tsx - [TSX] components\ui\chart.tsx - [TSX] components\ui\checkbox.tsx - [TSX] components\ui\collapsible.tsx - [TSX] components\ui\command.tsx - [TSX] components\ui\context-menu.tsx - [TSX] components\ui\dialog.tsx - [TSX] components\ui\drawer.tsx - [TSX] components\ui\dropdown-menu.tsx - [TSX] components\ui\form.tsx - [TSX] components\ui\hover-card.tsx - [TSX] components\ui\input-otp.tsx - [TSX] components\ui\input.tsx - [TSX] components\ui\label.tsx - [TSX] components\ui\menubar.tsx - [TSX] components\ui\navigation-menu.tsx - [TSX] components\ui\pagination.tsx - [TSX] components\ui\popover.tsx - [TSX] components\ui\progress.tsx - [TSX] components\ui\radio-group.tsx

- [TSX] components\ui\resizable.tsx
- [TSX] components\ui\scroll-area.tsx

- [TSX] components\ui\select.tsx
- [TSX] components\ui\separator.tsx
- [TSX] components\ui\sheet.tsx
- [TSX] components\ui\sidebar.tsx
- [TSX] components\ui\skeleton.tsx
- [TSX] components\ui\slider.tsx
- [TSX] components\ui\sonner.tsx
- [TSX] components\ui\switch.tsx
- [TSX] components\ui\table.tsx
- [TSX] components\ui\tabs.tsx
- [TSX] components\ui\textarea.tsx
- [TSX] components\ui\toast.tsx
- [TSX] components\ui\toaster.tsx
- [TSX] components\ui\toggle-group.tsx
- [TSX] components\ui\toggle.tsx
- [TSX] components\ui\tooltip.tsx
- [TSX] components\ui\use-mobile.tsx
- [TS] components\ui\use-toast.ts
- [TSX] hooks\use-mobile.tsx
- [TS] hooks\use-toast.ts
- [TS] lib\utils.ts
- [TS] next-env.d.ts
- [PKG] package.json
- [TS] tailwind.config.ts
- [TSC] tsconfig.json
- [TS] types\report-types.ts

■ File: app\admin\comprehensive-admin.tsx

```
-----
 1: // "use client"
 2:
 3: // import { useState, useEffect } from "react"
 4: // import { Button } from "@/components/ui/button"
 5: // import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs"
 6: // import { ScrollArea } from "@/components/ui/scroll-area"
 7: // import { Save, ArrowLeft } from "lucide-react"
 8: // import Link from "next/link"
 9:
10: // // Import all admin components
11: // import PatientInfoAdmin from "@/components/admin/patient-info-admin"
12: // import ContentAdmin from "@/components/admin/content-admin"
13: // import SettingsAdmin from "@/components/admin/settings-admin"
14: // import DietAnalysisAdmin from "@/components/admin/diet-analysis-admin"
15: // import GeneResultsAdmin from "@/components/admin/gene-results-admin"
16: // import ImportExportAdmin from "@/components/admin/import-export-admin"
17: // import SummariesAdmin from "@/components/admin/summaries-admin"
19: // import type {
20: // ComprehensiveReportData,
21: //
        PatientInfo,
22: // ReportContent,
23: // ReportSettings,
24: // DietAnalysis,
25: //
        MacronutrientData,
26: // GeneTestResult,
27: // ReportSummaries,
28: // } from "@/types/report-types"
29:
30: // export default function ComprehensiveAdminPage() {
31: // const [reportData, setReportData] = useState<ComprehensiveReportData>({
32: //
         patientInfo: {
          name: "",
33: //
34: //
            gender: "",
           birthDate: "",
35: //
           sampleCode: "",
36: //
37: //
           sampleDate: "",
           reportDate: "",
38: //
39: //
            reportAuth: "",
40: //
            genomicAnalytics: "",
           checkedBy: "",
41: //
            scientificContent: "",
42: //
43: //
          },
44: //
          content: {
45: //
            disclaimer: `The present report tells you about genetic variations/mutations associated with certa
47: // This report cannot replace visits to a healthcare professional. Your results serve as a reference point,
49: // Example, pvt , a comprehensive health app that leverages genetic, metabolic, anthropometric, and clinica
50: //
          introduction: `Welcome to your personalised nutrigenomics test report. It is our absolute pleasure
51: //
            genomicsExplanation: `We all are aware that DNA is the blueprint of the human body. The external f
52: //
            genesHealthImpact: `The human DNA consists of more than 20000 genes. Every gene has a role to play
            fundamentalsPRS: `The risk of an individual to suffer from a chronic condition, such as lifestyle
53: //
            utilityDoctors: `Your polygenic risk scores are not something you should be scared of, as you can
54: //
55: //
           microarrayExplanation: `A microarray is a process that involves detecting several (approximately 0
56: //
            microarrayData: `The microarray data obtained from your DNA is precious and has been archived on a
57: //
          },
58: //
          settings: {
           title: "COMPREHENSIVE GENOMICS REPORT",
59: //
60: //
           subtitle: "NUTRIGENOMICS TEST REPORT",
61: //
            companyName: "Example PVT LTD",
62: //
            headerColor: "#1e40af",
            accentColor: "#3b82f6",
63: //
64: //
           fonts: {
65: //
             primary: "Inter, system-ui, sans-serif",
66: //
              secondary: "Roboto, system-ui, sans-serif",
67: //
              mono: "JetBrains Mono, Consolas, monospace",
68: //
            },
69: //
70: //
           dietAnalysis: {
71: //
            macronutrients: {
```

```
72: //
               carbohydrateSensitivity: {
 73: //
                 score: 3,
                  level: "HIGH".
 74: //
 75: //
                 recommendation: "Maintain carb intake <45% For obesity & IR control",
 76: //
 77: //
               fatSensitivity: { score: 6, level: "HIGH", recommendation: "Fat intake not to exceed 15% of tota
 78: //
               proteinRequirement: {
 79: //
                 score: 6,
 80: //
                  level: "HIGH",
                  recommendation: "Protein supplements needed along with dietary source",
 81: //
 82: //
                },
 83: //
              },
 84: //
             mealPattern: {
 85: //
               mealFrequency: { score: 6, level: "FREQUENT", recommendation: "4-5 small meals suggested in a da
 86: //
               mealReplacement: { score: 6, level: "SUITABLE", recommendation: "Meal replacements may help in w
 87: //
               weightMaintenance: { score: 6, level: "HIGH", recommendation: "Weight maintenance regime can be
 88: //
              },
 89: //
             foodSensitivities: {
 90: //
               alcoholSensitivity: {
 91: //
                 score: 4,
 92: //
                 level: "HIGH",
 93: //
                 recommendation:
 94: //
                    "High sensitivity, avoid alcohol if possible, especially the types of beverages that trigger
 95: //
               },
               caffeineSensitivity: {
 96: //
 97: //
                 score: 6,
 98: //
                  level: "HIGH".
                  recommendation: "High sensitivity, do not consume >4 cups/day",
 99: //
100: //
               },
101: //
               glutenSensitivity: { score: 3, level: "HIGH", recommendation: "Gluten intake needs to be reduced
102: //
               lactoseSensitivity: { score: 10, level: "HIGH", recommendation: "Milk & milk products need to be
103: //
               saltSensitivity: {
104: //
                 score: 10.
105: //
                 level: "HIGH",
                 recommendation: "Try to reduce overall salt intake to up to 3-5 gm per day",
106: //
107: //
               },
             },
108: //
109: //
              tasteSensitivities: {
110: //
               spiceTolerance: { score: 6, level: "NORMAL", recommendation: "Normal sensitivity to taste" },
111: //
                sweetTaste: { score: 3, level: "HIGH", recommendation: "High sweet consumption tendency" },
112: //
                tasteSensitivity: { score: 6, level: "NORMAL", recommendation: "Normal taste sensitivity" },
113: //
114: //
            },
115: //
            nutritionData: {
116: //
            vitamins: {
117: //
                vitaminA: { score: 3, healthImpact: "Skin & Vision", intakeLevel: "ENHANCED INTAKE", source: "DI
               vitaminB12: {
118: //
119: //
                 score: 6,
120: //
                 healthImpact: "Nervous System & Bones",
                 intakeLevel: "ENHANCED INTAKE (METHYLCOBALAMIN)",
121: //
122: //
                 source: "DIET",
123: //
               },
124: //
               vitaminB2: { score: 3, healthImpact: "Energy Metabolism", intakeLevel: "ENHANCED INTAKE", source
125: //
                vitaminB6: { score: 6, healthImpact: "Tissue growth repair", intakeLevel: "ENHANCED INTAKE", sou
126: //
                vitaminB9: {
127: //
                 score: 3,
128: //
                 healthImpact: "RBC development & Heart health",
129: //
                 intakeLevel: "ENHANCED INTAKE (L METHYLFOLATE)",
130: //
                 source: "DIET",
               },
131: //
132: //
               vitaminC: { score: 3, healthImpact: "Skin & Immunity", intakeLevel: "ENHANCED INTAKE", source: "
133: //
               vitaminD: {
134: //
                 score: 6,
                  healthImpact: "Bones & Diabetes",
135: //
                 intakeLevel: "ENHANCED INTAKE & SUN EXPOSURE",
136: //
137: //
                 source: "DIET & SUN EXPOSURE",
138: //
               },
139: //
               vitaminE: { score: 5, healthImpact: "Skin & Immune system", intakeLevel: "ENHANCED INTAKE", sour
140: //
141: //
              fattvAcids: {
142: //
               omegaFattyAcids: {
143: //
                 score: 5.
144: //
                  healthImpact: "Cardiac health & Triglycerides",
```

```
intakeLevel: "ENHANCED INTAKE (VEG SOURCES)",
145: //
146: //
                 source: "ENHANCED INTAKE (VEG/FISH OIL) & DIET",
147: //
               },
148: //
             },
149: //
            elements: {
150: //
             calcium: {
151: //
                score: 3,
                 healthImpact: "Bone health & Nerve function",
152: //
                 intakeLevel: "ENHANCED INTAKE",
                 source: "DIET",
154: //
              },
155: //
156: //
              iodine: {
157: //
                 score: 3,
158: //
                 healthImpact: "Detoxification & Thyroid hormones",
                intakeLevel: "ENHANCED INTAKE",
159: //
160: //
                source: "DIET",
              },
161: //
162: //
               iron: { score: 3, healthImpact: "Haemoglobin & Energy", intakeLevel: "RESTRICTED INTAKE", source
163: //
               magnesium: {
164: //
                score: 3,
165: //
                healthImpact: "Heart health & Immunity",
                intakeLevel: "ENHANCED INTAKE",
166: //
167: //
                 source: "DIET",
168: //
              },
             phosphorus: {
169: //
                score: 3,
170: //
171: //
                 healthImpact: "Bone health & Kidney function",
                 intakeLevel: "ENHANCED INTAKE",
172: //
173: //
                source: "DIET",
174: //
              },
175: //
              selenium: {
176: //
177: //
                healthImpact: "Cognitive & Muscle function",
                intakeLevel: "ENHANCED INTAKE",
178: //
                 source: "DIET",
179: //
180: //
              },
181: //
               zinc: { score: 3, healthImpact: "Fertility & Skin", intakeLevel: "ENHANCED INTAKE", source: "DIE
           },
182: //
183: //
            complexNutrients: {
184: //
             antiInflammatory: {
185: //
                 score: 5,
186: //
                healthImpact: "Pain control & Organ health",
187: //
                intakeLevel: "ENHANCED INTAKE",
188: //
                 source: "DIET",
189: //
              },
190: //
               antioxidants: {
191: //
                score: 6,
192: //
                healthImpact: "Skin & Immune system",
                 intakeLevel: "ENHANCED INTAKE",
193: //
194: //
                 source: "DIET",
195: //
               },
196: //
            },
          },
197: //
198: //
           sportsAndFitness: {
199: //
            exerciseType: {
200: //
              endurancePotential: {
201: //
                level: "High Endurance Potential",
                 description: "Excellent genetic predisposition for endurance activities",
202: //
203: //
               },
               powerPotential: { level: "Average Power Potential", description: "Moderate power output capacity
204: //
               strengthProfile: { level: "High Strength Profile", description: "Good potential for strength tra
205: //
206: //
               exerciseTime: { level: "Evening time is more beneficial than morning", description: "MORNING Vs.
207: //
             },
208: //
            performance: {
209: //
               enduranceCapacity: { level: "High Endurance Potential", description: "Superior aerobic capacity"
210: //
               fatigueResistance: {
211: //
                 level: "Normal fatigue resistance. Average endurance capacity",
212: //
                 description: "Average endurance capacity",
213: //
214: //
               bloodFlow: {
215: //
                 level: "Reduced vascular efficiency, affects endurance sports.",
                 description: "Affects endurance sports",
216: //
217: //
```

```
218: //
              oxygenEfficiency: {
219: //
                level: "Normal VO2 Max. Need practice to excel in endurance sports",
                 description: "Need practice to excel",
220: //
221: //
222: //
               waterLoss: {
223: //
                level:
224: //
                   "Increased water and electrolyte loss tendency. Focus on Hydration and electrolyte managemen
225: //
                 description: "Focus on hydration",
226: //
227: //
               lactateClearing: {
228: //
                level: "High lactate clearance. Beneficial for Endurance sports.",
229: //
                 description: "Beneficial for endurance",
230: //
231: //
               recoveryEfficiency: {
                level: "High recovery efficiency. Enhanced sports potential & reduced injury risk",
232: //
233: //
                 description: "Enhanced sports potential",
234: //
235: //
               bodyComposition: {
                level: "Low fat accumulation. Increased muscle tendency.",
236: //
237: //
                 description: "Increased muscle tendency",
238: //
239: //
               injuryRisk: {
240: //
                 level: "High injury tendency. Thorough injury management steps to be taken.",
                 description: "Thorough injury management needed",
241: //
242: //
243: //
               achillesTendonInjury: {
244: //
                 level: "Low injury tendency. Ensure adequate warmup before exercises",
245: //
                 description: "Ensure adequate warmup",
246: //
247: //
               ligamentInjury: {
                 level: "Low ACL injury tendency. Ensure adequate warmup before exercises",
248: //
249: //
                 description: "Ensure adequate warmup",
250: //
251: //
              rupture: {
252: //
                level: "Low rupture tendency. Ensure adequate warmup before exercises",
253: //
                 description: "Ensure adequate warmup",
254: //
255: //
               muscleCramps: {
256: //
                level: "Low risk of muscle cramps. Ensure adequate warmup before exercises",
257: //
                 description: "Ensure adequate warmup",
258: //
               },
            },
259: //
260: //
           },
261: //
           lifestyleConditions: {
           heartVascularHealth: {
262: //
263: //
               hypertension: { status: "strength" },
264: //
              leftVentricularHypertrophy: { status: "strength" },
              atherosclerosis: { status: "improvement" },
265: //
266: //
              familialHypercholesterolemia: { status: "strength" },
267: //
               cardiomyopathy: { status: "strength" },
               cholesterolImbalance: { status: "improvement" },
268: //
               stroke: { status: "improvement" },
269: //
270: //
271: //
            diabesity: {
272: //
             obesity: { status: "improvement" },
273: //
               diabetesType2: { status: "improvement" },
274: //
275: //
            liverHealth: {
             nafld: { status: "improvement" },
276: //
277: //
               liverCirrhosis: { status: "strength" },
278: //
             },
279: //
             boneHealth: {
280: //
             osteoporosis: { status: "improvement" },
281: //
               osteoarthritis: { status: "improvement" },
282: //
             },
283: //
             gutHealth: {
              irritableBowelSyndrome: { status: "improvement" },
284: //
285: //
               celiacDisease: { status: "strength" },
286: //
287: //
             hormoneSystem: {
288: //
               hypothyroidism: { status: "improvement" },
289: //
             },
290: //
           },
```

```
metabolicCore: {
291: //
            methylation: {
292: //
             genes: ["MTHFR (A>C)", "MTHFR (C>T)", "MTR", "MTRR", "CBS"],
293: //
               genotype: "TT, GG, GG, GG, CC",
impact: "NORMAL METHYLATION",
294: //
295: //
              advice: "FOLIC ACID & METHYL COBALAMINE NEEDED TO MAINTAIN HOMOCYSTEINE",
296: //
            } ,
297: //
            inflammation: {
298: //
             genes: ["TNF-A", "IL6", "CRP"],
genotype: "GG, GG, TC",
299: //
300: //
               impact: "HIGH INFLAMMATION",
301: //
        },
oxidativeStress: {
  genes: ["MnSOD", "SOD2"],
  genotype: "AG, AG",
  impact: "HIGH OXIDATIVE STRESS",
  advice: "ANTIOXIDANT SUPPLEMENTS
               advice: "ANTI-INFLAMMATORY SUPPLEMENT INTAKE SUGGESTED",
302: //
303: //
304: //
305: //
306: //
307: //
308: //
                advice: "ANTIOXIDANT SUPPLEMENTS REQUIRED TO MANAGE OXIDATIVE STRESS",
309: //
310: //
            detoxification: {
             genes: ["GSTP1", "CYP1A2"],
311: //
              genotype: "AA, AC", impact: "AFFECTED DETOXIFICATION ABILITY",
312: //
313: //
               advice: "SUPPORT LIVER DETOXIFICATION WITH CRUCIFEROUS VEGETABLES",
314: //
            a
},
315: //
            vitaminDMetabolism: {
316: //
             genes: ["VDR-3 (Taq)", "VDR-2 (Bsm)"],
317: //
              genotype: "AG, TC",
impact: "LOW VIT D. METABOLISM",
318: //
319: //
320: //
               advice: "HIGHER VITAMIN D SUPPLEMENTATION NEEDED",
         321: //
322: //
323: //
324: //
325: //
326: //
                advice: "PCF RATIO 30:55:15% LPL= LDL, CETP= HDL, APOC3=TRIGLYCERIDES",
327: //
            insulinResistance: {
328: //
329: //
             genes: ["TCF712", "PPARG", "FTO"],
              genotype: "TT, CC, AT",
impact: "HIGH INSULIN RESISTANCE (IR)",
330: //
331: //
332: //
                advice: "FTO = IR TENDENCY TCF7L2 = OBESITY TRIGGERED IR PPARG= CENTRAL OBESITY",
333: //
            },
           \verb|circadianRhythm:| \{
334: //
             genes: ["CLOCK"],
335: //
              genotype: "AG",
impact: "EVENING EXERCISE TO BE PREFERRED",
336: //
337: //
338: //
               advice: "EVENING EXERCISE TO BE PREFERRED",
           339: //
340: //
             genes: ["ADRB2-2", "ADRB2-1", "ADRB3"],
genotype: "CC, GG, AG",
341: //
342: //
               impact: "SLOW RESPONSE TO WORKOUT",
343: //
344: //
                advice: "HIGH INTENSITY WORKOUT ADRB2-2 = CARBS SENSITIVITY",
            },
snackingTendency: {
345: //
346: //
347: //
              genes: ["MC4R"],
               genotype: "TC",
348: //
               impact: "SNACKING TENDENCY PRESENT",
349: //
                advice: "CONTROL SNACKING HABITS WITH STRUCTURED MEAL TIMING",
350: //
351: //
             },
           oestrogenElimination: \{
352: //
             genes: ["COMT", "CYPB1A1"],
353: //
              genotype: "GG, CG",
impact: "AFFECTED OESTROGEN ELIMINATION",
354: //
355: //
356: //
               advice: "SUPPORT ESTROGEN DETOX WITH CRUCIFEROUS VEGETABLES",
            },
357: //
            powerVsEndurance: {
358: //
             genes: ["ACE", "AGT", "ACTN3"],
genotype: "AA, GG, TT",
359: //
360: //
               impact: "HIGH POWER POTENTIAL",
361: //
362: //
                advice: "ACE (WHITE) = ENDURANCE AGT (RED) = LVH/HT",
363: //
```

```
364: //
            injuryRecovery: {
              genes: ["COL1A1", "GDF5"],
365: //
               genotype: "CC, AG",
366: //
               impact: "INCREASED RISK OF INJURY",
367: //
               advice: "FOCUS ON INJURY PREVENTION AND PROPER WARM-UP",
368: //
369: //
370: //
            fluidLossTendency: {
             genes: ["BDKRB2"],
371: //
              genotype: "TC",
impact: "HIGH FLUID LOSS TENDENCY",
372: //
373: //
               advice: "MAINTAIN PROPER HYDRATION DURING EXERCISE",
374: //
375: //
            },
            vo2Max: {
376: //
             genes: ["VEGF"],
genotype: "GG",
377: //
378: //
379: //
              impact: "AVERAGE VO2 MAX",
380: //
               advice: "FOCUS ON AEROBIC TRAINING TO IMPROVE VO2 MAX",
381: //
             },
382: //
           },
383: //
           digestiveHealth: {
            gutHealth: { level: "NORMAL GUT HEALTH", description: "Good overall digestive function" },
384: //
             glutenIntolerance: { level: "LOW INTOLERANCE", description: "CONDITIONAL GLUTEN ELIMINATION NEEDED
385: //
              celiacDiseaseTendency: { level: "LOW TENDENCY", description: "Low genetic risk for celiac disease"
386: //
387: //
             impactOnBonesJoints: {
388: //
              level: "NO IMPACT ON BONE HEALTH",
               description: "Digestive health does not affect bone health",
389: //
390: //
              lactoseIntolerance: { level: "HIGH INTOLERANCE", description: "LACTOSE ELIMINATION NEEDED" },
391: //
392: //
             probioticsRequirement: { level: "PROBIOTICS NEEDED", description: "FOOD & SUPPLEMENTS" },
393: //
394: //
          genesAndAddiction: {
395: //
              alcoholAddiction: { tendency: "LOW", description: "Low genetic predisposition to alcohol dependence
396: //
              smokingAddiction: { tendency: "NORMAL", description: "Average nicotine addiction susceptibility" }
397: //
              snackingHabits: { tendency: "HIGH", description: "Genetic tendency toward frequent snacking" },
398: //
             altruism: { tendency: "HIGH", description: "Strong genetic predisposition toward helping others" }
399: //
            },
400: //
           sleepAndRest: {
401: //
            sleepCycle: {
402: //
              impact: "DELAYED SLEEP CYCLE",
403: //
               intervention: "EXERCISE IN THE EVENING AVOID CARBS DURING BREAKFAST",
404: //
              },
405: //
             sleepApnea: {
406: //
              impact: "INCREASED CHANCES OF SLEEP APNEA",
               intervention: "EXERCISE REGULARLY SEEK MEDICAL ADVICE IF ISSUE PERSISTS",
407: //
408: //
             },
409: //
              sleepDepth: { impact: "LOW SLEEP DEPTH", intervention: "CONSUME CURD RICE IN DINNER FOR BETTER SLE
410: //
             stressSensitivity: {
411: //
               impact: "LOW STRESS SENSITIVITY",
412: //
                intervention: "EXERCISE REGULARLY FOR A BETTER SLEEP CYCLE",
413: //
             },
414: //
415: //
           allergiesAndSensitivity: {
             dustAllergy: { tendency: "NORMAL" },
416: //
417: //
             pesticideSensitivity: { tendency: "HIGH" },
418: //
              smokeSensitivity: { tendency: "HIGH" },
             automobileSmokeSensitivity: { tendency: "HIGH" },
419: //
420: //
             generalAdvice:
421: //
                "THE BEST WAY TO REDUCE ALLERGIES IS TO STAY AWAY FROM THE SOURCE, NO ROCKET SCIENCE HOWEVER THE
422: //
           },
            geneTestResults: [
423: //
424: //
            { geneName: "ALDH2 Aldehyde dehydrogenase 2", variation: "G>A", result: "GG" },
425: //
              { geneName: "ACTN3 Alpha-actinin-3 protein", variation: "C>T", result: "TT" },
426: //
              { geneName: "ACE Angiotensin I-Converting Enzyme", variation: "G>A", result: "AA" },
427: //
              { geneName: "AGT Angiotensinogen", variation: "G>A", result: "GG" },
              { geneName: "ApoA5 Apolipoprotein A5", variation: "G>A", result: "GG" }
428: //
429: //
             { geneName: "APOC3 Apolipoprotein C 3", variation: "C>G", result: "GG" },
             { geneName: "APOE Apolipoprotein E", variation: "C>T", result: "TC" },
430: //
431: //
              { geneName: "APOE4 Apolipoprotein E (TOMM40)", variation: "A>G", result: "AA" },
               \{ \  \, \text{geneName: "ADRB2-1 BETA-2-ADRENERGIC RECEPTOR (1)", variation: "A>G", result: "GG"} \ \}, \\
432: //
              { geneName: "ADRB2-2 BETA-2-ADRENERGIC RECEPTOR (2)", variation: "C>G", result: "CC" },
433: //
434: //
435: //
           metabolicSummary: {
436: //
              strengths: [
```

```
"NORMAL METHYLATION",
437: //
438: //
               "HIGH POWER POTENTIAL"
439: //
               "NORMAL GUT HEALTH",
               "LOW STRESS SENSITIVITY",
440: //
               "HIGH RECOVERY EFFICIENCY",
441: //
           ],
442: //
443: //
           weaknesses: [
444: //
               "HIGH INFLAMMATION",
               "HIGH OXIDATIVE STRESS",
445: //
               "AFFECTED DETOXIFICATION ABILITY",
446: //
447: //
              "LOW VIT D. METABOLISM",
               "HIGH INSULIN RESISTANCE",
448: //
449: //
               "AFFECTED OESTROGEN ELIMINATION",
              "INCREASED RISK OF INJURY",
450: //
451: //
              "HIGH FLUID LOSS TENDENCY",
452: //
            ],
453: //
          },
454: //
           preventiveHealth: {
455: //
            diagnosticTests: {
456: //
              halfYearly: ["PLASMA SUGAR (FASTING & PP)", "VITAMIN D"],
               yearly: ["HbA1c", "LIPID PROFILE", "SERUM HOMOCYSTEINE", "VITAMIN B12", "LIVER PROFILE"],
457: //
458: //
             },
459: //
             nutritionalSupplements: [
460: //
             { supplement: "VITAMIN D", needed: true },
                { supplement: "METHYL FOLATE + METHYL COBALAMINE + B6", needed: true },
461: //
                { supplement: "OMEGA FATTY ACIDS (FISH OIL)", needed: true },
462: //
463: //
               { supplement: "FOLIC ACID + COBALAMINE + B6", needed: true },
                { supplement: "OMEGA FATTY ACIDS (VEG)", needed: true },
464: //
                { supplement: "VITAMIN E", needed: true },
465: //
466: //
                { supplement: "PROBIOTICS", needed: true },
467: //
             1,
468: //
           },
469: //
           familyGeneticImpact: [
470: //
           {
             gene: "MnSOD",
471: //
             normalAlleles: "AA",
472: //
               yourResult: "AG",
473: //
              healthimpact: "INCREASED TENDENCY OF OXIDATIVE STRESS NEED OF ANTI-OXIDANT SUPPLEMENTS",
474: //
475: //
476: //
            {
            gene: "FTO",
normalAlleles: "TT",
477: //
478: //
479: //
             yourResult: "AT",
             healthImpact:
480: //
481: //
                 "INCREASED TENDENCY OF INSULIN RESISTANCE WEIGHT AND CALORIE MANAGEMENT IMPORTANT TO MANAGE AN
            },
482: //
483: //
          ],
484: //
          summaries: {
           nutrigenomicsSummary:
485: //
486: //
              "Based on your genetic analysis, you have specific nutritional needs including enhanced vitamin
487: //
             exerciseGenomicsSummary:
488: //
               "Your genetic profile indicates high endurance potential with good recovery capacity. Focus on a
489: //
          },
490: //
         })
491:
492: //
         const [isSaving, setIsSaving] = useState(false)
493: //
         const [loading, setLoading] = useState(true)
494:
495: //
         useEffect(() => {
496: //
          loadReportData()
497: //
         }, [])
498:
499: //
         const loadReportData = async () => {
500: //
           try {
             const response = await fetch("/api/comprehensive-report-data")
501: //
502: //
             if (response.ok && response.headers.get("content-type")?.includes("application/json")) {
503: //
               const data = await response.json()
504: //
               setReportData(data)
505: //
506: //
          } catch (error) {
507: //
            console.error("Error loading report data:", error)
508: //
          } finally {
509: //
             setLoading(false)
```

```
510: //
           }
511: //
512:
513: //
          const saveReportData = async () => {
514: //
           setIsSaving(true)
515: //
           try {
516: //
             const response = await fetch("/api/comprehensive-report-data", {
517: //
               method: "POST",
518: //
                headers: {
519: //
                 "Content-Type": "application/json",
520: //
                },
521: //
               body: JSON.stringify(reportData),
522: //
              })
523:
524: //
             if (response.ok) {
525: //
                alert("Report data saved successfully!")
526: //
              }
527: //
            } catch (error) {
528: //
              console.error("Error saving report data:", error)
529: //
              alert("Error saving report data")
530: //
            } finally {
531: //
              setIsSaving(false)
532: //
533: //
          }
534:
535: //
          // Helper functions for updating nested data
536: //
          const updatePatientInfo = (field: keyof PatientInfo, value: string) => {
537: //
            setReportData((prev) => ({
538: //
              ...prev,
539: //
              patientInfo: { ...prev.patientInfo, [field]: value },
540: //
            }))
541: //
542:
          const updateContent = (field: keyof ReportContent, value: string) => {
543: //
544: //
           setReportData((prev) => ({
545: //
              ...prev,
546: //
              content: { ...prev.content, [field]: value },
547: //
            }))
548: //
          }
549:
550: //
          const updateSettings = (field: keyof ReportSettings, value: string) => {
551: //
           setReportData((prev) => ({
552: //
              ...prev,
553: //
              settings: { ...prev.settings, [field]: value },
554: //
            }))
555: //
556:
557: //
          const updateDietAnalysis = (section: keyof DietAnalysis, field: string, data: Partial<MacronutrientDat</pre>
558: //
           setReportData((prev) => ({
559: //
              ...prev,
560: //
              dietAnalysis: {
561: //
                ...prev.dietAnalysis,
562: //
                [section]: {
563: //
                  ...prev.dietAnalysis[section],
564: //
                  [field]: {
                    ...prev.dietAnalysis[section][field as keyof (typeof prev.dietAnalysis)[typeof section]],
565: //
566: //
567: //
                  },
568: //
                },
569: //
              },
570: //
            }))
571: //
572:
573: //
          const updateSummaries = (field: keyof ReportSummaries, value: string) => {
574: //
            setReportData((prev) => ({
575: //
              ...prev,
              summaries: { ...prev.summaries, [field]: value },
576: //
            }))
577: //
          }
578: //
579:
580: //
          // Gene test results management
          const addGeneTestResult = () => {
581: //
582: //
            setReportData((prev) => ({
```

```
583: //
             ...prev.
             geneTestResults: [...prev.geneTestResults, { geneName: "", variation: "", result: "" }],
584: //
585: //
           }))
586: //
587:
588: //
         const updateGeneTestResult = (index: number, field: keyof GeneTestResult, value: string) => {
589: //
          setReportData((prev) => {
590: //
            const newResults = [...prev.geneTestResults]
             newResults[index] = { ...newResults[index], [field]: value }
591: //
592: //
             return { ...prev, geneTestResults: newResults }
593: //
           })
         }
594: //
595:
596: //
         const removeGeneTestResult = (index: number) => {
597: //
          setReportData((prev) => ({
598: //
599: //
             geneTestResults: prev.geneTestResults.filter((_, i) => i !== index),
600: //
           }))
601: //
602:
603: //
         if (loading) {
604: //
          return (
605: //
             <div className="min-h-screen flex items-center justify-center bg-gradient-to-br from-blue-50 to-in</pre>
606: //
               <div className="text-center">
607: //
                 <div className="animate-spin rounded-full h-16 w-16 border-b-4 border-blue-600 mx-auto mb-6"><</pre>
608: //
                 Loading comprehensive admin panel...
609: //
               </div>
610: //
             </div>
611: //
          )
612: // }
613:
614: //
         return (
615: //
          <div className="min-h-screen bg-gradient-to-br from-gray-50 to-blue-50">
616: //
             <div className="container mx-auto px-4 py-8">
617: //
               <div className="flex items-center justify-between mb-8">
618: //
                 <div className="flex items-center gap-4">
                   <Link href="/">
619: //
620: //
                     <Button variant="outline" size="sm" className="shadow-sm bg-transparent">
621: //
                       <ArrowLeft className="h-4 w-4 mr-2" />
622: //
                       Back to Home
623: //
                     </Button>
624: //
                   </Link>
625: //
                   <hl className="text-4xl font-bold text-gray-900">? Comprehensive Genomics Admin</hl>
626: //
                 </div>
627: //
                 <div className="flex gap-2">
628: //
                   <Link href="/report/preview">
629: //
                     <Button variant="outline" className="shadow-sm bg-transparent">
630: //
                       ?? Preview Report
631: //
                     </Rutton>
                   </Link>
632: //
633: //
                   <Button onClick={saveReportData} disabled={isSaving} className="shadow-sm">
634: //
                     <Save className="h-4 w-4 mr-2" />
635: //
                     {isSaving ? "Saving..." : "Save All Changes"}
636: //
                   </Button>
637: //
                 </div>
638: //
               </div>
639:
640: //
               <Tabs defaultValue="patient-info" className="space-y-6">
641: //
                 <ScrollArea className="w-full whitespace-nowrap">
642: //
                    <TabsList className="grid w-full grid-cols-8 gap-1 bg-white shadow-sm">
643: //
                     <TabsTrigger value="patient-info">Patient Info</TabsTrigger>
644: //
                     <TabsTrigger value="content">Content</TabsTrigger>
645: //
                     <TabsTrigger value="settings">Settings</TabsTrigger>
646: //
                      <TabsTrigger value="diet">Diet Analysis</TabsTrigger>
647: //
                     <TabsTrigger value="genes">Gene Results</TabsTrigger>
648: //
                     <TabsTrigger value="summaries">Summaries</TabsTrigger>
649: //
                     <TabsTrigger value="import-export">Import/Export</TabsTrigger>
                     <TabsTrigger value="more">More Sections</TabsTrigger>
650: //
651: //
                   </TabsList>
652: //
                 </ScrollArea>
653:
                 {/* Patient Info Tab */}
654: //
655: //
                  <TabsContent value="patient-info">
```

```
656: //
                  <PatientInfoAdmin patientInfo={reportData.patientInfo} updatePatientInfo={updatePatientInfo}
657: //
                </TabsContent>
658:
               {/* Content Tab */}
659: //
                <TabsContent value="content">
660: //
661: //
                 <ContentAdmin content={reportData.content} updateContent={updateContent} />
662: //
                </TabsContent>
663:
                {/* Settings Tab */}
664: //
665: //
                <TabsContent value="settings">
666: //
                  <SettingsAdmin settings={reportData.settings} updateSettings={updateSettings} />
667: //
                </TabsContent>
668:
669: //
               {/* Diet Analysis Tab */}
670: //
                <TabsContent value="diet">
671: //
                  <DietAnalysisAdmin dietAnalysis={reportData.dietAnalysis} updateDietAnalysis={updateDietAnal</pre>
672: //
                </TabsContent>
673:
674: //
               {/* Gene Results Tab */}
675: //
                <TabsContent value="genes">
676: //
                  <GeneResultsAdmin
677: //
                    geneTestResults={reportData.geneTestResults}
678: //
                    addGeneTestResult={addGeneTestResult}
679: //
                    updateGeneTestResult={updateGeneTestResult}
680: //
                    removeGeneTestResult={removeGeneTestResult}
681: //
                  />
682: //
                </TabsContent>
683:
                {/* Summaries Tab */}
684: //
685: //
                <TabsContent value="summaries">
686: //
                  <SummariesAdmin summaries={reportData.summaries} updateSummaries={updateSummaries} />
687: //
                </TabsContent>
688:
689: //
               {/* Import/Export Tab */}
690: //
                <TabsContent value="import-export">
691: //
                  <ImportExportAdmin reportData={reportData} setReportData={setReportData} />
692: //
                </TabsContent>
693:
694: //
                {/* More Sections Tab */}
695: //
                <TabsContent value="more">
                  <div className="bg-white rounded-lg shadow-lg p-8 text-center">
696: //
697: //
                    <div className="text-6xl mb-4">?</div>
698: //
                    <h2 className="text-2xl font-bold text-gray-800 mb-4">Additional Sections Coming Soon</h2>
699: //
                    700: //
                      More admin panels for Nutrition, Sports & Fitness, Lifestyle Conditions, Metabolic Core,
701: //
                      sections will be added here.
702: //
                    703: //
                    <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-4 text-sm">
704: //
                      <div className="bg-blue-50 p-4 rounded-lg">
                        <h4 className="font-semibold text-blue-800">Nutrition Admin</h4>
705: //
706: //
                        Vitamins, elements, supplements
707: //
                      </div>
708: //
                      <div className="bg-green-50 p-4 rounded-lg">
709: //
                        <h4 className="font-semibold text-green-800">Sports & Fitness Admin</h4>
710: //
                        Exercise types, performance
711: //
                      </div>
712: //
                      <div className="bg-purple-50 p-4 rounded-lg">
                        <h4 className="font-semibold text-purple-800">Metabolic Core Admin</h4>
713: //
                        Gene analysis, impacts
714: //
715: //
                      </div>
716: //
                      <div className="bg-orange-50 p-4 rounded-lg">
717: //
                        <h4 className="font-semibold text-orange-800">Lifestyle Conditions</h4>
718: //
                        Health conditions, risks
719: //
                      </div>
720: //
                      <div className="bg-pink-50 p-4 rounded-lg">
721: //
                        <h4 className="font-semibold text-pink-800">Sleep & Allergies</h4>
722: //
                        Sleep patterns, sensitivities
723: //
                      </div>
724: //
                      <div className="bg-indigo-50 p-4 rounded-lg">
725: //
                        <h4 className="font-semibold text-indigo-800">Preventive Health</h4>
726: //
                        Tests, supplements
727: //
                      </div>
728: //
                    </div>
```

```
729: //
                   </div>
730: //
                </TabsContent>
731: //
               </Tabs>
732: //
             </div>
733: //
           </div>
734: // )
735: // }
```

■ File: app\admin\page.tsx

61:

```
______
 1: "use client";
 2:
 3: import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
 4: import { Button } from "@/components/ui/button";
 5: import { useState, useEffect } from "react";
 6: import { useToast } from "@/components/ui/use-toast";
 7: import { v4 as uuidv4 } from "uuid"; // Import uuid for default data generation
 8: import type {
 9: ComprehensiveReportData,
 10:
     PatientInfo,
11: ReportContent,
12: ReportSettings,
13: // Removed DietAnalysis
14:
     NutritionData,
 15:
      NutrientData.
16:
     GeneTestResult,
17: ReportSummaries,
18: SportsAndFitness,
19: ExerciseData,20: LifestyleCond
      LifestyleConditions,
 21: HealthConditionStatus,
 22: MetabolicCore,
 23: MetabolicGeneData,
      DigestiveHealth,
 25:
     DigestiveHealthData,
 26: GenesAndAddiction,
 27: AddictionData,
28: SleepAndRest,
29: SleepData,
     SleepData,
30: AllergiesAndSensitivity,
 31: AllergyData,
 32: PreventiveHealth,
 33:
      FamilyGeneticImpact,
 34:
     DynamicDietFieldDefinition, // NEW
 35: PatientDietAnalysisResult, // NEW
 36: } from "@/types/report-types";
 37:
 38: // Corrected imports for admin components
 39: import PatientInfoAdmin from "@/components/admin/patient-info-admin";
 40: import ContentAdmin from "@/components/admin/content-admin";
 41: import SettingsAdmin from "@/components/admin/settings-admin";
 42: import DynamicDietFieldAdmin from "@/components/admin/dynamic-diet-field-admin";
 43: import GeneResultsAdmin from "@/components/admin/gene-results-admin";
 44: import SummariesAdmin from "@/components/admin/summaries-admin";
 45: import ImportExportAdmin from "@/components/admin/import-export-admin";
 46: import NutritionAdmin from "@/components/admin/nutrition-admin";
 47: import SportsFitnessAdmin from "@/components/admin/sports-fitness-admin";
 48: import LifestyleConditionsAdmin from "@/components/admin/lifestyle-conditions-admin";
 49: import DigestiveHealthAdmin from "@/components/admin/digestive-health-admin";
 50: import GenesAddictionAdmin from "@/components/admin/genes-addiction-admin";
 51: import SleepRestAdmin from "@/components/admin/sleep-rest-admin";
 52: import AllergiesSensitivityAdmin from "@/components/admin/allergies-sensitivity-admin";
 53: import PreventiveHealthAdmin from "@/components/admin/preventive-health-admin";
 54: import FamilyGeneticImpactAdmin from "@/components/admin/family-genetic-impact-admin";
 55: import PDFGenerator from "@/components/admin/pdf-generator";
 56: import MetabolicCoreAdmin from "@/components/admin/metabolic-core-admin";
 57: import GeneticParametersAdmin from "@/components/admin/genetic-parameters-admin";
 59: const getDefaultReportData = (): ComprehensiveReportData => ({
 60: patientInfo: {
       name: "John Doe",
```

```
gender: "MALE",
 62:
        birthDate: "1990-01-01",
 63:
        sampleCode: "DNL1000000110",
 64:
         sampleDate: "2023-01-15",
 65:
         reportDate: "2023-02-01",
 66:
        reportAuth: "Dr. Jane Smith, PhD",
 67:
 68:
         genomicAnalytics: "Genomics Lab Inc.",
 69:
        checkedBy: "Dr. Alice Brown",
 70:
         scientificContent: "Dr. Robert White",
 71:
        disclaimer:
           "This for informational purposes only and should not be used as a substitute for professional medica
 72:
 73:
      },
 74:
      content: {
 75:
        introduction:
 76:
           "Welcome to your personalized nutrigenomics report. This document provides insights into how your gen
 77:
        genomicsExplanation:
 78:
           "Genomics is the study of an organism's complete set of DNA, including all of its genes. It helps us
 79:
        genesHealthImpact:
           "Your genes play a significant role in determining your health predispositions. This report highlight
 80:
 81:
        fundamentalsPRS:
 82:
           "Polygenic Risk Scores (PRS) combine the effects of many genetic variants to estimate an individual's
 83:
        utilityDoctors:
 84:
           "This report is designed to be a valuable tool for doctors and dietitians, providing actionable genet
 85:
        microarrayExplanation:
           "Microarray technology allows for the simultaneous measurement of the expression levels of thousands
 87:
        microarravData:
 88:
           "Your microarray data has been analyzed to identify specific genetic variations relevant to your heal
 89:
 90:
      settings: {
 91:
        title: "Comprehensive Health Report",
 92:
         subtitle: "A Detailed Analysis of Your Genetics",
 93:
         companyName: "Health Solutions Inc.",
        headerColor: "#2C3E50",
 94:
        accentColor: "#E74C3C",
 95:
 96:
        fonts: {
 97:
         primary: "Helvetica, Arial, sans-serif",
 98:
           secondary: "Georgia, serif",
 99:
          mono: "Courier New, monospace",
100:
       },
101:
       },
102:
       // NEW: Default dynamic diet field definitions
       dynamicDietFieldDefinitions: [
103:
104:
       {
105:
           _uuid: uuidv4(),
106:
           id: "carbohydrate_sensitivity",
107:
           label: "Carbohydrate Sensitivity",
          category: "Macronutrients",
108:
109:
          min: 1,
110:
          max: 10.
           highRecommendation: "Reduce carbohydrate intake, focus on complex carbs.",
111:
          normalRecommendation: "Maintain balanced carbohydrate intake.",
112:
113:
         lowRecommendation: "Ensure adequate carbohydrate intake.",
114:
        },
115:
       {
116:
           _uuid: uuidv4(),
           id: "fat_sensitivity",
117:
          label: "Fat Sensitivity",
118:
119:
          category: "Macronutrients",
120:
          min: 1,
          max: 10,
121:
122:
          highRecommendation:
123:
             "Reduce saturated and trans fats; focus on healthy fats.",
124:
           normalRecommendation: "Maintain balanced fat intake.",
125:
           lowRecommendation: "Ensure adequate healthy fat intake.",
126:
127:
        {
128:
          _uuid: uuidv4(),
129:
           id: "protein_requirement",
           label: "Protein Requirement",
130:
          category: "Macronutrients",
131:
132:
133:
           max: 10.
           highRecommendation: "Increased protein intake recommended.",
134:
```

```
normalRecommendation: "Ensure adequate protein intake.",
135:
136:
          lowRecommendation:
137:
             "Consider increasing protein intake for muscle maintenance.",
138:
        },
139:
140:
           _uuid: uuidv4(),
        _uuia · uuia . . , , .
id: "meal_frequency",
141:
142:
          label: "Meal Frequency",
          category: "Meal Pattern",
143:
          min: 1.
144:
         max: 10,
145:
         highRecommendation: "Consider smaller, more frequent meals.",
146:
          normalRecommendation: "Maintain regular meal frequency.",
147:
          lowRecommendation: "Consider fewer, larger meals.",
148:
149:
       }.
150:
       {
          _uuid: uuidv4(),
151:
152:
           id: "alcohol_sensitivity",
          label: "Alcohol Sensitivity",
153:
154:
         category: "Food Sensitivities",
155:
         min: 1,
156:
          max: 10,
157:
          highRecommendation:
158:
            "Limit alcohol consumption due to genetic sensitivity.",
159:
         normalRecommendation: "Moderate alcohol intake is fine.",
          lowRecommendation: "Normal alcohol metabolism.",
160:
161:
        },
162:
       {
163:
          _uuid: uuidv4(),
164:
         id: "caffeine_sensitivity",
          label: "Caffeine Sensitivity",
165:
166:
          category: "Food Sensitivities",
167:
          min: 1,
         max: 10,
168:
169:
         highRecommendation: "Limit caffeine intake due to slow metabolism.",
         normalRecommendation:
170:
171:
            "Normal caffeine metabolism; moderate intake is fine.",
172:
          lowRecommendation:
173:
             "Fast caffeine metabolism; higher intake may be tolerated.",
174:
175:
176: // NEW: Default patient-specific results for dynamic diet fields
177: patientDietAnalysisResults: [
178:
179:
          fieldId: "carbohydrate_sensitivity",
180:
           score: 5,
181:
          level: "NORMAL",
182:
          recommendation: "Maintain balanced carbohydrate intake.",
183:
        },
184:
          fieldId: "fat_sensitivity",
185:
186:
         score: 7,
187:
         level: "HIGH",
188:
          recommendation: "Reduce saturated and trans fats; focus on healthy fats.",
189:
190:
191:
         fieldId: "protein_requirement",
192:
          score: 3,
193:
          level: "LOW",
          recommendation: "Ensure adequate protein intake for muscle maintenance.",
194:
195:
       },
196:
       {
         fieldId: "meal_frequency",
197:
198:
          score: 6,
          level: "FREQUENT".
199:
200:
          recommendation: "Consider smaller, more frequent meals.",
201:
        },
202:
          fieldId: "alcohol_sensitivity",
203:
204:
         score: 9,
205:
         level: "HIGH",
206:
          recommendation: "Limit alcohol consumption due to genetic sensitivity.",
207:
```

```
208:
209:
         fieldId: "caffeine_sensitivity",
210:
         score: 2,
211:
          level: "LOW",
         recommendation: "Normal caffeine metabolism; moderate intake is fine.",
212:
213:
214: ],
215: nutritionData: {
216:
       vitamins: {
217:
         vitaminA: {
           score: 3,
218:
219:
           healthImpact: "Skin & Vision",
           intakeLevel: "ENHANCED INTAKE",
source: "DIET",
220:
221:
222:
         },
223:
        vitaminB12: {
224:
           score: 6,
225:
            healthImpact: "Nervous System & Bones",
           intakeLevel: "ENHANCED INTAKE (METHYLCOBALAMIN)",
226:
           source: "DIET",
228:
         },
         vitaminB2: {
229:
         score: 3,
230:
           healthImpact: "Energy Metabolism",
231:
232:
           intakeLevel: "ENHANCED INTAKE",
           source: "DIET",
233:
234:
          },
235:
          vitaminB6: {
236:
           score: 6,
237:
           healthImpact: "Tissue growth repair",
           intakeLevel: "ENHANCED INTAKE",
238:
239:
            source: "DIET",
240:
         },
        vitaminB9: {
241:
242:
           score: 3,
243:
            healthImpact: "RBC development & Heart health",
            intakeLevel: "ENHANCED INTAKE (L METHYLFOLATE)",
244:
245:
           source: "DIET",
246:
         },
247:
         vitaminC: {
          score: 3,
248:
           healthImpact: "Skin & Immunity",
249:
           intakeLevel: "ENHANCED INTAKE",
251:
           source: "DIET",
252:
          },
          vitaminD: {
253:
254:
           score: 6,
255:
           healthImpact: "Bones & Diabetes",
           intakeLevel: "ENHANCED INTAKE & SUN EXPOSURE",
256:
257:
            source: "DIET & SUN EXPOSURE",
         },
258:
259:
        vitaminE: {
260:
           score: 5,
261:
            healthImpact: "Skin & Immune system",
262:
            intakeLevel: "ENHANCED INTAKE",
            source: "DIET",
263:
264:
         },
265:
        },
266:
        fattyAcids: {
267:
          omegaFattyAcids: {
268:
           score: 5,
269:
           healthImpact: "Cardiac health & Triglycerides",
270:
            intakeLevel: "ENHANCED INTAKE (VEG SOURCES)",
271:
            source: "ENHANCED INTAKE (VEG/FISH OIL) & DIET",
272:
          },
273:
        },
274:
       elements: {
275:
        calcium: {
276:
277:
           healthImpact: "Bone health & Nerve function",
           intakeLevel: "ENHANCED INTAKE",
278:
279:
            source: "DIET",
280:
```

```
iodine: {
281:
282:
            score: 3,
283:
            healthImpact: "Detoxification & Thyroid hormones",
284:
            intakeLevel: "ENHANCED INTAKE",
285:
            source: "DIET",
286:
         },
287:
          iron: {
288:
            score: 3,
289:
            healthImpact: "Haemoglobin & Energy",
            intakeLevel: "RESTRICTED INTAKE",
290:
291:
            source: "DIET",
292:
          },
293:
          magnesium: {
294:
            score: 3,
295:
            healthImpact: "Heart health & Immunity",
            intakeLevel: "ENHANCED INTAKE",
296:
297:
            source: "DIET",
298:
          },
299:
          phosphorus: {
300:
            score: 3,
            healthImpact: "Bone health & Kidney function",
301:
            intakeLevel: "ENHANCED INTAKE",
302:
            source: "DIET",
303:
304:
         },
305:
          selenium: {
306:
            score: 3.
307:
            healthImpact: "Cognitive & Muscle function",
            intakeLevel: "ENHANCED INTAKE",
308:
            source: "DIET",
310:
         },
311:
         zinc: {
312:
            score: 3,
313:
           healthImpact: "Fertility & Skin",
314:
           intakeLevel: "ENHANCED INTAKE",
            source: "DIET",
315:
316:
          },
        },
317:
        complexNutrients: {
318:
319:
         antiInflammatory: {
320:
            score: 5,
321:
            healthImpact: "Pain control & Organ health",
            intakeLevel: "ENHANCED INTAKE",
322:
            source: "DIET",
         },
324:
325:
         antioxidants: {
326:
            score: 6,
            healthImpact: "Skin & Immune system",
327:
            intakeLevel: "ENHANCED INTAKE",
328:
329:
            source: "DIET",
330:
          },
331:
       },
332: },
333: sportsAndFitness: {
334:
       exerciseType: {
335:
          endurancePotential: {
            level: "High Endurance Potential",
336:
337:
            description:
              "Excellent genetic predisposition for endurance activities",
338:
339:
          },
340:
          powerPotential: {
341:
            level: "Average Power Potential",
342:
            description: "Moderate power output capacity",
343:
           },
344:
           strengthProfile: {
            level: "High Strength Profile",
345:
346:
            description: "Good potential for strength training",
347:
348:
          exerciseTime: {
349:
            level: "Evening time is more beneficial than morning",
350:
            description: "MORNING Vs. EVENING",
351:
          },
352:
         },
353:
        performance: {
```

```
354:
          enduranceCapacity: {
355:
            level: "High Endurance Potential",
356:
            description: "Superior aerobic capacity",
357:
358:
          fatigueResistance: {
359:
            level: "Normal fatigue resistance. Average endurance capacity",
360:
            description: "Average endurance capacity",
361:
362:
            level: "Reduced vascular efficiency, affects endurance sports.",
363:
            description: "Affects endurance sports",
364:
365:
366:
          oxygenEfficiency: {
            level: "Normal VO2 Max. Need practice to excel in endurance sports",
367:
            description: "Need practice to excel",
368:
369:
370:
          waterLoss: {
371:
372:
              "Increased water and electrolyte loss tendency. Focus on Hydration and electrolyte management dur
373:
            description: "Focus on hydration",
374:
           },
375:
           lactateClearing: {
376:
            level: "High lactate clearance. Beneficial for Endurance sports.",
377:
            description: "Beneficial for endurance",
378:
379:
          recoveryEfficiency: {
380:
              "High recovery efficiency. Enhanced sports potential & reduced injury risk",
381:
382:
            description: "Enhanced sports potential",
383:
384:
          bodyComposition: {
385:
            level: "Low fat accumulation. Increased muscle tendency.",
            description: "Increased muscle tendency",
386:
387:
388:
          injurvRisk: {
389:
              "High injury tendency. Thorough injury management steps to be taken.",
390:
391:
            description: "Thorough injury management needed",
392:
393:
          achillesTendonInjury: {
394:
            level: "Low injury tendency. Ensure adequate warmup before exercises",
395:
            description: "Ensure adequate warmup",
396:
397:
          ligamentInjury: {
398:
            level:
399:
              "Low ACL injury tendency. Ensure adequate warmup before exercises",
400:
            description: "Ensure adequate warmup",
401:
402:
          rupture: {
403:
            level: "Low rupture tendency. Ensure adequate warmup before exercises",
404:
            description: "Ensure adequate warmup",
405:
          },
406:
          muscleCramps: {
407:
408:
              "Low risk of muscle cramps. Ensure adequate warmup before exercises",
            description: "Ensure adequate warmup",
409:
410:
          },
411:
        },
412:
413:
      lifestyleConditions: {
       heartVascularHealth: {
415:
          hypertension: { status: "strength" },
416:
           leftVentricularHypertrophy: { status: "strength" },
           atherosclerosis: { status: "improvement" },
417:
          418:
419:
          cardiomyopathy: { status: "strength" },
420:
          cholesterolImbalance: { status: "improvement" },
421:
          stroke: { status: "improvement" },
422:
423:
        diabesity: {
424:
          obesity: { status: "improvement" },
425:
          diabetesType2: { status: "improvement" },
426:
```

```
427:
        liverHealth: {
428:
           nafld: { status: "improvement" },
429:
           liverCirrhosis: { status: "strength" },
430:
431:
        boneHealth: {
432:
          osteoporosis: { status: "improvement" },
433:
          osteoarthritis: { status: "improvement" },
434:
         },
435:
        gutHealth: {
          irritableBowelSyndrome: { status: "improvement" },
436:
          celiacDisease: { status: "strength" },
437:
438:
         },
439:
        hormoneSystem: {
         hypothyroidism: { status: "improvement" },
440:
441:
         },
442:
      },
443:
      metabolicCore: {
444:
       methylation: {
         genes: ["MTHFR"],
445:
446:
          genotype: "C/T",
447:
          impact: "Reduced folate metabolism",
448:
          advice: "Consider L-methylfolate supplementation.",
449:
450:
        inflammation: {
         genes: ["CRP"],
451:
           genotype: "G/A",
452:
453:
          impact: "Increased inflammatory response",
          advice: "Incorporate anti-inflammatory foods.",
454:
455:
        },
456:
       oxidativeStress: {
457:
         genes: ["SOD2"],
458:
           genotype: "T/C",
          impact: "Reduced antioxidant defense",
459:
          advice: "Increase antioxidant-rich foods and supplements.",
460:
461:
        },
462:
        detoxification: {
463:
          genes: ["GSTP1"],
464:
          genotype: "A/G",
465:
          impact: "Impaired detoxification capacity",
466:
          advice: "Support liver health with cruciferous vegetables.",
467:
468:
        vitaminDMetabolism: {
469:
         genes: ["VDR"],
470:
           genotype: "C/C",
471:
          impact: "Reduced Vitamin D absorption",
472:
          advice: "Ensure adequate Vitamin D intake and sun exposure.",
473:
474:
       lipidMetabolism: {
475:
           genes: ["APOE"],
           genotype: "E3/E4",
476:
          impact: "Increased LDL cholesterol tendency",
477:
          advice: "Monitor lipid levels and follow a heart-healthy diet.",
478:
479:
480:
        insulinResistance: {
481:
          genes: ["TCF7L2"],
           genotype: "T/T",
482:
          impact: "Higher risk of insulin resistance",
483:
          advice: "Focus on low glycemic index foods and regular exercise.",
484:
485:
         },
486:
         circadianRhythm: {
487:
         genes: ["CLOCK"],
488:
          genotype: "C/G",
489:
          impact: "Altered sleep-wake cycle",
490:
          advice:
             "Maintain consistent sleep schedule and optimize sleep environment.",
491:
492:
493:
         exerciseResponsiveness: {
494:
          genes: ["ACTN3"],
495:
           genotype: "R/X",
          impact: "Enhanced power and strength response to training",
496:
497:
          advice: "Incorporate strength and power training into routine.",
498:
         }.
499:
         snackingTendency: {
```

```
500:
          genes: ["FTO"],
501:
          genotype: "A/A",
502:
          impact: "Increased tendency for snacking and higher BMI",
          advice: "Practice mindful eating and portion control.",
503:
504:
505:
        oestrogenElimination: {
506:
          genes: ["COMT"],
507:
          genotype: "G/A",
508:
          impact: "Slower estrogen elimination",
          advice: "Support liver detoxification pathways.",
509:
510:
511:
       powerVsEndurance: {
512:
          genes: ["ACE"],
513:
           genotype: "I/D",
          impact: "Balanced power and endurance potential",
514:
515:
          advice: "Vary training to include both power and endurance exercises.",
516:
        },
517:
        injuryRecovery: {
518:
          genes: ["COL1A1"],
519:
          genotype: "G/T",
520:
          impact: "Slower collagen repair, increased injury risk",
521:
          advice: "Focus on adequate protein and Vitamin C for tissue repair.",
522:
523:
        fluidLossTendency: {
524:
         genes: ["AGT"],
           genotype: "T/C",
525:
526:
          impact: "Increased fluid and electrolyte loss during exercise",
          advice: "Ensure proper hydration and electrolyte replenishment.",
527:
528:
        },
529:
       vo2Max: {
530:
          genes: ["PPARGC1A"],
           genotype: "G/G",
531:
          impact: "High VO2 Max potential",
532:
          advice: "Optimize cardiovascular training for peak performance.",
533:
534:
        },
535:
      },
536:
      digestiveHealth: {
537:
       qutHealth: {
538:
          level: "NORMAL GUT HEALTH",
539:
          description: "Good overall digestive function",
540:
541:
         glutenIntolerance: {
542:
         level: "LOW INTOLERANCE",
          description: "CONDITIONAL GLUTEN ELIMINATION NEEDED",
543:
544:
         },
545:
        celiacDiseaseTendency: {
546:
          level: "LOW TENDENCY",
547:
          description: "Low genetic risk for celiac disease",
548:
         },
549:
         impactOnBonesJoints: {
550:
          level: "NO IMPACT ON BONE HEALTH",
551:
          description: "Digestive health does not affect bone health",
552:
553:
        lactoseIntolerance: {
554:
          level: "HIGH INTOLERANCE",
          description: "LACTOSE ELIMINATION NEEDED",
555:
556:
557:
        probioticsRequirement: {
558:
           level: "PROBIOTICS NEEDED",
           description: "FOOD & SUPPLEMENTS",
559:
560:
        },
561:
562:
      genesAndAddiction: {
563:
        alcoholAddiction: {
564:
          tendency: "LOW",
565:
          description: "Low genetic predisposition to alcohol dependency",
566:
         },
567:
         smokingAddiction: {
           tendency: "NORMAL",
568:
          description: "Average nicotine addiction susceptibility",
569:
570:
571:
         snackingHabits: {
572:
          tendency: "HIGH",
```

```
573:
          description: "Genetic tendency toward frequent snacking",
574:
        },
575:
        altruism: {
           tendency: "HIGH",
576:
577:
           description: "Strong genetic predisposition toward helping others",
578:
579:
     },
      sleepAndRest: {
580:
581:
       sleepCycle: {
          impact: "DELAYED SLEEP CYCLE",
582:
          intervention: "EXERCISE IN THE EVENING AVOID CARBS DURING BREAKFAST",
583:
584:
        },
585:
        sleepApnea: {
          impact: "INCREASED CHANCES OF SLEEP APNEA",
586:
587:
          intervention: "EXERCISE REGULARLY SEEK MEDICAL ADVICE IF ISSUE PERSISTS",
588:
589:
        sleepDepth: {
590:
          impact: "LOW SLEEP DEPTH",
          intervention: "CONSUME CURD RICE IN DINNER FOR BETTER SLEEP",
591:
592:
593:
       stressSensitivity: {
594:
          impact: "LOW STRESS SENSITIVITY",
595:
           intervention: "EXERCISE REGULARLY FOR A BETTER SLEEP CYCLE",
596:
597: },
598: allergiesAndSensitivity: {
599:
       dustAllergy: { tendency: "NORMAL" },
        pesticideSensitivity: { tendency: "HIGH" },
600:
601:
       smokeSensitivity: { tendency: "HIGH" },
602:
       automobileSmokeSensitivity: { tendency: "HIGH" },
       generalAdvice:
603:
604:
           "THE BEST WAY TO REDUCE ALLERGIES IS TO STAY AWAY FROM THE SOURCE, NO ROCKET SCIENCE HOWEVER THE FOLL
605: },
606: geneTestResults: [
607:
       {
608:
          geneName: "ALDH2 Aldehyde dehydrogenase 2",
          variation: "G>A",
609:
610:
          result: "GG",
611:
       },
612:
613:
          geneName: "MTHFR Methylenetetrahydrofolate reductase",
          variation: "C>T",
614:
615:
          result: "CT",
616:
       },
617:
      ],
618:
      metabolicSummary: {
619:
       strengths: ["Efficient detoxification", "Normal lipid metabolism"],
620:
       weaknesses: [
           "Increased oxidative stress",
621:
622:
           "Higher risk of insulin resistance",
623:
        ],
624: },
625: preventiveHealth: {
626:
       diagnosticTests: {
627:
          halfYearly: ["PLASMA SUGAR (FASTING & PP)", "VITAMIN D"],
          yearly: [
628:
629:
            "HbAlc",
630:
            "LIPID PROFILE",
631:
            "SERUM HOMOCYSTEINE",
             "VITAMIN B12",
632:
633:
            "LIVER PROFILE",
634:
         ],
635:
        },
636:
        nutritionalSupplements: [
         { supplement: "VITAMIN D", needed: true },
637:
           { supplement: "METHYL FOLATE + METHYL COBALAMINE + B6", needed: true },
         { supplement: "OMEGA FATTY ACIDS (FISH OIL)", needed: true },
639:
          { supplement: "FOLIC ACID + COBALAMINE + B6", needed: true },
640:
          { supplement: "OMEGA FATTY ACIDS (VEG)", needed: true },
641:
          { supplement: "VITAMIN E", needed: true },
642:
643:
           { supplement: "PROBIOTICS", needed: true },
644:
        1.
645:
     },
```

```
646:
      familyGeneticImpact: [
647:
       {
648:
          gene: "MnSOD",
649:
          normalAlleles: "AA",
          yourResult: "AG",
650:
651:
         healthImpact:
652:
            "INCREASED TENDENCY OF OXIDATIVE STRESS NEED OF ANTI-OXIDANT SUPPLEMENTS",
       },
653:
654:
       {
          gene: "FTO",
655:
          normalAlleles: "TT",
656:
657:
         yourResult: "AT",
658:
          healthImpact:
            "INCREASED TENDENCY OF INSULIN RESISTANCE WEIGHT AND CALORIE MANAGEMENT IMPORTANT TO MANAGE AND RED
659:
       },
660:
661: ],
662: categories: [
663:
       {
          id: "category_1",
664:
         category: "Lipid Metabolism",
          imageUrl: "/table/content.png",
666:
667:
          description:
668:
           "This category includes genes related to lipid metabolism and cardiovascular risk.",
669:
          parameters: [
670:
          "APOAlyy",
            "APOB",
671:
672:
            "LDLR",
           "CETP",
673:
            "LIPC",
674:
675:
            "LPL",
            "SCARB1",
676:
677:
            "ABCA1",
            "PCSK9",
678:
679:
            "ANGPTL3",
680:
            "ANGPTL4",
681:
            "PLTP",
            "APOC3",
682:
683:
            "APOE",
684:
            "SREBF2",
685:
            "HMGCR",
686:
            "LCAT",
           "CYP7A1",
687:
            "PPARA",
689:
            "PPARG",
690:
            "NR1H3",
691:
692:
         isActive: true,
693:
          order: 1,
694:
        },
696: geneticParameters: [],
697: metadata: {
698: lastUpdated: "2025-07-20T12:00:00.000Z",
699:
       version: "1.0.0",
700:
        totalCategories: 1,
        totalParameters: 21,
701:
702: },
703: summaries: {
      nutrigenomicsSummary:
704:
         "Based on the overall nutrigenomics analysis, provide expert summary for personalized diet and lifest
705:
706:
        exerciseGenomicsSummary:
707:
          "Based on the overall genomics analysis, provide expert summary for personalized exercise plan...",
708:
     },
709: });
710:
711: const AdminPage = () => {
712: const [reportData, setReportData] =
713:
       useState<ComprehensiveReportData>(getDefaultReportData);
714:
      const { toast } = useToast();
715:
716: // Load data from API on component mount
717:
      useEffect(() => {
718:
        const fetchData = async () => {
```

```
719:
                             try {
720:
                                   const response = await fetch("/api/report-data");
721:
                                    if (response.ok) {
722:
                                         const data = await response.json();
723:
                                         setReportData(data);
724:
                                         toast({
725:
                                               description: "Report data has been loaded from the backend.",
726:
                                               variant: "success",
727:
                                               duration: 3000,
                                         });
728:
729:
                                     } else {
730:
                                         toast({
                                               title: "Failed to load data",
731:
732:
                                               description:
733:
                                                     "Could not load report data from the server. Using default data.",
734:
                                                variant: "destructive",
735:
                                                duration: 3000,
736:
                                          });
                                  }
737:
738:
                              } catch (error) {
739:
                                    console.error("Error fetching report data:", error);
740:
                                   toast({
741:
                                         title: "Error fetching data",
742:
                                        description:
743:
                                              "An error occurred while fetching data from the server. Using default data.",
744:
                                          variant: "destructive",
745:
                                          duration: 3000,
746:
                                     });
                             }
747:
748:
                         };
749:
                         fetchData();
750:
                   }, []);
751:
752:
                 const saveReportData = async () => {
753:
                     try {
754:
                             const response = await fetch("/api/report-data", {
                                    method: "POST",
755:
756:
                                    headers: {
757:
                                         "Content-Type": "application/json",
758:
                                     },
759:
                                    body: JSON.stringify(reportData),
760:
                               });
761:
                              if (response.ok) {
762:
763:
                                  toast({
764:
                                          title: "Report data saved!",
765:
                                         description: "Your progress has been saved to the backend.",
766:
                                         variant: "success",
767:
                                          duration: 3000,
768:
                                    });
                               } else {
769:
770:
                                   const errorData = await response.json();
771:
                                   toast({
772:
                                         title: "Failed to save data",
773:
                                         description:
                                              774:
775:
                                          variant: "destructive",
776:
                                          duration: 3000,
777:
                                    });
                             }
778:
779:
                         } catch (error) {
780:
                              console.error("Error saving report data:", error);
781:
                              toast({
782:
                                    title: "Error saving data",
                                    description: "An unexpected error occurred while saving data.", % \left( \frac{1}{2}\right) =\frac{1}{2}\left( \frac
783:
784:
                                    variant: "destructive",
785:
                                    duration: 3000,
                               });
786:
                          }
787:
788:
                  };
789:
790:
                   const resetSection = (section: keyof ComprehensiveReportData) => {
791:
                          setReportData((prev) => {
```

```
792:
          const defaultData = getDefaultReportData();
793:
          return { ...prev, [section]: defaultData[section] };
794:
         });
795:
         toast({
          title: `${section} reset!`,
796:
          description: `The \{section\} section has been reset to default values.`,
797:
798:
          duration: 3000,
799:
        });
:008
801:
      const updatePatientInfo = (field: keyof PatientInfo, value: string) => {
802:
803:
       setReportData((prev) => ({
804:
           ...prev,
           patientInfo: { ...prev.patientInfo, [field]: value },
805:
806:
         }));
807:
      };
808:
809:
      const updateReportContent = (field: keyof ReportContent, value: string) => {
810:
        setReportData((prev) => ({
811:
          ...prev,
812:
           content: { ...prev.content, [field]: value },
813:
         }));
814:
      };
815:
816:
      const updateReportSettings = (field: keyof ReportSettings, value: string) => {
817:
       setReportData((prev) => ({
818:
           ...prev,
           settings: { ...prev.settings, [field]: value },
819:
820:
        }));
821:
      };
822:
823:
      // NEW: Update function for dynamicDietFieldDefinitions
824:
      const updateDynamicDietFieldDefinitions = (
825:
       definitions: DynamicDietFieldDefinition[]
826:
      ) => {
827:
       setReportData((prev) => ({
828:
           ...prev,
829:
          dynamicDietFieldDefinitions: definitions,
830:
        }));
831:
832:
833:
      // NEW: Update function for patientDietAnalysisResults
      const updatePatientDietAnalysisResult = (
835:
        fieldId: string,
836:
        data: Partial < Patient Diet Analysis Result >
837:
      ) => {
838:
       setReportData((prev) => {
839:
          const existingIndex = prev.patientDietAnalysisResults.findIndex(
840:
            (r) => r.fieldId === fieldId
841:
           );
842:
           const newResults = [...prev.patientDietAnalysisResults];
843:
844:
          if (existingIndex > -1) {
845:
            newResults[existingIndex] = { ...newResults[existingIndex], ...data };
846:
           } else {
847:
            // If result for this fieldId doesn't exist, create a new one
848:
            newResults.push({
849:
              fieldId.
850:
              score: 0,
              level: "NORMAL",
851:
852:
              recommendation: "",
853:
               ...data,
854:
            });
855:
856:
          return { ...prev, patientDietAnalysisResults: newResults };
857:
         });
      };
858:
859:
860:
      const updateNutritionData = (
       category: keyof NutritionData,
861:
862:
        nutrient: string,
863:
        field: keyof NutrientData,
864:
        value: string | number
```

```
865:
     ) => {
866:
       setReportData((prev) => ({
867:
         ...prev,
868:
          nutritionData: {
869:
            ...prev.nutritionData,
870:
            [category]: {
871:
              ...prev.nutritionData[category],
872:
              [nutrient]: {
873:
                ...prev.nutritionData[category][
874:
                  nutrient as keyof (typeof prev.nutritionData)[typeof category]
875:
876:
                [field]: value,
877:
              },
272:
879:
          },
880:
        }));
881:
      };
882:
      const updateSportsAndFitness = (
883:
       section: keyof SportsAndFitness,
885:
       field: string,
886:
        data: Partial<ExerciseData>
887:
      ) => {
888:
       setReportData((prev) => ({
889:
         ...prev,
          sportsAndFitness: {
890:
891:
            ...prev.sportsAndFitness,
892:
             [section]: {
893:
              ...prev.sportsAndFitness[section],
894:
              [field]: {
895:
                ...prev.sportsAndFitness[section][
896:
                   field as keyof (typeof prev.sportsAndFitness)[typeof section]
897:
                ],
                ...data,
898:
899:
              },
900:
             },
901:
        }));
902:
903:
      };
904:
905:
      const updateLifestyleCondition = (
906:
       section: keyof LifestyleConditions,
907:
       field: string,
        status: HealthConditionStatus["status"]
908:
909:
     ) => {
910:
       setReportData((prev) => ({
911:
         ...prev,
912:
         lifestyleConditions: {
913:
            ...prev.lifestyleConditions,
914:
             [section]: {
915:
              ...prev.lifestyleConditions[section],
916:
              [field]: {
917:
                 ...prev.lifestyleConditions[section][
918:
                  field as keyof (typeof prev.lifestyleConditions)[typeof section]
919:
920:
                status: status,
921:
              },
922:
             },
923:
           },
        }));
924:
      };
925:
926:
927:
      const updateMetabolicCore = (
928:
        field: keyof MetabolicCore,
929:
        data: Partial<MetabolicGeneData>
930:
      ) => {
       setReportData((prev) => ({
931:
932:
         ...prev,
          metabolicCore: {
933:
934:
           ...prev.metabolicCore,
935:
            [field]: {
936:
              ...prev.metabolicCore[field],
937:
               ...data,
```

```
938:
             },
          },
939:
940:
         }));
941:
942:
943:
       const updateDigestiveHealth = (
944:
        field: keyof DigestiveHealth,
945:
        data: Partial<DigestiveHealthData>
946:
       ) => {
        setReportData((prev) => ({
947:
948:
           ...prev,
949:
           digestiveHealth: {
950:
             ...prev.digestiveHealth,
951:
             [field]: {
               ...prev.digestiveHealth[field],
952:
               ...data,
953:
954:
             },
955:
           },
956:
         }));
957:
958:
959:
       const updateGenesAndAddiction = (
960:
         field: keyof GenesAndAddiction,
961:
        data: Partial<AddictionData>
962:
       ) => {
963:
        setReportData((prev) => ({
964:
           ...prev,
965:
           genesAndAddiction: {
             ...prev.genesAndAddiction,
966:
967:
             [field]: {
968:
               ...prev.genesAndAddiction[field],
               ...data,
969:
970:
             },
971:
           },
972:
         }));
973:
974:
975:
       const updateSleepAndRest = (
976:
       field: keyof SleepAndRest,
977:
        data: Partial<SleepData>
978:
       ) => {
979:
        setReportData((prev) => ({
980:
           ...prev,
981:
           sleepAndRest: {
982:
             ...prev.sleepAndRest,
983:
             [field]: {
               ...prev.sleepAndRest[field],
984:
985:
               ...data,
986:
             },
987:
           },
988:
         }));
989:
       };
990:
991:
       const updateAllergiesAndSensitivity = (
992:
         field: keyof AllergiesAndSensitivity,
993:
         data: Partial<AllergyData> | string
994:
       ) => {
995:
         setReportData((prev) => ({
996:
           ...prev,
997:
           allergiesAndSensitivity: {
998:
             ...prev.allergiesAndSensitivity,
999:
             [field]:
                typeof data === "string"
1000:
1001:
                  ? data
1002:
                   : {
1003:
                       ...(prev.allergiesAndSensitivity[
1004:
                         field as Exclude<
1005:
                           keyof AllergiesAndSensitivity,
1006:
                           "generalAdvice"
1007:
1008:
                       ] as AllergyData),
1009:
                       ...data,
1010:
```

```
1011:
           },
1012:
        }));
1013:
1014:
1015:
        const updatePreventiveHealth = (
1016:
         section: keyof PreventiveHealth,
1017:
         data: any
1018:
        ) => {
1019:
         setReportData((prev) => ({
1020:
            ...prev,
1021:
            [section]: data,
1022:
         }));
1023:
1024:
1025:
        const addFamilyGeneticImpact = () => {
1026:
        setReportData((prev) => ({
1027:
           ...prev,
1028:
            familyGeneticImpact: [
1029:
              ...prev.familyGeneticImpact,
1030:
              { gene: "", normalAlleles: "", yourResult: "", healthImpact: "" },
1031:
           ],
          }));
1032:
        };
1033:
1034:
1035:
        const updateFamilyGeneticImpact = (
1036:
         index: number,
1037:
          field: keyof FamilyGeneticImpact,
          value: string
1038:
1039:
        ) => {
1040:
          setReportData((prev) => {
1041:
           const newImpacts = [...prev.familyGeneticImpact];
1042:
            newImpacts[index] = { ...newImpacts[index], [field]: value };
1043:
           return { ...prev, familyGeneticImpact: newImpacts };
1044:
         });
        };
1045:
1046:
1047:
        const removeFamilyGeneticImpact = (index: number) => {
1048:
         setReportData((prev) => ({
1049:
            ...prev,
1050:
            familyGeneticImpact: prev.familyGeneticImpact.filter(
              (_, i) => i !== index
1051:
1052:
           ),
1053:
         }));
        };
1054:
1055:
1056:
        const updateGeneTestResult = (
1057:
         index: number,
1058:
         field: keyof GeneTestResult,
1059:
         value: string
1060:
        ) => {
          setReportData((prev) => {
1061:
1062:
           const newGeneTests = [...prev.geneTestResults];
1063:
            newGeneTests[index] = { ...newGeneTests[index], [field]: value };
1064:
            return { ...prev, geneTestResults: newGeneTests };
1065:
          });
        };
1066:
1067:
1068:
        const addGeneTestResult = () => {
1069:
        setReportData((prev) => ({
1070:
            ...prev,
1071:
            geneTestResults: [
1072:
              ...prev.geneTestResults,
1073:
              { geneName: "", variation: "", result: "" },
1074:
            ],
1075:
          }));
1076:
1077:
1078:
        const removeGeneTestResult = (index: number) => {
1079:
          setReportData((prev) => ({
1080:
            ...prev,
1081:
            geneTestResults: prev.geneTestResults.filter((_, i) => i !== index),
1082:
          }));
1083:
```

```
1084:
1085:
       const updateReportSummaries = (
1086:
        field: keyof ReportSummaries,
1087:
         value: string
1088:
        ) => {
1089:
         setReportData((prev) => ({
1090:
1091:
            summaries: { ...prev.summaries, [field]: value },
1092:
          }));
        };
1093:
1094:
1095:
        return (
1096:
         <div className="max-w-7xl mx-auto py-10">
1097:
            <hl className="text-3xl font-bold mb-5">Admin Dashboard</hl>
1098:
1099:
            <div className="mb-5 flex flex-col sm:flex-row gap-2 sm:items-center sm:justify-start no-print">
1100:
             <Button onClick={saveReportData} className="w-full sm:w-auto">
1101:
                Save Data
              </But.ton>
1102:
1103:
              <Button
1104:
                onClick={() => setReportData(getDefaultReportData())}
1105:
               className="w-full sm:w-auto"
1106:
1107:
               Reset All
1108:
              </Button>
            </div>
1109:
1110:
            <Tabs defaultValue="patient-info" className="w-[100%]">
1111:
1112:
             <div className="w-full overflow-x-auto scrollbar-hide">
1113:
                <TabsList className="flex gap-2 min-w-max bg-white shadow-sm px-4 py-2 rounded-md border border-
1114:
                  <TabsTrigger value="patient-info">Patient Info</TabsTrigger>
1115:
                  <TabsTrigger value="content">Content</TabsTrigger>
1116:
                  <TabsTrigger value="genetic-parameters">
1117:
                    Table Of Content
1118:
                  </TabsTrigger>
1119:
                  <TabsTrigger value="settings">Settings</TabsTrigger>
1120:
                  <TabsTrigger value="diet-fields">Diet Fields</TabsTrigger>
1121:
                  <TabsTrigger value="nutrition">Nutrition</TabsTrigger>
1122:
                  <TabsTrigger value="sports-fitness">Sports & Fitness</TabsTrigger>
1123:
                  <TabsTrigger value="lifestyle-conditions">Lifestyle</TabsTrigger>
1124:
                  <TabsTrigger value="metabolic-core">Metabolic Core</TabsTrigger>
1125:
                  <TabsTrigger value="digestive-health">Digestive Health</TabsTrigger>
1126:
                  <TabsTrigger value="genes-addiction">Genes & Addiction</TabsTrigger>
1127:
                  <TabsTrigger value="sleep-rest">Sleep & Rest</TabsTrigger>
1128:
                  <TabsTrigger value="allergies-sensitivity">Allergies</TabsTrigger>
1129:
                  <TabsTrigger value="preventive-health">
1130:
                    Preventive Health
1131:
                  </TabsTrigger>
                  <TabsTrigger value="family-genetic-impact">
1132:
1133:
                    Family Impact
1134:
                  </TabsTrigger>
1135:
                  <TabsTrigger value="genes">Gene Results</TabsTrigger>
1136:
                  <TabsTrigger value="summaries">Summaries</TabsTrigger>
1137:
                  <TabsTrigger value="pdf-export">PDF Export</TabsTrigger>
1138:
                  <TabsTrigger value="import-export">Import/Export</TabsTrigger>
                </TabsList>
1139:
              </div>
1140:
1141:
1142:
              <TabsContent value="patient-info">
1143:
                <PatientInfoAdmin
1144:
                 patientInfo={reportData.patientInfo}
1145:
                  updatePatientInfo={updatePatientInfo}
1146:
                  onSave={() => saveReportData()}
1147:
                  onReset={() => resetSection("patientInfo")}
1148:
                />
1149:
              </TabsContent>
1150:
              <TabsContent value="content">
1151:
                <ContentAdmin
1152:
                  content={reportData.content}
1153:
                 updateContent={updateReportContent}
                 onSave={() => saveReportData()}
1154:
                 onReset={() => resetSection("content")}
1155:
1156:
```

```
1157:
              </TabsContent>
1158:
1159:
              <TabsContent value="genetic-parameters">
1160:
                <GeneticParametersAdmin
1161:
                  geneticParameters={reportData.geneticParameters}
1162:
                  updateParameters={(updated) =>
1163:
                    setReportData((prev) => ({ ...prev, geneticParameters: updated }))
1164:
                  onSave={() => saveReportData()}
1165:
                  onReset={() => resetSection("geneticParameters")}
1166:
1167:
1168:
              </TabsContent>
1169:
1170:
              <TabsContent value="settings">
1171:
                <SettingsAdmin
1172:
                  settings={reportData.settings}
1173:
                  updateSettings={updateReportSettings}
1174:
                  onSave={() => saveReportData()}
1175:
                  onReset={() => resetSection("settings")}
1176:
1177:
              </TabsContent>
1178:
1179:
              <TabsContent value="diet-fields">
1180:
                {/* Changed tab content value */}
1181:
1182:
                <DvnamicDietFieldAdmin
                  dynamicDietFieldDefinitions={reportData.dynamicDietFieldDefinitions}
1184:
                  updateDynamicDietFieldDefinitions={
1185:
                    updateDynamicDietFieldDefinitions
1186:
1187:
                  onSave={() => saveReportData()}
1188:
                  onReset={() => resetSection("dynamicDietFieldDefinitions")}
                />
1189:
1190:
              </TabsContent>
              <TabsContent value="nutrition">
1191:
1192:
               <NutritionAdmin
1193:
                  nutritionData={reportData.nutritionData}
1194:
                  updateNutritionData={updateNutritionData}
1195:
                  onSave={() => saveReportData()}
1196:
                  onReset={() => resetSection("nutritionData")}
1197:
1198:
              </TabsContent>
1199:
              <TabsContent value="sports-fitness">
1200:
                <SportsFitnessAdmin</pre>
1201:
                  sportsAndFitness={reportData.sportsAndFitness}
1202:
                  updateSportsAndFitness={updateSportsAndFitness}
1203:
                  onSave={() => saveReportData()}
1204:
                  onReset={() => resetSection("sportsAndFitness")}
1205:
                />
1206:
              </TabsContent>
              <TabsContent value="lifestyle-conditions">
1207:
1208:
               <LifestyleConditionsAdmin
1209:
                  lifestyleConditions={reportData.lifestyleConditions}
1210:
                  \verb"updateLifestyleCondition={updateLifestyleCondition}" \\
1211:
                  onSave={() => saveReportData()}
                  onReset={() => resetSection("lifestyleConditions")}
1212:
                />
1213:
1214:
              </TabsContent>
1215:
              <TabsContent value="metabolic-core">
1216:
                <MetabolicCoreAdmin
1217:
                  metabolicCore={reportData.metabolicCore}
1218:
                  updateMetabolicCore={updateMetabolicCore}
1219:
                  onSave={() => saveReportData()}
1220:
                  onReset={() => resetSection("metabolicCore")}
                />
1221:
1222:
              </TabsContent>
              <TabsContent value="digestive-health">
1223:
1224:
                <DigestiveHealthAdmin
1225:
                  digestiveHealth={reportData.digestiveHealth}
1226:
                  updateDigestiveHealth={updateDigestiveHealth}
1227:
                  onSave={() => saveReportData()}
                  onReset={() => resetSection("digestiveHealth")}
1228:
1229:
```

```
1230:
              </TabsContent>
1231:
              <TabsContent value="genes-addiction">
1232:
                <GenesAddictionAdmin
                  genesAndAddiction={reportData.genesAndAddiction}
1233:
1234:
                  updateGenesAndAddiction={updateGenesAndAddiction}
1235:
                  onSave={() => saveReportData()}
1236:
                  onReset={() => resetSection("genesAndAddiction")}
1237:
                />
              </TabsContent>
1238:
              <TabsContent value="sleep-rest">
1239:
1240:
                <SleepRestAdmin
1241:
                  sleepAndRest={reportData.sleepAndRest}
1242:
                  updateSleepAndRest={updateSleepAndRest}
1243:
                  onSave={() => saveReportData()}
                 onReset={() => resetSection("sleepAndRest")}
1244:
1245:
                />
              </TabsContent>
1246:
1247:
              <TabsContent value="allergies-sensitivity">
1248:
                <AllergiesSensitivityAdmin
1249:
                  allergiesAndSensitivity={reportData.allergiesAndSensitivity}
1250:
                  updateAllergiesAndSensitivity={updateAllergiesAndSensitivity}
1251:
                  onSave={() => saveReportData()}
1252:
                  onReset={() => resetSection("allergiesAndSensitivity")}
1253:
               />
1254:
              </TabsContent>
             <TabsContent value="preventive-health">
1255:
1256:
               <PreventiveHealthAdmin</pre>
1257:
                  preventiveHealth={reportData.preventiveHealth}
1258:
                  updatePreventiveHealth={updatePreventiveHealth}
1259:
                  onSave={() => saveReportData()}
1260:
                  onReset={() => resetSection("preventiveHealth")}
1261:
1262:
              </TabsContent>
              <TabsContent value="family-genetic-impact">
1264:
                <FamilyGeneticImpactAdmin</pre>
1265:
                  familyGeneticImpact={reportData.familyGeneticImpact}
1266:
                  addFamilyGeneticImpact={addFamilyGeneticImpact}
1267:
                  updateFamilyGeneticImpact={updateFamilyGeneticImpact}
1268:
                  removeFamilyGeneticImpact={removeFamilyGeneticImpact}
1269:
                  onSave={() => saveReportData()}
1270:
                  onReset={() => resetSection("familyGeneticImpact")}
1271:
                />
1272:
              </TabsContent>
1273:
              <TabsContent value="genes">
1274:
               <GeneResultsAdmin
1275:
                  geneTestResults={reportData.geneTestResults}
1276:
                  updateGeneTestResult={updateGeneTestResult}
1277:
                  addGeneTestResult={addGeneTestResult}
1278:
                  removeGeneTestResult={removeGeneTestResult}
1279:
                  onSave={() => saveReportData()}
                  onReset={() => resetSection("geneTestResults")}
1280:
               />
1281:
1282:
              </TabsContent>
1283:
              <TabsContent value="summaries">
1284:
                <SummariesAdmin
1285:
                  summaries={reportData.summaries}
                  updateSummaries={updateReportSummaries}
1286:
1287:
                  onSave={() => saveReportData()}
1288:
                  onReset={() => resetSection("summaries")}
               />
1289:
1290:
              </TabsContent>
1291:
              <TabsContent value="pdf-export">
1292:
               <PDFGenerator reportData={reportData} />
1293:
              </TabsContent>
              <TabsContent value="import-export">
1294:
1295:
                <ImportExportAdmin</pre>
1296:
                  reportData={reportData}
1297:
                  setReportData={setReportData}
1298:
1299:
              </TabsContent>
1300:
            </Tabs>
1301:
          </div>
1302: );
```

```
1303: };
1304:
1305: export default AdminPage;
```

._____

■ File: app\api\comprehensive-report-data\route.ts

```
______
 1: import { type NextRequest, NextResponse } from "next/server"
 2:
 3: // In-memory storage for demo purposes
 4: let reportData: any = null
 6: export async function GET() {
 7:
    if (!reportData) {
 8:
      return NextResponse.json({ message: "No data found" }, { status: 404 })
 9:
10:
11:
     return NextResponse.json(reportData)
12: }
13:
14: export async function POST(request: NextRequest) {
15: try {
16:
      const data = await request.json()
17:
      reportData = data
18:
19:
       return NextResponse.json({ message: "Data saved successfully" })
    } catch (error) {
20:
       return NextResponse.json({ message: "Error saving data" }, { status: 500 })
21:
22:
23: }
```

■ File: app\api\report-data\route.ts

37:

```
______
 1: import { promises as fs } from "fs";
 2: import path from "path";
 3: import { NextResponse } from "next/server";
 4: import { v4 as uuidv4 } from "uuid"; // Import uuid
 5: import type { ComprehensiveReportData } from "@/types/report-types";
 6:
 7: const dataFilePath = path.join(process.cwd(), "data", "report-data.json");
 8:
 9: // Default data to initialize if the file doesn't exist
 10: const defaultReportData: ComprehensiveReportData = {
11: patientInfo: {
12:
      name: "John",
       gender: "MALE",
13:
       birthDate: "1990-01-01",
 14:
       sampleCode: "DNL1000000110",
15:
       sampleDate: "2023-01-15",
16:
17:
       reportDate: "2023-02-01",
18:
       reportAuth: "Dr. Jane Smith, PhD",
 19:
        genomicAnalytics: "Genomics Lab Inc.",
        checkedBy: "Dr. Alice Brown",
 20:
       scientificContent: "Dr. Robert White",
 21:
 22:
       disclaimer:
 23:
          "This report is for informational purposes only and should not be used as a substitute for profession
 24:
        signature1: "",
 25:
       signature2: "",
 26:
     },
 27:
     content: {
 28:
       introduction:
         "Welcome to your personalized nutrigenomics report. This document provides insights into how your gen
 29:
 30:
       genomicsExplanation:
         "Genomics is the study of an organism's complete set of DNA, including all of its genes. It helps us
31:
 32:
       genesHealthImpact:
 33:
          "Your genes play a significant role in determining your health predispositions. This report highlight
 34:
       fundamentalsPRS:
          "Polygenic Risk Scores (PRS) combine the effects of many genetic variants to estimate an individual's
 35:
       utilityDoctors:
 36:
```

"This report is designed to be a valuable tool for doctors and dietitians, providing actionable genet

```
38:
        microarravExplanation:
 39:
           "Microarray technology allows for the simultaneous measurement of the expression levels of thousands
 40:
         microarrayData:
 41:
           "Your microarray data has been analyzed to identify specific genetic variations relevant to your heal
 42:
 43:
      settings: {
 44:
       title: "Comprehensive Health Report",
 45:
         subtitle: "A Detailed Analysis of Your Genetics",
         companyName: "Health Solutions Inc.",
 46:
        headerColor: "#2C3E50",
 47:
        accentColor: "#E74C3C",
 48:
 49:
       fonts: {
 50:
         primary: "Helvetica, Arial, sans-serif",
 51:
          secondary: "Georgia, serif",
 52:
          mono: "Courier New, monospace",
 53:
       },
 54:
      },
 55:
      // NEW: Default dynamic diet field definitions
       dynamicDietFieldDefinitions: [
 56:
 57:
 58:
           _uuid: uuidv4(),
 59:
           id: "carbohydrate_sensitivity",
 60:
           label: "Carbohydrate Sensitivity",
           category: "Macronutrients",
 61:
 62:
          min: 1.
 63:
           max: 10,
 64:
           highRecommendation: "Reduce carbohydrate intake, focus on complex carbs.",
           normalRecommendation: "Maintain balanced carbohydrate intake.",
 65:
 66:
           lowRecommendation: "Ensure adequate carbohydrate intake.",
 67:
       },
 68:
           _uuid: uuidv4(),
 69:
 70:
           id: "fat_sensitivity",
          label: "Fat Sensitivity",
 71:
 72:
           category: "Macronutrients",
 73:
          min: 1,
           max: 10,
 74:
 75:
          highRecommendation:
 76:
             "Reduce saturated and trans fats; focus on healthy fats.",
           normalRecommendation: "Maintain balanced fat intake.",
 77:
 78:
           lowRecommendation: "Ensure adequate healthy fat intake.",
 79:
         },
 80:
         {
           _uuid: uuidv4(),
 81:
 82:
           id: "protein_requirement",
 83:
           label: "Protein Requirement",
          category: "Macronutrients",
 84:
 85:
          min: 1,
 86:
          max: 10.
 87:
           highRecommendation: "Increased protein intake recommended.",
          normalRecommendation: "Ensure adequate protein intake.",
 88:
 89:
          lowRecommendation:
 90:
             "Consider increasing protein intake for muscle maintenance.",
 91:
        },
 92:
        {
 93:
           uuid: uuidv4(),
           id: "meal_frequency",
 94:
           label: "Meal Frequency",
 95:
 96:
          category: "Meal Pattern",
 97:
          min: 1,
 98:
          max: 10,
 99:
          highRecommendation: "Consider smaller, more frequent meals.",
100:
           normalRecommendation: "Maintain regular meal frequency.",
101:
           lowRecommendation: "Consider fewer, larger meals.",
102:
103:
        {
104:
          _uuid: uuidv4(),
105:
           id: "alcohol_sensitivity",
106:
           label: "Alcohol Sensitivity",
          category: "Food Sensitivities",
107:
108:
          min: 1,
109:
           max: 10.
110:
           highRecommendation:
```

```
"Limit alcohol consumption due to genetic sensitivity.",
111:
112:
          normalRecommendation: "Moderate alcohol intake is fine.",
113:
          lowRecommendation: "Normal alcohol metabolism.",
114:
        },
115:
116:
           _uuid: uuidv4(),
        _uuld: uuluva(,,
id: "caffeine_sensitivity",
117:
          label: "Caffeine Sensitivity",
118:
119:
          category: "Food Sensitivities",
120:
          min: 1.
         max: 10,
121:
         highRecommendation: "Limit caffeine intake due to slow metabolism.",
122:
         normalRecommendation:
123:
124:
           "Normal caffeine metabolism; moderate intake is fine.",
125:
         lowRecommendation:
126:
            "Fast caffeine metabolism; higher intake may be tolerated.",
127:
       },
128:
      // NEW: Default patient-specific results for dynamic diet fields
129:
      patientDietAnalysisResults: [
131:
132:
          fieldId: "carbohydrate_sensitivity",
133:
          score: 5,
134:
         level: "NORMAL",
135:
         recommendation: "Maintain balanced carbohydrate intake.",
136:
       },
137:
       {
          fieldId: "fat_sensitivity",
138:
139:
         score: 7,
140:
         level: "HIGH",
          recommendation: "Reduce saturated and trans fats; focus on healthy fats.",
141:
142:
143:
        fieldId: "protein_requirement",
144:
145:
         score: 3,
146:
          level: "LOW",
147:
          recommendation: "Ensure adequate protein intake for muscle maintenance.",
148:
149:
       {
150:
          fieldId: "meal_frequency",
151:
          score: 6,
         level: "FREOUENT",
152:
         recommendation: "Consider smaller, more frequent meals.",
154:
       },
155:
       {
156:
          fieldId: "alcohol_sensitivity",
157:
         score: 9,
158:
         level: "HIGH",
159:
          recommendation: "Limit alcohol consumption due to genetic sensitivity.",
160:
161:
        fieldId: "caffeine_sensitivity",
162:
163:
         score: 2,
164:
          level: "LOW",
165:
          recommendation: "Normal caffeine metabolism; moderate intake is fine.",
166:
        },
167: ],
168: nutritionData: {
      vitamins: {
169:
          vitaminA: {
170:
171:
           score: 3,
172:
           healthImpact: "Skin & Vision",
           intakeLevel: "ENHANCED INTAKE",
173:
174:
            source: "DIET",
         },
175:
176:
          vitaminB12: {
177:
            score: 6,
178:
            healthImpact: "Nervous System & Bones",
            intakeLevel: "ENHANCED INTAKE (METHYLCOBALAMIN)",
179:
180:
            source: "DIET",
181:
182:
          vitaminB2: {
183:
            score: 3,
```

```
healthImpact: "Energy Metabolism",
185:
            intakeLevel: "ENHANCED INTAKE",
186:
            source: "DIET",
187:
          },
188:
          vitaminB6: {
189:
           score: 6,
            healthImpact: "Tissue growth repair",
190:
191:
            intakeLevel: "ENHANCED INTAKE",
192:
            source: "DIET",
         },
193:
194:
         vitaminB9: {
195:
           score: 3,
            healthImpact: "RBC development & Heart health",
196:
            intakeLevel: "ENHANCED INTAKE (L METHYLFOLATE)",
197:
198:
            source: "DIET",
         },
199:
200:
          vitaminC: {
201:
            score: 3,
           healthImpact: "Skin & Immunity",
202:
           intakeLevel: "ENHANCED INTAKE",
204:
           source: "DIET",
205:
          },
206:
          vitaminD: {
207:
           score: 6.
208:
            healthImpact: "Bones & Diabetes",
209:
            intakeLevel: "ENHANCED INTAKE & SUN EXPOSURE",
210:
            source: "DIET & SUN EXPOSURE",
211:
          vitaminE: {
212:
213:
           score: 5,
214:
            healthImpact: "Skin & Immune system",
            intakeLevel: "ENHANCED INTAKE",
215:
            source: "DIET",
216:
217:
         },
       },
218:
       fattyAcids: {
219:
220:
         omegaFattyAcids: {
221:
           score: 5,
222:
           healthImpact: "Cardiac health & Triglycerides",
           intakeLevel: "ENHANCED INTAKE (VEG SOURCES)",
223:
224:
            source: "ENHANCED INTAKE (VEG/FISH OIL) & DIET",
225:
         },
        },
227:
        elements: {
        calcium: {
228:
229:
            score: 3,
230:
           healthImpact: "Bone health & Nerve function",
231:
           intakeLevel: "ENHANCED INTAKE",
            source: "DIET",
232:
         },
233:
         iodine: {
234:
          score: 3,
236:
           healthImpact: "Detoxification & Thyroid hormones",
           intakeLevel: "ENHANCED INTAKE",
237:
238:
            source: "DIET",
         },
239:
240:
         iron: {
241:
            score: 3,
            healthImpact: "Haemoglobin & Energy",
242:
            intakeLevel: "RESTRICTED INTAKE",
243:
244:
           source: "DIET",
245:
246:
          magnesium: {
247:
            score: 3,
            healthImpact: "Heart health & Immunity",
248:
249:
           intakeLevel: "ENHANCED INTAKE",
250:
            source: "DIET",
251:
          },
252:
          phosphorus: {
253:
           score: 3,
254:
           healthImpact: "Bone health & Kidney function",
255:
            intakeLevel: "ENHANCED INTAKE",
256:
            source: "DIET",
```

```
257:
          },
258:
          selenium: {
259:
           score: 3,
            healthImpact: "Cognitive & Muscle function",
260:
            intakeLevel: "ENHANCED INTAKE",
261:
262:
            source: "DIET",
          },
263:
264:
          zinc: {
265:
            score: 3,
            healthImpact: "Fertility & Skin",
266:
267:
            intakeLevel: "ENHANCED INTAKE",
268:
            source: "DIET",
269:
          },
        },
270:
271:
        complexNutrients: {
272:
         antiInflammatory: {
273:
            score: 5,
274:
            healthImpact: "Pain control & Organ health",
            intakeLevel: "ENHANCED INTAKE",
275:
276:
            source: "DIET",
277:
          },
278:
          antioxidants: {
279:
            score: 6,
280:
            healthImpact: "Skin & Immune system",
281:
            intakeLevel: "ENHANCED INTAKE",
282:
            source: "DIET",
283:
           },
        },
284:
285: },
286:
      sportsAndFitness: {
287:
       exerciseType: {
288:
          endurancePotential: {
            level: "High Endurance Potential",
289:
290:
               "Excellent genetic predisposition for endurance activities",
291:
292:
           },
293:
          powerPotential: {
294:
            level: "Average Power Potential",
295:
            description: "Moderate power output capacity",
296:
297:
          strengthProfile: {
            level: "High Strength Profile",
298:
299:
            description: "Good potential for strength training",
300:
301:
           exerciseTime: {
302:
            level: "Evening time is more beneficial than morning",
             description: "MORNING Vs. EVENING",
303:
304:
          },
305:
         },
306:
        performance: {
307:
           enduranceCapacity: {
            level: "High Endurance Potential",
309:
            description: "Superior aerobic capacity",
310:
           },
311:
           fatigueResistance: {
            level: "Normal fatigue resistance. Average endurance capacity",
312:
            description: "Average endurance capacity",
313:
314:
315:
          bloodFlow: {
             level: "Reduced vascular efficiency, affects endurance sports.", \ 
316:
317:
            description: "Affects endurance sports",
318:
319:
           oxygenEfficiency: {
320:
            level: "Normal VO2 Max. Need practice to excel in endurance sports",
             description: "Need practice to excel",
321:
322:
323:
          waterLoss: {
324:
            level:
325:
               "Increased water and electrolyte loss tendency. Focus on Hydration and electrolyte management dur
326:
            description: "Focus on hydration",
327:
328:
           lactateClearing: {
329:
             level: "High lactate clearance. Beneficial for Endurance sports.",
```

```
330:
             description: "Beneficial for endurance",
331:
           },
332:
           recoveryEfficiency: {
333:
               "High recovery efficiency. Enhanced sports potential & reduced injury risk",
334:
335:
             description: "Enhanced sports potential",
336:
337:
           bodyComposition: {
338:
             level: "Low fat accumulation. Increased muscle tendency.",
             description: "Increased muscle tendency",
339:
340:
341:
           injuryRisk: {
342:
             level:
               "High injury tendency. Thorough injury management steps to be taken.",
343:
344:
             description: "Thorough injury management needed",
345:
346:
           achillesTendonInjury: {
347:
             level: "Low injury tendency. Ensure adequate warmup before exercises",
             description: "Ensure adequate warmup",
348:
349:
           },
350:
           ligamentInjury: {
351:
352:
               "Low ACL injury tendency. Ensure adequate warmup before exercises",
353:
             description: "Ensure adequate warmup",
354:
355:
           rupture: {
356:
             level: "Low rupture tendency. Ensure adequate warmup before exercises",
357:
             description: "Ensure adequate warmup",
358:
           },
359:
           muscleCramps: {
360:
361:
               "Low risk of muscle cramps. Ensure adequate warmup before exercises",
             description: "Ensure adequate warmup",
362:
363:
           },
         },
364:
365:
366:
       lifestyleConditions: {
367:
        heartVascularHealth: {
368:
           hypertension: { status: "strength" },
           leftVentricularHypertrophy: { status: "strength" },
atherosclerosis: { status: "improvement" },
369:
370:
           familial {\tt Hypercholesterolemia: \{ status: "strength" \},}
371:
372:
           cardiomyopathy: { status: "strength" },
373:
           cholesterolImbalance: { status: "improvement" },
374:
           stroke: { status: "improvement" },
375:
376:
         diabesity: {
377:
           obesity: { status: "improvement" },
           diabetesType2: { status: "improvement" },
378:
379:
380:
         liverHealth: {
           nafld: { status: "improvement" },
381:
382:
           liverCirrhosis: { status: "strength" },
383:
         },
384:
         boneHealth: {
           osteoporosis: { status: "improvement" },
385:
           osteoarthritis: { status: "improvement" },
386:
387:
         },
388:
         gutHealth: {
           irritableBowelSyndrome: { status: "improvement" },
389:
           celiacDisease: { status: "strength" },
390:
391:
392:
         hormoneSystem: {
393:
           hypothyroidism: { status: "improvement" },
394:
         },
395:
      },
396:
       metabolicCore: {
397:
       methylation: {
398:
          genes: ["MTHFR"],
          genotype: "C/T",
399:
400:
          impact: "Reduced folate metabolism",
401:
           advice: "Consider L-methylfolate supplementation.",
402:
```

```
403:
        inflammation: {
          genes: ["CRP"],
404:
405:
           genotype: "G/A",
           impact: "Increased inflammatory response",
406:
          advice: "Incorporate anti-inflammatory foods.",
407:
408:
        },
409:
       oxidativeStress: {
410:
         genes: ["SOD2"],
411:
          genotype: "T/C",
          impact: "Reduced antioxidant defense",
412:
          advice: "Increase antioxidant-rich foods and supplements.",
413:
414:
         },
415:
        detoxification: {
416:
          genes: ["GSTP1"],
417:
          genotype: "A/G",
418:
          impact: "Impaired detoxification capacity",
419:
          advice: "Support liver health with cruciferous vegetables.",
420:
         },
421:
        vitaminDMetabolism: {
422:
          genes: ["VDR"],
423:
          genotype: "C/C",
424:
          impact: "Reduced Vitamin D absorption",
425:
          advice: "Ensure adequate Vitamin D intake and sun exposure.",
426:
427:
       lipidMetabolism: {
428:
          genes: ["APOE"],
429:
           genotype: "E3/E4",
           impact: "Increased LDL cholesterol tendency",
430:
          advice: "Monitor lipid levels and follow a heart-healthy diet.",
431:
432:
        },
433:
       insulinResistance: {
434:
          genes: ["TCF7L2"],
          genotype: "T/T",
435:
          impact: "Higher risk of insulin resistance",
437:
          advice: "Focus on low glycemic index foods and regular exercise.",
438:
         },
439:
        circadianRhythm: {
440:
          genes: ["CLOCK"],
441:
          genotype: "C/G",
442:
          impact: "Altered sleep-wake cycle",
443:
          advice:
444:
             "Maintain consistent sleep schedule and optimize sleep environment.",
445:
446:
         exerciseResponsiveness: {
447:
         genes: ["ACTN3"],
448:
           genotype: "R/X",
449:
          impact: "Enhanced power and strength response to training",
450:
          advice: "Incorporate strength and power training into routine.",
451:
         },
452:
        snackingTendency: {
          genes: ["FTO"],
453:
          genotype: "A/A",
455:
          impact: "Increased tendency for snacking and higher BMI",
456:
          advice: "Practice mindful eating and portion control.",
457:
458:
        oestrogenElimination: {
          genes: ["COMT"],
459:
460:
           genotype: "G/A",
461:
           impact: "Slower estrogen elimination",
           advice: "Support liver detoxification pathways.",
462:
463:
        },
        powerVsEndurance: {
464:
465:
          genes: ["ACE"],
466:
           genotype: "I/D",
          impact: "Balanced power and endurance potential",
467:
468:
          advice: "Vary training to include both power and endurance exercises.",
469:
        },
470:
        injuryRecovery: {
           genes: ["COL1A1"],
471:
472:
           genotype: "G/T",
473:
          impact: "Slower collagen repair, increased injury risk",
474:
          advice: "Focus on adequate protein and Vitamin C for tissue repair.",
475:
```

```
476:
        fluidLossTendency: {
477:
          genes: ["AGT"],
478:
          genotype: "T/C",
479:
          impact: "Increased fluid and electrolyte loss during exercise",
          advice: "Ensure proper hydration and electrolyte replenishment.",
480:
481:
        },
482:
       vo2Max: {
483:
         genes: ["PPARGC1A"],
484:
          genotype: "G/G",
          impact: "High VO2 Max potential",
485:
          advice: "Optimize cardiovascular training for peak performance.",
486:
487:
        },
488:
      },
489:
      digestiveHealth: {
490:
        gutHealth: {
491:
          level: "NORMAL GUT HEALTH",
492:
          description: "Good overall digestive function",
493:
494:
        glutenIntolerance: {
495:
          level: "LOW INTOLERANCE",
496:
          description: "CONDITIONAL GLUTEN ELIMINATION NEEDED",
497:
         },
498:
        celiacDiseaseTendency: {
499:
          level: "LOW TENDENCY",
500:
          description: "Low genetic risk for celiac disease",
501:
        },
502:
       impactOnBonesJoints: {
         level: "NO IMPACT ON BONE HEALTH",
503:
504:
          description: "Digestive health does not affect bone health",
505:
       },
506:
       lactoseIntolerance: {
507:
         level: "HIGH INTOLERANCE",
508:
          description: "LACTOSE ELIMINATION NEEDED",
509:
       },
       probioticsRequirement: {
510:
511:
          level: "PROBIOTICS NEEDED",
512:
          description: "FOOD & SUPPLEMENTS",
513:
        },
514: },
515: genesAndAddiction: {
516:
       alcoholAddiction: {
517:
         tendency: "LOW",
518:
         description: "Low genetic predisposition to alcohol dependency",
519:
       },
       smokingAddiction: {
520:
521:
          tendency: "NORMAL",
522:
          description: "Average nicotine addiction susceptibility",
523:
       snackingHabits: {
524:
525:
        tendency: "HIGH",
526:
          description: "Genetic tendency toward frequent snacking",
527:
        },
528:
       altruism: {
529:
          tendency: "HIGH",
530:
           description: "Strong genetic predisposition toward helping others",
531:
        },
532:
     },
533:
      sleepAndRest: {
       sleepCycle: {
534:
          impact: "DELAYED SLEEP CYCLE",
535:
536:
          intervention: "EXERCISE IN THE EVENING AVOID CARBS DURING BREAKFAST",
537:
538:
        sleepApnea: {
539:
          impact: "INCREASED CHANCES OF SLEEP APNEA",
          intervention: "EXERCISE REGULARLY SEEK MEDICAL ADVICE IF ISSUE PERSISTS",
540:
541:
542:
        sleepDepth: {
543:
          impact: "LOW SLEEP DEPTH",
544:
           intervention: "CONSUME CURD RICE IN DINNER FOR BETTER SLEEP",
545:
        },
546:
        stressSensitivity: {
          impact: "LOW STRESS SENSITIVITY",
547:
548:
           intervention: "EXERCISE REGULARLY FOR A BETTER SLEEP CYCLE",
```

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549:
        },
550:
551:
     allergiesAndSensitivity: {
       dustAllergy: { tendency: "NORMAL" },
552:
        pesticideSensitivity: { tendency: "HIGH" },
553:
554:
        smokeSensitivity: { tendency: "HIGH" },
555:
        automobileSmokeSensitivity: { tendency: "HIGH" },
       generalAdvice:
556:
557:
          "THE BEST WAY TO REDUCE ALLERGIES IS TO STAY AWAY FROM THE SOURCE, NO ROCKET SCIENCE HOWEVER THE FOLL
      },
558:
559:
      geneTestResults: [
560:
       {
561:
          geneName: "ALDH2 Aldehyde dehydrogenase 2",
          variation: "G>A",
562:
563:
          result: "GG",
564:
        },
565:
        {
566:
          geneName: "MTHFR Methylenetetrahydrofolate reductase",
          variation: "C>T",
567:
568:
          result: "CT",
569:
        },
570:
      ],
571:
      metabolicSummary: {
       strengths: ["Efficient detoxification", "Normal lipid metabolism"],
572:
573:
        weaknesses: [
574:
          "Increased oxidative stress",
575:
           "Higher risk of insulin resistance",
576:
        ],
577:
     },
578:
      preventiveHealth: {
579:
       diagnosticTests: {
580:
          halfYearly: ["PLASMA SUGAR (FASTING & PP)", "VITAMIN D"],
          yearly: [
581:
582:
             "HbAlc",
583:
             "LIPID PROFILE",
584:
             "SERUM HOMOCYSTEINE",
585:
             "VITAMIN B12",
586:
            "LIVER PROFILE",
587:
          ],
588:
        },
589:
        nutritionalSupplements: [
         { supplement: "VITAMIN D", needed: true },
590:
           { supplement: "METHYL FOLATE + METHYL COBALAMINE + B6", needed: true },
592:
           { supplement: "OMEGA FATTY ACIDS (FISH OIL)", needed: true },
593:
          { supplement: "FOLIC ACID + COBALAMINE + B6", needed: true },
594:
           { supplement: "OMEGA FATTY ACIDS (VEG)", needed: true },
           { supplement: "VITAMIN E", needed: true },
595:
596:
           { supplement: "PROBIOTICS", needed: true },
597:
        1,
598:
      },
599:
      familyGeneticImpact: [
       {
601:
          gene: "MnSOD",
602:
          normalAlleles: "AA",
603:
          yourResult: "AG",
604:
          healthImpact:
605:
             "INCREASED TENDENCY OF OXIDATIVE STRESS NEED OF ANTI-OXIDANT SUPPLEMENTS",
606:
        },
607:
        {
          gene: "FTO",
608:
609:
         normalAlleles: "TT",
610:
          yourResult: "AT",
611:
          healthImpact:
612:
            "INCREASED TENDENCY OF INSULIN RESISTANCE WEIGHT AND CALORIE MANAGEMENT IMPORTANT TO MANAGE AND RED
613:
        },
614:
      ],
615:
      categories: [
616:
       {
           id: "category_1",
617:
618:
          category: "Lipid Metabolism",
           imageUrl: "/table/content.png",
619:
620:
          description:
621:
             "This category includes genes related to lipid metabolism and cardiovascular risk.",
```

```
622:
         parameters: [
            "APOA11yy",
623:
            "APOB",
624:
625:
            "LDLR",
            "CETP",
626:
            "LIPC",
627:
            "LPL",
628:
629:
            "SCARB1",
630:
            "ABCA1",
            "PCSK9",
631:
632:
            "ANGPTL3",
            "ANGPTL4",
633:
634:
            "PLTP",
            "APOC3",
635:
636:
            "APOE",
637:
            "SREBF2",
638:
            "HMGCR",
639:
            "LCAT",
            "CYP7A1",
640:
           "PPARA",
641:
            "PPARG",
642:
643:
            "NR1H3",
         ],
644:
645:
         isActive: true,
646:
         order: 1,
647:
       },
648:
     ],
649: geneticParameters: [],
650: metadata: {
651:
      lastUpdated: "2025-07-20T12:00:00.000Z",
       version: "1.0.0",
652:
653:
        totalCategories: 1,
        totalParameters: 21,
654:
655:
     },
656:
657:
      summaries: {
658:
       nutrigenomicsSummary:
659:
         "Based on the overall nutrigenomics analysis, provide expert summary for personalized diet and lifest
660:
        exerciseGenomicsSummary:
661:
           "Based on the overall genomics analysis, provide expert summary for personalized exercise plan...",
662: },
663: };
664:
665: export async function GET() {
666: try {
667:
        // Ensure the data directory exists
668:
        const dataDir = path.dirname(dataFilePath);
669:
       await fs.mkdir(dataDir, { recursive: true });
670:
671:
        let data: ComprehensiveReportData;
672:
673:
        try {
674:
          const fileContent = await fs.readFile(dataFilePath, "utf-8");
675:
          data = JSON.parse(fileContent);
676:
        } catch (readError: any) {
          if (readError.code === "ENOENT") {
677:
678:
            // File does not exist, initialize with default data
679:
            data = defaultReportData;
680:
            await fs.writeFile(
681:
              dataFilePath,
682:
              JSON.stringify(data, null, 2),
683:
              "utf-8"
684:
            );
685:
          } else {
            // Other read errors
686:
687:
            console.error("Error reading report data file:", readError);
688:
            return NextResponse.json(
689:
              { error: "Failed to read report data" },
690:
               { status: 500 }
691:
            );
692:
          }
         }
693:
694:
```

```
695:
        return NextResponse.json(data);
696:
     } catch (error) {
697:
       console.error("Error in GET /api/report-data:", error);
698:
        return NextResponse.json(
         { error: "Internal Server Error" },
699:
700:
          { status: 500 }
        );
701:
702:
     }
703: }
704:
705: export async function POST(request: Request) {
706:
      try {
707:
        const data: ComprehensiveReportData = await request.json();
708:
        // Basic validation (can be expanded)
709:
710:
        if (!data | | !data.patientInfo | | !data.content) {
          return NextResponse.json(
711:
712:
             { error: "Invalid report data provided" },
             { status: 400 }
713:
         );
714:
        }
715:
716:
717:
        // Ensure the data directory exists
        const dataDir = path.dirname(dataFilePath);
718:
719:
        await fs.mkdir(dataDir, { recursive: true });
720:
721:
        await fs.writeFile(dataFilePath, JSON.stringify(data, null, 2), "utf-8");
        return NextResponse.json({ message: "Report data saved successfully" });
722:
723:
     } catch (error) {
724:
       console.error("Error in POST /api/report-data:", error);
725:
        return NextResponse.json(
726:
         { error: "Internal Server Error" },
          { status: 500 }
727:
728:
        );
729:
     }
730: }
```

■ File: app\api\upload-image\route.ts

```
______
 1: import { writeFile } from "fs/promises";
 2: import path from "path";
 3: import { NextRequest, NextResponse } from "next/server";
 5: export async function POST(req: NextRequest) {
 6: const formData = await req.formData();
 7: const file = formData.get("file") as File;
 8:
 9:
     if (!file) {
10:
      return NextResponse.json(
        { success: false, error: "No file uploaded" },
          { status: 400 }
12:
13:
       );
14:
15:
      const bytes = await file.arrayBuffer();
16:
17:
     const buffer = Buffer.from(bytes);
 18:
     const fileName = `${Date.now()}-${file.name}`;
19:
 20:
     const filePath = path.join(process.cwd(), "public", "table", fileName);
 21:
 22:
     try {
 23:
       await writeFile(filePath, buffer);
       const publicUrl = `/table/${fileName}`;
 24:
 25:
       return NextResponse.json({ success: true, url: publicUrl });
26:
     } catch (error) {
 27:
       return NextResponse.json(
         { success: false, error: "Failed to save file" },
 28:
          { status: 500 }
 29:
 30:
        );
 31:
      }
 32: }
```

■ File: app\layout.tsx

```
1: import type React from "react"
2: import type { Metadata } from "next"
3: import { Inter } from "next/font/google"
4: import "./globals.css"
5: import { ThemeProvider } from "@/components/theme-provider"
6: import { Toaster } from "@/components/ui/toaster"
8: const inter = Inter({ subsets: ["latin"] })
9:
10: export const metadata: Metadata = {
11:
    title: "Nutrigenomics Report App",
12:
     description: "Comprehensive Nutrigenomics Test Report Application",
      generator: 'v0.dev'
13:
14: }
15:
16: export default function RootLayout({
17: children,
18: }: Readonly<{</pre>
19: children: React.ReactNode
20: }>) {
21: return (
22:
      <html lang="en" suppressHydrationWarning>
         <body className={inter.className}>
23:
          <ThemeProvider attribute="class" defaultTheme="system" enableSystem disableTransitionOnChange>
24:
25:
             {children}
26:
             <Toaster />
           </ThemeProvider>
28:
         </body>
29:
      </html>
30: )
31: }
```

■ File: app\page.tsx

```
______
 1: import { CardDescription } from "@/components/ui/card";
 2: import Link from "next/link";
 3: import { Button } from "@/components/ui/button";
 4: import { Card, CardContent, CardHeader, CardTitle } from "@/components/ui/card";
 5: import {
 6: Settings,
 7:
     FileText,
 8:
     Eye,
 9: Download,
10: Database,
11: Dna,
12:
     Activity,
13: Heart,
14: Brain,
15: Utensils,
16:
     Zap,
17:
     AlertCircle,
18: Users,
19: } from "lucide-react";
20:
21: export default function HomePage() {
22: return (
      <div className="flex flex-col items-center w-full justify-center min-h-screen bg-gradient-to-br from-gr</pre>
24:
        {/* Quick Actions */}
25:
         <div className="grid md:grid-cols-4 gap-6 mb-12 mt-12">
26:
           <Link href="/admin">
27:
             <Card className="hover:shadow-xl transition-all duration-300 border-0 bg-gradient-to-br from-blue
28:
              <CardContent className="p-6 text-center">
                <Settings className="h-12 w-12 mx-auto mb-4" />
29:
30:
                <h3 className="font-bold text-lg">Admin Panel</h3>
31:
                Manage all data
32:
              </CardContent>
33:
             </Card>
34:
           </Link>
35:
```

```
<Link href="/report/preview">
 36:
 37:
             <Card className="hover:shadow-xl transition-all duration-300 border-0 bg-gradient-to-br from-gree
 38:
               <CardContent className="p-6 text-center">
 39:
                 <Eye className="h-12 w-12 mx-auto mb-4" />
 40:
                 <h3 className="font-bold text-lg">Preview Report</h3>
 41:
                 View live report
 42:
               </CardContent>
 43:
             </Card>
 44:
            </Link>
 45:
 46:
            <Link href="/report/pdf">
             <Card className="hover:shadow-xl transition-all duration-300 border-0 bg-gradient-to-br from-purp
 47:
 48:
               <CardContent className="p-6 text-center">
                 <Download className="h-12 w-12 mx-auto mb-4" />
 49:
 50:
                 <h3 className="font-bold text-lq">Generate PDF</h3>
 51:
                 Export to PDF
               </CardContent>
 52:
 53:
              </Card>
 54:
            </Link>
 55:
 56:
            <Card className="hover:shadow-xl transition-all duration-300 border-0 bg-gradient-to-br from-orange
 57:
             <CardContent className="p-6 text-center">
 58:
                <Database className="h-12 w-12 mx-auto mb-4" />
               <h3 className="font-bold text-lg">Data Management</h3>
 59:
                CRUD operations
 60:
 61:
             </CardContent>
 62:
            </Card>
 63:
          </div>
 64:
 65:
          {/* Report Sections */}
 66:
          <Card className="shadow-lg border-0 bg-white mb-12">
 67:
            <CardHeader className="bg-gradient-to-r from-indigo-500 to-purple-600 text-white rounded-t-lg">
             <CardTitle className="text-2xl">
 68:
 69:
               ? Report Sections Included
             </CardTitle>
 70:
 71:
             <CardDescription className="text-indigo-100">
 72:
               All sections from the original PDF with complete data management
 73:
              </CardDescription>
 74:
            </CardHeader>
 75:
            <CardContent className="p-8">
 76:
              <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
 77:
               <div className="flex items-center gap-3 p-4 bg-red-50 rounded-lg">
 78:
                 <Utensils className="h-8 w-8 text-red-600" />
 79:
                 <div>
 80:
                   <h4 className="font-semibold text-red-800">Diet Analysis</h4>
 81:
                   82:
                    Macronutrients, sensitivities, meal patterns
 83:
                   </div>
 84:
 85:
                </div>
 86:
 87:
               <div className="flex items-center gap-3 p-4 bg-blue-50 rounded-lg">
 88:
                 <Activity className="h-8 w-8 text-blue-600" />
 89:
                 <div>
 90:
                   <h4 className="font-semibold text-blue-800">Nutrition</h4>
                   91:
 92:
                     Vitamins, minerals, supplements
 93:
                   94:
                 </div>
 95:
                </div>
 96:
 97:
               <div className="flex items-center gap-3 p-4 bg-green-50 rounded-lg">
                 <Zap className="h-8 w-8 text-green-600" />
 98:
 99:
                 <div>
100:
                   <h4 className="font-semibold text-green-800">
101:
                     Sports & Fitness
102:
                   </h4>
103:
                   104:
                     Exercise types, performance factors
105:
                   106:
                 </div>
107:
               </div>
108:
```

```
<div className="flex items-center gap-3 p-4 bg-yellow-50 rounded-lg">
109:
110:
                <Heart className="h-8 w-8 text-yellow-600" />
111:
                <div>
                  <h4 className="font-semibold text-yellow-800">
112:
113:
                   Lifestyle Conditions
114:
                  </h4>
115:
                  116:
                   Health risks and strengths
117:
                </div>
118:
119:
              </div>
120:
121:
              <div className="flex items-center gap-3 p-4 bg-purple-50 rounded-lg">
122:
                <Dna className="h-8 w-8 text-purple-600" />
123:
124:
                  <h4 className="font-semibold text-purple-800">
125:
                   Metabolic Core
126:
                  127:
128:
                   Gene analysis and impacts
129:
                  130:
                </div>
131:
              </div>
132:
              <div className="flex items-center gap-3 p-4 bg-indigo-50 rounded-lg">
133:
                <Brain className="h-8 w-8 text-indigo-600" />
134:
135:
                  <h4 className="font-semibold text-indigo-800">
136:
137:
                   Digestive Health
138:
                  </h4>
139:
                  140:
                   Gut health, intolerances
141:
                  < / r>
                </div>
142:
              </div>
143:
144:
145:
              <div className="flex items-center gap-3 p-4 bg-pink-50 rounded-lg">
146:
                <Dna className="h-8 w-8 text-pink-600" />
147:
                <div>
                  <h4 className="font-semibold text-pink-800">
148:
149:
                   Genes & Addiction
150:
                  </h4>
151:
                  Tendencies, advice
152:
                </div>
153:
              </div>
154:
155:
              <div className="flex items-center gap-3 p-4 bg-teal-50 rounded-lg">
156:
                <Brain className="h-8 w-8 text-teal-600" />
157:
158:
                  <h4 className="font-semibold text-teal-800">Sleep & Rest</h4>
159:
                  Sleep patterns, quality
                </div>
160:
161:
              </div>
162:
163:
              <div className="flex items-center gap-3 p-4 bg-cyan-50 rounded-lg">
                <AlertCircle className="h-8 w-8 text-cyan-600" />
164:
165:
                <div>
166:
                  <h4 className="font-semibold text-cvan-800">
167:
                   Allergies & Sensitivity
168:
                  </h4>
169:
                  170:
                    Environmental sensitivities
171:
                  172:
                </div>
173:
              </div>
174:
              <div className="flex items-center gap-3 p-4 bg-lime-50 rounded-lg">
175:
176:
                <Heart className="h-8 w-8 text-lime-600" />
177:
178:
                  <h4 className="font-semibold text-lime-800">
179:
                   Preventive Health
180:
                  </h4>
181:
```

```
182:
                    Diagnostic tests, supplements
183:
                   184:
                 </div>
185:
               </div>
186:
187:
               <div className="flex items-center gap-3 p-4 bg-amber-50 rounded-lg">
188:
                 <Users className="h-8 w-8 text-amber-600" />
189:
                 <div>
190:
                   <h4 className="font-semibold text-amber-800">
191:
                    Family Genetic Impact
192:
193:
                   194:
                     Inherited traits, family recommendations
195:
                   196:
                 </div>
197:
               </div>
198:
             </div>
199:
            </CardContent>
200:
         </Card>
201:
       </div>
202: );
203: }
```

■ File: app\report\[id]\page.tsx

```
_____
 1: import { notFound } from "next/navigation";
 2: import ComprehensiveReportViewer from "@/components/comprehensive-report-viewer";
 3: import type { ComprehensiveReportData } from "@/types/report-types";
 4:
 5: interface ReportPageProps {
 6: params: {
 7:
       id: string;
     };
 8:
 9: }
10:
11: async function getReportData(
12: id: string
13: ): Promise<ComprehensiveReportData | null> {
14:
     try {
15:
       // In a real application, you would fetch data based on the 'id'
       // For this example, we fetch the single stored report data
       const response = await fetch(
17:
18:
         `${
           19:
20:
         }/api/report-data`,
 21:
         { cache: "no-store" }
 22:
        );
 23:
24:
       if (!response.ok) {
        console.error(
 26:
           `Failed to fetch report data: ${response.status} ${response.statusText}`
 27:
 28:
         return null;
 29:
        }
 30:
 31:
       const data = await response.json();
 32:
       // If you had multiple reports, you'd filter by ID here
33:
        return data as ComprehensiveReportData;
 34:
      } catch (error) {
 35:
        console.error("Error fetching report data:", error);
 36:
       return null;
 37:
      }
38: }
 39:
 40: export default async function ReportPage({ params }: ReportPageProps) {
 41:
     const reportData = await getReportData(params.id);
42:
43:
     if (!reportData) {
 44:
      notFound();
 45:
      }
 46:
```

■ File: app\report\pdf\page.tsx

```
______
 1: import ComprehensiveReportViewer from "@/components/comprehensive-report-viewer";
 2: import type { ComprehensiveReportData } from "@/types/report-types";
 3:
 4: async function getReportData(): Promise<ComprehensiveReportData | null> {
 5: try {
 6:
      const response = await fetch(
 7:
         `${
           process.env.NEXT_PUBLIC_APP_URL || "http://localhost:3000"
 8:
 9:
         }/api/report-data`,
10:
         { cache: "no-store" }
 11:
12:
13:
      if (!response.ok) {
14:
        console.error(
           `Failed to fetch report data: ${response.status} ${response.statusText}`
15:
 16:
17:
         return null;
      }
18:
19:
 20:
       const data = await response.json();
21:
       return data as ComprehensiveReportData;
22: } catch (error) {
      console.error("Error fetching report data:", error);
 23:
 24:
       return null;
 25:
     }
26: }
 28: export default async function ReportPdfPage() {
 29: const reportData = await getReportData();
30:
31: if (!reportData) {
 32: return (
 33:
         <div className="text-center py-10 text-red-500">
 34:
           Failed to load report data for PDF generation.
 35:
         </div>
36:
      );
 37: }
 38:
 39:
      <div className="min-h-screen bg-white print:bg-white">
40:
         <ComprehensiveReportViewer reportData={reportData} />
42:
       </div>
43:
     );
 44: }
```

■ File: app\report\preview\page.tsx

```
______
 1: import ComprehensiveReportViewer from "@/components/comprehensive-report-viewer";
 2: import type { ComprehensiveReportData } from "@/types/report-types";
 4: async function getReportData(): Promise<ComprehensiveReportData | null> {
 5: try {
 6:
     const response = await fetch(
 7:
 8:
        }/api/report-data`
 9:
       { cache: "no-store" }
10:
11:
     );
12:
13:
      if (!response.ok) {
```

```
14:
         console.error(
15:
            `Failed to fetch report data: ${response.status} ${response.statusText}`
16:
         );
17:
         return null;
       }
18:
19:
20:
      const data = await response.json();
21:
       return data as ComprehensiveReportData;
22:
     } catch (error) {
23:
       console.error("Error fetching report data:", error);
24:
       return null;
25:
    }
26: }
27:
28: export default async function ReportPreviewPage() {
29: const reportData = await getReportData();
30:
31:
     if (!reportData) {
32:
      return (
         <div className="text-center py-10 text-red-500">
34:
           Failed to load report data for preview.
35:
         </div>
36:
       );
37:
    }
38:
     return (
39:
40:
       <div className="min-h-screen bg-gray-100 print:bg-white">
41:
         <ComprehensiveReportViewer reportData={reportData} />
42:
       </div>
43:
    );
44: }
```

■ File: components\admin\allergies-sensitivity-admin.tsx

```
______
 1: "use client"
 3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 4: import { Input } from "@/components/ui/input"
5: import { Label } from "@/components/ui/label"
 6: import { Textarea } from "@/components/ui/textarea"
 7: import { Button } from "@/components/ui/button"
 8: import { Save, RotateCcw } from "lucide-react"
 9: import type { AllergiesAndSensitivity, AllergyData } from "@/types/report-types"
10:
11: interface AllergiesSensitivityAdminProps {
12: allergiesAndSensitivity: AllergiesAndSensitivity
     updateAllergiesAndSensitivity: (field: keyof AllergiesAndSensitivity, data: Partial<AllergyData> | string
13:
14:
      onSave: () => void
      onReset: () => void
15:
16: }
17:
18: export default function AllergiesSensitivityAdmin({
 19:
      allergiesAndSensitivity,
 20: updateAllergiesAndSensitivity,
 21: onSave,
 22:
     onReset,
 23: }: AllergiesSensitivityAdminProps) {
 24:
     const renderAllergyField = (
       field: Exclude<keyof AllergiesAndSensitivity, "generalAdvice">,
 26:
       data: AllergyData,
        title: string,
 27:
 28:
     ) => (
        <Card key={field} className="border-2 border-orange-100 bg-orange-50/30">
 29:
 30:
          <CardHeader className="pb-3">
            <CardTitle className="text-lg text-orange-800">{title}/CardTitle>
31:
 32:
          </CardHeader>
 33:
          <CardContent className="space-y-4">
            <div className="space-y-2">
 34:
 35:
              <Label className="text-sm font-medium">Tendency</Label>
 36:
              <Input.
 37:
                value={data.tendency}
```

```
onChange={(e) => updateAllergiesAndSensitivity(field, { tendency: e.target.value })}
  38:
  39:
                             placeholder="e.g., NORMAL, HIGH"
  40:
                             className="border-2 focus:border-orange-500"
  41:
                      </div>
 42:
  43:
                   </CardContent>
  44:
               </Card>
  45:
           )
  46:
           return (
  47:
  48:
               <Card className="shadow-lg border-0 bg-white">
  49:
                   <CardHeader className="bg-gradient-to-r from-orange-500 to-red-600 text-white rounded-t-lg">
  50:
                       <CardTitle className="text-2xl">? Allergies & Sensitivity</CardTitle>
 51:
                       <CardDescription className="text-orange-100">
  52:
                         Manage genetic predispositions for various allergies and environmental sensitivities
  53:
                       </CardDescription>
  54:
                   </CardHeader>
  55:
                   <CardContent className="space-y-8 p-8">
  56:
                      {/* Action Buttons */}
  57:
                      <div className="flex justify-end gap-2 mb-6">
 58:
                          <Button onClick={onReset} variant="outline" size="sm">
  59:
                             <RotateCcw className="h-4 w-4 mr-2" />
  60:
                             Reset
  61:
                          </But.ton>
                          <Button onClick={onSave} size="sm">
  62:
  63:
                             <Save className="h-4 w-4 mr-2" />
  64:
                             Save Changes
  65:
                          </Button>
  66:
                      </div>
  67:
                      {/* Allergy & Sensitivity Fields */}
  68:
  69:
                       <div className="grid md:grid-cols-2 lg:grid-cols-2 gap-6">
  70:
                          {Object.entries(allergiesAndSensitivity)
  71:
                             .filter(([key]) => key !== "generalAdvice")
  72:
                             .map(([key, item]) =>
  73:
                                renderAllergyField(
  74:
                                    key as Exclude<keyof AllergiesAndSensitivity, "generalAdvice">,
  75:
                                    item as AllergyData,
  76:
                                    \label{eq:key.replace(([A-Z])/g, " $1").replace((^./, (str) => str.toUpperCase()), (str) => str.toUpp
  77:
                                ),
  78:
                             ) }
  79:
                      </div>
  :08
                      { \mbox{ (/* General Advice */)}}
  81:
  82:
                      <div className="space-y-2">
  83:
                          <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-orange-200 pb-2">? General A
  84:
                          <Label className="text-sm font-medium">General Advice for Allergies & Sensitivities</Label>
  85:
  86:
                             value={allergiesAndSensitivity.generalAdvice}
  87:
                             onChange={(e) => updateAllergiesAndSensitivity("generalAdvice", e.target.value)}
 88:
  89:
                            className="border-2 focus:border-orange-500 text-sm"
  90:
                            placeholder="Enter general advice for managing allergies and sensitivities..."
  91:
                          />
  92:
                       </div>
 93:
                      {/* Section Guidelines */}
  94:
  95:
                       <div className="bg-orange-50 border-2 border-orange-200 rounded-lg p-6">
  96:
                          <h4 className="font-semibold text-orange-800 mb-2">? Allergies & Sensitivity Guidelines:</h4>
 97:
                          <div className="text-sm text-orange-700 space-y-2">
 98:
                             99:
                                 <1i>>
100:
                                    <strong>Dust Allergy:</strong> Genetic tendency towards allergic reactions to dust.
101:
                                 102:
                                 <1i>>
103:
                                    <strong>Pesticide Sensitivity:</strong> Genetic susceptibility to adverse reactions from pe
104:
                                 105:
                                 <1i>>
106:
                                    <strong>Smoke Sensitivity:</strong> Genetic predisposition to sensitivity from smoke (e.g.,
107:
                                    environmental).
108:
                                 109:
                                 <1i>>
110:
                                    <strong>Automobile Smoke Sensitivity:</strong> Genetic tendency to react to vehicle exhaust
```

```
111:
112:
                 Genetic variations can influence immune system responses to various environmental factors
113:
                 Personalized advice can help in reducing hyper-reactivity and managing symptoms.
114:
115:
             </div>
116:
           </div>
117:
         </CardContent>
118:
118:
       </Card>
120: }
```

■ File: components\admin\content-admin.tsx

```
1: "use client";
2:
3: import {
4: Card,
5: CardContent,
6: CardDescription,
7:
     CardHeader,
8:
     CardTitle,
9: } from "@/components/ui/card";
10: import { Label } from "@/components/ui/label";
11: import { Textarea } from "@/components/ui/textarea";
12: import { Button } from "@/components/ui/button";
13: import { Save, RotateCcw } from "lucide-react"; // Import icons
14: import type { ReportContent } from "@/types/report-types";
15:
16: interface ContentAdminProps {
17: content: ReportContent;
18: updateContent: (field: keyof ReportContent, value: string) => void;
19: onSave: () => void; // Added onSave
     onReset: () => void; // Added onReset
20:
21: }
22:
23: export default function ContentAdmin({
24: content,
25: updateContent,
26: onSave,
     onSave,
27: onReset,
28: }: ContentAdminProps) {
29: return (
30:
      <Card className="shadow-lg border-0 bg-white">
31:
         <CardHeader className="bg-gradient-to-r from-green-500 to-teal-600 text-white rounded-t-lg">
32:
           <CardTitle className="text-2xl">? Report Content</CardTitle>
33:
            <CardDescription className="text-green-100">
34:
             Edit the main content sections of the report
35:
            </CardDescription>
         </CardHeader>
36:
37:
         <CardContent className="space-y-8 p-8">
38:
           {/* Action Buttons */}
39:
            <div className="flex justify-end gap-2 mb-6">
40:
             <Button onClick={onReset} variant="outline" size="sm">
               <RotateCcw className="h-4 w-4 mr-2" />
41:
42:
               Reset
43:
             </Button>
44:
             <Button onClick={onSave} size="sm">
45:
               <Save className="h-4 w-4 mr-2" />
46:
               Save Changes
47:
             </Button>
48:
           </div>
49:
           <div className="space-y-3">
50:
51:
             <Label
52:
               htmlFor="introduction"
53:
               className="text-lg font-semibold text-gray-800"
54:
55:
               ? Welcome Letter Introduction
56:
             </Label>
57:
             <Textarea
58:
               id="introduction"
```

```
59:
                 value={content.introduction}
 60:
                 onChange={(e) => updateContent("introduction", e.target.value)}
 61:
                 placeholder="Enter introduction text"
 62:
                 rows={8}
                 className="border-2 focus:border-green-500 text-sm leading-relaxed"
 63:
 64:
              />
 65:
            </div>
 66:
            <div className="space-y-3">
              <Label
 67:
                htmlFor="genomicsExplanation"
 68:
                className="text-lg font-semibold text-gray-800"
 69:
 70:
 71:
                ? What is Genomics?
 72:
               </Label>
 73:
               <Textarea
 74:
                id="genomicsExplanation"
 75:
                 value={content.genomicsExplanation}
 76:
                 onChange={(e) =>
                  updateContent("genomicsExplanation", e.target.value)
 77:
 78:
 79:
                placeholder="Enter genomics explanation"
 :08
                 rows={8}
 81:
                 className="border-2 focus:border-green-500 text-sm leading-relaxed"
 82:
              />
            </div>
 83:
            <div className="space-y-3">
 84:
 85:
              <Label
 86:
                htmlFor="genesHealthImpact"
 87:
                className="text-lg font-semibold text-gray-800"
 88:
 89:
                ? Genes and Health Impact
 90:
               </Label>
 91:
               <Textarea
                id="genesHealthImpact"
 92:
 93:
                 value={content.genesHealthImpact}
 94:
                 onChange={(e) => updateContent("genesHealthImpact", e.target.value)}
 95:
                 placeholder="Enter genes and health impact content"
 96:
                rows={8}
 97:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
 98:
               />
 99:
             </div>
100:
            <div className="space-y-3">
101:
              <Label
               htmlFor="fundamentalsPRS"
102:
103:
                className="text-lg font-semibold text-gray-800"
104:
105:
                ? Fundamentals and PRS
106:
              </Label>
107:
              <Textarea
108:
                id="fundamentalsPRS"
109:
                value={content.fundamentalsPRS}
110:
               onChange={(e) => updateContent("fundamentalsPRS", e.target.value)}
111:
               placeholder="Enter fundamentals and PRS content"
112:
                rows={8}
113:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
              />
114:
            </div>
115:
116:
           <div className="space-y-3">
117:
              <Label
                htmlFor="utilityDoctors"
118:
119:
                className="text-lg font-semibold text-gray-800"
120:
121:
                ???? Utility for Doctors and Dietitians
122:
              </Label>
123:
              <Textarea
124:
                id="utilityDoctors"
125:
                value={content.utilityDoctors}
126:
                onChange={(e) => updateContent("utilityDoctors", e.target.value)}
127:
                placeholder="Enter utility for doctors content"
128:
                rows={8}
129:
                 className="border-2 focus:border-green-500 text-sm leading-relaxed"
130:
               />
131:
             </div>
```

```
<div className="space-y-3">
132:
133:
              <Label
134:
                htmlFor="microarrayExplanation"
                className="text-lg font-semibold text-gray-800"
135:
136:
137:
                ? Microarray Explanation
138:
              </Label>
139:
              <Textarea
                id="microarrayExplanation"
140:
141:
                value={content.microarrayExplanation}
142:
                onChange={(e) =>
                  updateContent("microarrayExplanation", e.target.value)
143:
144:
145:
                placeholder="Enter microarray explanation"
146:
                rows={8}
147:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
148:
              />
149:
            </div>
150:
            <div className="space-y-3">
151:
              <Label
152:
               htmlFor="microarrayData"
153:
                className="text-lg font-semibold text-gray-800"
154:
155:
               ? Your Microarray Data
156:
              </Label>
157:
              <Textarea
158:
                id="microarrayData"
159:
                value={content.microarrayData}
160:
                onChange={(e) => updateContent("microarrayData", e.target.value)}
161:
               placeholder="Enter microarray data content"
162:
                rows={8}
163:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
              />
164:
            </div>
165:
166:
          </CardContent>
167:
        </Card>
168: );
169: }
```

■ File: components\admin\diet-analysis-admin.tsx

30:) => (

```
______
 1: "use client"
 2:
 3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 4: import { Input } from "@/components/ui/input"
 5: import { Label } from "@/components/ui/label"
 6: import { Textarea } from "@/components/ui/textarea"
 7: import { SelectContent, SelectItem, SelectTrigger, SelectValue } from "@/components/ui/select"
 8: import { Button } from "@/components/ui/button" // Import Button
 9: import { Save, RotateCcw } from "lucide-react" // Import icons
10: import type { DietAnalysis, MacronutrientData } from "@/types/report-types"
11:
 12: interface DietAnalysisAdminProps {
13: dietAnalysis: DietAnalysis
14: updateDietAnalysis: (section: keyof DietAnalysis, field: string, data: Partial<MacronutrientData>) => voi
15: onSave: () => void // Added onSave
 16:
     onReset: () => void // Added onReset
17: }
18:
19: export default function DietAnalysisAdmin({
 20: dietAnalysis,
 21:
     updateDietAnalysis,
 22: onSave,
 23: onReset,
 24: }: DietAnalysisAdminProps) {
    const renderMacronutrientField = (
 25:
 26:
       section: keyof DietAnalysis,
 27:
      field: string,
 28:
      data: MacronutrientData,
 29:
      title: string,
```

```
31:
         <Card key={field} className="border-2 border-blue-100 bg-blue-50/30">
 32:
           <CardHeader className="pb-3">
 33:
             <CardTitle className="text-lg text-blue-800">{title}</CardTitle>
 34:
           </CardHeader>
 35:
           <CardContent className="space-y-4">
 36:
             <div className="grid grid-cols-2 gap-4">
 37:
               <div className="space-y-2">
 38:
                 <Label className="text-sm font-medium">Score (1-10)</Label>
 39:
                 <Input
                   type="number"
 40:
                   min="1"
 41:
 42:
                  max="10"
 43:
                   value={data.score}
                   onChange={(e) => updateDietAnalysis(section, field, { score: Number.parseInt(e.target.value)
 44:
 45:
                   className="border-2 focus:border-blue-500"
 46:
                 />
               </div>
 47:
 48:
               <div className="space-y-2">
                 <Label className="text-sm font-medium">Level</Label>
 49:
 50:
                 <Select value={data.level} onValueChange={(value) => updateDietAnalysis(section, field, { level
 51:
                   <SelectTrigger className="border-2 focus:border-blue-500">
 52:
                     <SelectValue />
 53:
                   </SelectTrigger>
 54:
                   <SelectContent>
                     <SelectItem value="HIGH">HIGH</SelectItem>
 55:
                     <SelectItem value="NORMAL">NORMAL/SelectIt.em>
 56:
 57:
                     <SelectItem value="LOW">LOW</SelectItem>
 58:
                     <SelectItem value="FREQUENT">FREQUENT</SelectItem>
 59:
                     <SelectItem value="LESS FREQUENT">LESS FREQUENT/SelectItem>
 60:
                     <SelectItem value="SUITABLE">SUITABLE</SelectItem>
                     <SelectItem value="LESS SUITABLE">LESS SUITABLE
 61:
                   </SelectContent>
 62:
 63:
                 </Select>
              </div>
 64:
            </div>
 65:
 66:
            <div className="space-y-2">
 67:
               <Label className="text-sm font-medium">Recommendation</Label>
 68:
               <Textarea
 69:
                 value={data.recommendation}
 70:
                 onChange={(e) => updateDietAnalysis(section, field, { recommendation: e.target.value })}
 71:
 72:
                 className="border-2 focus:border-blue-500 text-sm"
 73:
               />
             </div>
 74:
 75:
           </CardContent>
 76:
         </Card>
 77:
      )
 78:
 79:
      return (
        <Card className="shadow-lg border-0 bg-white">
 :08
          <CardHeader className="bg-gradient-to-r from-amber-500 to-orange-600 text-white rounded-t-lg">
 81:
 82:
            <CardTitle className="text-2xl">? Diet Analysis/CardTitle>
 83:
             <CardDescription className="text-amber-100">
 84:
               Configure macronutrients, meal patterns, and food sensitivities
 85:
             </CardDescription>
 86:
           </CardHeader>
           <CardContent className="space-y-8 p-8">
 87:
 88:
             {/* Action Buttons */}
 89:
             <div className="flex justify-end gap-2 mb-6">
 90:
               <Button onClick={onReset} variant="outline" size="sm">
 91:
                 <RotateCcw className="h-4 w-4 mr-2" />
 92:
                 Reset
 93:
               </Button>
 94:
               <Button onClick={onSave} size="sm">
                 <Save className="h-4 w-4 mr-2" />
 95:
 96:
                 Save Changes
 97:
               </Button>
 98:
             </div>
 99:
100:
             {/* Macronutrients Section */}
             <div className="space-y-4">
101:
              <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-amber-200 pb-2">? Macronutri
102:
103:
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
```

```
{renderMacronutrientField(
104:
105:
                   "macronutrients",
106:
                   "carbohydrateSensitivity",
107:
                   dietAnalysis.macronutrients.carbohydrateSensitivity,
108:
                   "Carbohydrate Sensitivity",
109:
                 ) }
110:
                {renderMacronutrientField(
111:
                   "macronutrients",
112:
                   "fatSensitivity",
113:
                   dietAnalysis.macronutrients.fatSensitivity,
114:
                   "Fat Sensitivity",
115:
                 ) }
116:
                 {renderMacronutrientField(
117:
                   "macronutrients",
118:
                   "proteinRequirement",
119:
                   dietAnalysis.macronutrients.proteinRequirement,
120:
                   "Protein Requirement",
121:
                 ) }
               </div>
122:
123:
             </div>
124:
125:
             {/* Meal Pattern Section */}
126:
             <div className="space-y-4">
127:
               <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-amber-200 pb-2">?? Meal Patt
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
128:
129:
                {renderMacronutrientField(
130:
                   "mealPattern",
131:
                   "mealFrequency",
132:
                   dietAnalysis.mealPattern.mealFrequency,
133:
                   "Meal Frequency",
134:
                 ) }
135:
                 {renderMacronutrientField(
                   "mealPattern",
136:
137:
                   "mealReplacement",
                   dietAnalysis.mealPattern.mealReplacement,
138:
139:
                   "Meal Replacement",
140:
                 ) }
141:
                 {renderMacronutrientField(
142:
                   "mealPattern",
143:
                   "weightMaintenance",
144:
                   dietAnalysis.mealPattern.weightMaintenance,
145:
                   "Weight Maintenance",
146:
                 ) }
               </div>
147:
148:
            </div>
149:
150:
            {/* Food Sensitivities Section */}
151:
            <div className="space-y-4">
               <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-amber-200 pb-2">
152:
153:
                 ? Food Sensitivities
154:
               </h3>
155:
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
156:
                 {renderMacronutrientField(
157:
                   "foodSensitivities",
158:
                   "alcoholSensitivity",
159:
                   dietAnalysis.foodSensitivities.alcoholSensitivity,
160:
                   "Alcohol Sensitivity",
161:
                 ) }
162:
                 {renderMacronutrientField(
163:
                   "foodSensitivities",
164:
                   "caffeineSensitivity",
165:
                   dietAnalysis.foodSensitivities.caffeineSensitivity,
166:
                   "Caffeine Sensitivity",
167:
                 ) }
168:
                 {renderMacronutrientField(
169:
                   "foodSensitivities",
170:
                   "glutenSensitivity",
171:
                   dietAnalysis.foodSensitivities.glutenSensitivity,
172:
                   "Gluten Sensitivity",
173:
                 ) }
174:
                 {renderMacronutrientField(
175:
                   "foodSensitivities",
176:
                   "lactoseSensitivity",
```

```
177:
                   dietAnalysis.foodSensitivities.lactoseSensitivity,
178:
                   "Lactose Sensitivity",
179:
                 ) }
180:
                 {renderMacronutrientField(
181:
                   "foodSensitivities",
182:
                   "saltSensitivity",
183:
                   dietAnalysis.foodSensitivities.saltSensitivity,
184:
                   "Salt Sensitivity",
                 ) }
185:
               </div>
186:
187:
             </div>
188:
189:
             {/* Taste Sensitivities Section */}
190:
             <div className="space-y-4">
191:
              <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-amber-200 pb-2">
192:
                 ? Taste Sensitivities
193:
               </h3>
194:
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
195:
                {renderMacronutrientField(
196:
                   "tasteSensitivities",
197:
                   "spiceTolerance",
198:
                   dietAnalysis.tasteSensitivities.spiceTolerance,
199:
                   "Spice Tolerance",
200:
                ) }
                {renderMacronutrientField(
201:
202:
                   "tasteSensitivities",
203:
                   "sweetTaste",
204:
                   dietAnalysis.tasteSensitivities.sweetTaste,
                   "Sweet Taste",
206:
                ) }
207:
                {renderMacronutrientField(
208:
                   "tasteSensitivities",
                   "tasteSensitivity",
209:
                  dietAnalysis.tasteSensitivities.tasteSensitivity,
210:
211:
                   "Taste Sensitivity",
212:
                 ) }
213:
               </div>
214:
            </div>
215:
          </CardContent>
216:
        </Card>
217: )
218: }
```

■ File: components\admin\digestive-health-admin.tsx

```
______
 1: "use client"
 2:
 3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 4: import { Input } from "@/components/ui/input"
 5: import { Label } from "@/components/ui/label"
 6: import { Textarea } from "@/components/ui/textarea"
 7: import { Button } from "@/components/ui/button"
 8: import { Save, RotateCcw } from "lucide-react"
 9: import type { DigestiveHealth, DigestiveHealthData } from "@/types/report-types"
10:
11: interface DigestiveHealthAdminProps {
12:
    digestiveHealth: DigestiveHealth
13: updateDigestiveHealth: (field: keyof DigestiveHealth, data: Partial<DigestiveHealthData>) => void
14: onSave: () => void
15:
     onReset: () => void
16: }
 17:
18: export default function DigestiveHealthAdmin({
19: digestiveHealth,
20: updateDigestiveHealth,
 21:
     onSave,
 22:
     onReset
 23: }: DigestiveHealthAdminProps) {
 24: const renderDigestiveHealthField = (field: keyof DigestiveHealth, data: DigestiveHealthData, title: strin
 25:
      <Card key={field} className="border-2 border-red-100 bg-red-50/30">
 26:
          <CardHeader className="pb-3">
```

```
27:
            <CardTitle className="text-lg text-red-800">{title}</CardTitle>
28:
          </CardHeader>
29:
          <CardContent className="space-y-4">
30:
            <div className="space-y-2">
31:
             <Label className="text-sm font-medium">Level</Label>
32:
33:
               value={data.level}
               onChange={(e) => updateDigestiveHealth(field, { level: e.target.value })}
34:
               placeholder="e.g., NORMAL GUT HEALTH"
35:
               className="border-2 focus:border-red-500"
36:
37:
           </div>
38:
39:
           <div className="space-y-2">
40:
             <Label className="text-sm font-medium">Description</Label>
41:
             <Textarea
42:
               value={data.description}
               onChange={(e) => updateDigestiveHealth(field, { description: e.target.value })}
43:
44:
               rows={3}
               className="border-2 focus:border-red-500 text-sm"
45:
46:
             />
47:
           </div>
48:
          </CardContent>
49:
       </Card>
50:
     )
51:
52:
     return (
53:
       <Card className="shadow-lg border-0 bg-white">
54:
         <CardHeader className="bg-gradient-to-r from-red-500 to-orange-600 text-white rounded-t-lg">
           <CardTitle className="text-2xl">? Digestive Health</CardTitle>
56:
           <CardDescription className="text-red-100">
57:
             Manage genetic influences on gut health, intolerances, and sensitivities
58:
            </CardDescription>
59:
         </CardHeader>
60:
          <CardContent className="space-y-8 p-8">
           {/* Action Buttons */}
61:
62:
           <div className="flex justify-end gap-2 mb-6">
             <Button onClick={onReset} variant="outline" size="sm">
63:
64:
               <RotateCcw className="h-4 w-4 mr-2" />
65:
               Reset
66:
             </Button>
67:
             <Button onClick={onSave} size="sm">
68:
               <Save className="h-4 w-4 mr-2" />
69:
               Save Changes
70:
             </Button>
71:
           </div>
72:
73:
            {/* Digestive Health Fields */}
74:
            <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
75:
             {Object.entries(digestiveHealth).map(([key, item]) =>
76:
               renderDigestiveHealthField(
77:
                 key as keyof DigestiveHealth,
78:
                 item as DigestiveHealthData,
79:
                 key.replace(/([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase()),
:08
               ),
81:
             ) }
82:
            </div>
83:
84:
            {/* Section Guidelines */}
85:
            <div className="bg-red-50 border-2 border-red-200 rounded-lg p-6">
             <h4 className="font-semibold text-red-800 mb-2">? Digestive Health Guidelines:</h4>
86:
87:
             <div className="text-sm text-red-700 space-y-2">
88:
               89:
                 <1i>>
90:
                    <strong>Gut Health:</strong> Overall genetic predisposition for gut function.
                 91:
92:
                 <1i>>
93:
                    <strong>Gluten Intolerance:</strong> Genetic tendency towards gluten sensitivity.
94:
                 95:
                 <1i>>
96:
                   <strong>Celiac Disease Tendency:</strong> Genetic risk for celiac disease.
97:
                 98:
                 <1i>>
99:
                    <strong>Impact on Bones/Joints:</strong> How digestive health genetics might influence musc
```

```
100:
                  health.
101:
                 102:
                 <
103:
                   <strong>Lactose Intolerance:</strong> Genetic ability to digest lactose.
104:
                 105:
                 <
106:
                  <strong>Probiotics Requirement:</strong> Indication for probiotic supplementation based on
107:
                 108:
               109:
             </div>
110:
           </div>
111:
         </CardContent>
112:
      </Card>
113: )
114: }
```

■ File: components\admin\dynamic-diet-field-admin.tsx

```
______
 1: "use client";
 2:
 3: import { useState, useEffect } from "react";
 4: import { DragDropContext, Droppable, Draggable } from "@hello-pangea/dnd";
 5: import { v4 as uuidv4 } from "uuid";
 6: import {
 7:
     Card,
 8: CardContent,
 9: CardDescription,
10: CardHeader,
     CardTitle,
11:
 12: } from "@/components/ui/card";
13: import { Button } from "@/components/ui/button";
 14: import { Plus, Save, RotateCcw, Trash2, GripVertical } from "lucide-react";
15: import { useToast } from "@/components/ui/use-toast";
16: import {
17: FieldInput,
18: FieldTextarea,
19: FieldSelect,
 20: } from "@/components/admin/dynamic-field-helpers";
 21: import type { DynamicDietFieldDefinition } from "@/types/report-types";
 23: interface DynamicDietFieldAdminProps {
 24: dynamicDietFieldDefinitions: DynamicDietFieldDefinition[];
     updateDynamicDietFieldDefinitions: (
 25:
 26:
       definitions: DynamicDietFieldDefinition[]
 27: ) => void;
 28: onSave: () => void;
 29:
     onReset: () => void;
 30: }
31:
 32: export default function DynamicDietFieldAdmin({
 33: dynamicDietFieldDefinitions,
     updateDynamicDietFieldDefinitions,
 34:
 35:
     onSave,
36: onReset,
 37: }: DynamicDietFieldAdminProps) {
 38: const [localFields, setLocalFields] = useState<DynamicDietFieldDefinition[]>(
 39:
       dynamicDietFieldDefinitions
 40: );
 41: const [categories, setCategories] = useState<string[]>([
 42:
        "Macronutrients",
 43:
        "Meal Pattern",
 44:
        "Food Sensitivities",
        "Taste Sensitivities",
 45:
 46: ]); // Predefined categories for diet analysis
 47:
     const [showCreateModal, setShowCreateModal] = useState(false);
 48:
     const [newFieldData, setNewFieldData] = useState<</pre>
 49:
       Omit<DynamicDietFieldDefinition, "_uuid" | "id">
 50:
      > ( {
 51:
       label: "",
 52:
       category: categories[0] || "", // Default to first category
 53:
        min: 1,
```

```
54:
        max: 10.
 55:
        highRecommendation: "",
 56:
       normalRecommendation: "",
 57:
         lowRecommendation: "",
 58:
      });
 59:
      const { toast } = useToast();
 60:
 61:
      useEffect(() => {
 62:
        setLocalFields(dynamicDietFieldDefinitions);
 63:
       }, [dynamicDietFieldDefinitions]);
 64:
       const addNewField = () => {
 65:
 66:
        if (!newFieldData.label.trim()) {
 67:
           toast({
 68:
             title: "Validation Error",
 69:
             description: "Field label is required.",
             variant: "destructive",
 70:
 71:
             duration: 3000,
          });
 72:
 73:
          return;
 74:
         }
 75:
 76:
         const fieldId = newFieldData.label
 77:
           .toLowerCase()
 78:
           .replace(/\s+/g, "_")
           .replace(/[^a-z0-9_]/g, "");
 79:
 :08
         const isDuplicate = localFields.some((field) => field.id === fieldId);
 81:
 82:
         if (isDuplicate) {
 83:
          toast({
             title: "Validation Error",
 84:
 85:
             description: "A field with this label (ID) already exists.",
             variant: "destructive",
 86:
 87:
            duration: 3000,
          });
 88:
 89:
          return;
         }
 90:
 91:
 92:
         const newField: DynamicDietFieldDefinition = {
           _uuid: uuidv4(),
 93:
 94:
           id: fieldId,
 95:
           ...newFieldData,
 96:
         };
 97:
 98:
         const updatedFields = [...localFields, newField];
 99:
         setLocalFields(updatedFields);
100:
         updateDynamicDietFieldDefinitions(updatedFields);
101:
         setShowCreateModal(false);
102:
        setNewFieldData({
103:
          label: "",
104:
          category: categories[0] || "",
105:
         min: 1,
106:
          max: 10,
107:
          highRecommendation: "",
108:
          normalRecommendation: "",
          lowRecommendation: "",
109:
110:
       });
111:
        toast({
          title: "Field Added",
112:
           description: `"${newField.label}" has been added. Remember to Save Changes.`,
113:
114:
          variant: "success",
115:
           duration: 3000,
116:
        });
117:
      };
118:
119:
       const handleCreateModalClose = () => {
120:
       setShowCreateModal(false);
121:
        setNewFieldData({
           label: "",
122:
123:
          category: categories[0] || "",
124:
          min: 1,
125:
           max: 10,
126:
           highRecommendation: "",
```

```
normalRecommendation: "",
127:
128:
          lowRecommendation: "",
129:
        });
130:
131:
132:
      const updateLocalField = (
133:
       index: number,
134:
       key: keyof DynamicDietFieldDefinition,
135:
        value: any
      ) => {
136:
137:
       const updated = [...localFields];
       if (key === "id") {
138:
         const newId = String(value)
139:
140:
            .toLowerCase()
141:
            .replace(/\s+/g, "_")
            .replace(/[^a-z0-9_]/g, "");
142:
          const isDuplicate = localFields.some(
143:
144:
            (f, i) => i !== index && f.id === newId
145:
          );
146:
          if (isDuplicate) {
147:
           toast({
148:
              title: "Validation Error",
149:
              description: "Field ID must be unique.",
150:
              variant: "destructive",
151:
              duration: 3000,
152:
            });
153:
            return;
154:
          updated[index] = { ...updated[index], [key]: newId };
155:
156:
        } else {
157:
          updated[index] = { ...updated[index], [key]: value };
158:
        setLocalFields(updated);
159:
        updateDynamicDietFieldDefinitions(updated); // Update parent state immediately
160:
161:
162:
163:
      const deleteField = (idToDelete: string) => {
164:
       if (
165:
          !window.confirm(
             "Are you sure you want to delete this field? This action cannot be undone."
166:
167:
168:
        ) {
169:
          return;
170:
        }
171:
        const updatedFields = localFields.filter(
172:
          (field) => field.id !== idToDelete
173:
174:
       setLocalFields(updatedFields);
175:
        updateDynamicDietFieldDefinitions(updatedFields);
176:
        toast({
177:
          title: "Field Deleted",
178:
          description: "Field removed. Remember to Save Changes.",
179:
          variant: "destructive",
180:
          duration: 3000,
181:
        });
      };
182:
183:
184:
      const onDragEnd = (result: any) => {
185:
       if (!result.destination) return;
186:
187:
        const reordered = Array.from(localFields);
188:
        const [moved] = reordered.splice(result.source.index, 1);
189:
        reordered.splice(result.destination.index, 0, moved);
190:
191:
        setLocalFields(reordered);
192:
       updateDynamicDietFieldDefinitions(reordered); // Update parent state
193:
       toast({
194:
          title: "Fields Reordered",
195:
          description: "Order updated. Remember to Save Changes.",
196:
          variant: "warning",
197:
          duration:3000,
198:
        });
199:
      };
```

```
200:
201:
202:
       <Card className="shadow-lg border-0 bg-white">
           <CardHeader className="bg-gradient-to-r from-amber-500 to-orange-600 text-white rounded-t-lg">
203:
            <CardTitle className="text-2x1">
204:
205:
               ? Dynamic Diet Field Management
206:
             </CardTitle>
207:
             <CardDescription className="text-amber-100">
208:
               Define and manage the types of diet analysis fields for your reports.
             </CardDescription>
209:
210:
           </CardHeader>
          <CardContent className="space-y-8 p-8">
211:
212:
             <div className="flex justify-start items-center">
               <h3 className="text-xl font-semibold text-gray-800">
213:
214:
                 Configured Fields
215:
               </h3>
             </div>
216:
217:
218:
             <div className="flex justify-end mb-6">
219:
              <Button
220:
                onClick={onReset}
221:
                 variant="outline"
222:
                 size="sm"
223:
                className="mx-1"
224:
                 <RotateCcw className="h-4 w-4 mr-2" />
225:
226:
                 Reset Section
227:
               </Button>
228:
               <Button
229:
                onClick={() => setShowCreateModal(true)}
230:
                 size="sm"
231:
                 className="mx-1"
232:
                 <Plus className="h-4 w-4 mr-2" />
233:
234:
                Add New Field
235:
               </Button>
               <Button onClick={onSave} size="sm" className="mx-1">
236:
237:
                 <Save className="h-4 w-4 mr-2" />
238:
                 Save All Changes
239:
               </Button>
240:
             </div>
241:
242:
             {localFields.length === 0 ? (
               <div className="text-center py-12 text-gray-500 italic">
243:
244:
                 No dynamic diet fields defined yet.
245:
               </div>
246:
             ) : (
247:
               <DragDropContext onDragEnd={onDragEnd}>
248:
                 <Droppable droppableId="fields">
                   {(provided) => (
249:
250:
                     <div
251:
                       {...provided.droppableProps}
252:
                       ref={provided.innerRef}
253:
                       className="space-y-4"
254:
255:
                       {localFields.map((field, index) => (
256:
                         <Draggable
257:
                           key={field._uuid}
258:
                           draggableId={field._uuid}
                           index={index}
259:
260:
261:
                            {(provided, snapshot) => (
262:
                              <div
                               ref={provided.innerRef}
263:
264:
                                \{\dots provided.draggableProps\}
265:
                               className={`border rounded-lg p-4 bg-white shadow-sm transition-all duration-200
266:
                                  snapshot.isDragging
267:
                                    ? "bg-gray-100 ring-2 ring-blue-500 shadow-lg"
                                    : "hover:shadow-md"
268:
                               }`}
269:
270:
271:
                                <div className="flex items-center justify-between mb-4">
272:
                                  <div className="flex items-center gap-2">
```

```
273:
                                    <span
274:
                                      {...provided.dragHandleProps}
275:
                                      className="cursor-grab text-gray-400"
276:
                                      <GripVertical className="h-5 w-5" />
277:
278:
                                    </span>
                                    <h4 className="text-lg font-semibold text-gray-900">
279:
280:
                                      {index + 1}. {field.label} (ID: {field.id})
281:
                                  </div>
282:
283:
                                  <Button
                                    variant="destructive"
284:
285:
                                    size="sm
                                    onClick={() => deleteField(field.id)}
286:
287:
                                    className="ml-4"
288:
289:
                                    <Trash2 className="h-4 w-4" />
290:
                                  </Button>
291:
                                </div>
292:
293:
                                <div className="grid grid-cols-1 md:grid-cols-2 lg:grid-cols-3 gap-4">
294:
                                  {/* First row - 3 columns */}
295:
                                  <FieldInput
                                    label="Field ID (Auto-generated from Label)"
296:
297:
                                    value={field.id}
298:
                                    onChange={(val) =>
299:
                                      updateLocalField(index, "id", val)
300:
                                    disabled // ID is derived from label, not directly editable
301:
302:
                                  />
303:
                                  <FieldInput
304:
                                    label="Label"
305:
                                    value={field.label}
306:
                                    onChange={(val) =>
                                      updateLocalField(index, "label", val)
307:
308:
                                    }
                                  />
309:
310:
                                  <FieldSelect
311:
                                    label="Category"
312:
                                    value={field.category}
313:
                                    options={categories}
314:
                                    onChange={(val) =>
315:
                                      updateLocalField(index, "category", val)
316:
                                    }
317:
                                  />
                                  {/* Second row - 2 columns on left side */}
318:
319:
                                  <FieldInput
320:
                                    label="Min Score"
321:
                                    type="number"
322:
                                    value={field.min}
323:
                                    onChange={(val) =>
                                     updateLocalField(index, "min", val)
324:
325:
326:
                                    min={0}
327:
                                    max={field.max}
328:
                                  />
329:
                                  <FieldInput
330:
                                    label="Max Score"
331:
                                    type="number"
332:
                                    value={field.max}
333:
                                    onChange={(val) =>
334:
                                      updateLocalField(index, "max", val)
335:
336:
                                    min={field.min}
337:
                                  />
338:
                                  <div></div>{" "}
                                  {/*} Empty div for spacing on the right */{}
339:
340:
                                   {/* Third row - 3 columns */}
341:
                                  <FieldTextarea
342:
                                    label="High Recommendation"
343:
                                    value={field.highRecommendation}
344:
                                    onChange={(val) =>
345:
                                      updateLocalField(
```

```
346:
                                         index.
347:
                                         "highRecommendation",
348:
                                         val
349:
                                    }
350:
351:
352:
                                  <FieldTextarea
353:
                                    label="Normal Recommendation"
354:
                                     value={field.normalRecommendation}
355:
                                    onChange={(val) =>
356:
                                       updateLocalField(
357:
                                         index,
                                         "normalRecommendation",
358:
359:
                                         val
360:
                                    }
361:
362:
                                  />
363:
                                  <FieldTextarea
364:
                                    label="Low Recommendation"
365:
                                    value={field.lowRecommendation}
366:
                                    onChange={(val) =>
367:
                                       updateLocalField(
368:
                                         index,
369:
                                         "lowRecommendation",
370:
                                         val
371:
372:
                                    }
                                  />
373:
374:
                                </div>
375:
                              </div>
376:
                            ) }
377:
                          </Draggable>
378:
                        ))}
379:
                        {provided.placeholder}
380:
                      </div>
381:
                   ) }
382:
                  </Droppable>
383:
               </DragDropContext>
384:
             ) }
385:
           </CardContent>
386:
387:
           {/* Create New Field Modal */}
           {showCreateModal && (
389:
             <div className="fixed inset-0 bg-black bg-opacity-50 flex items-center justify-center z-50 p-4">
390:
               <div className="bg-white rounded-lg p-6 w-full max-w-md max-h-[90vh] overflow-y-auto shadow-xl">
391:
                 <h3 className="text-xl font-bold mb-4">
392:
                   Add New Diet Field Definition
393:
                 </h3>
                 <div className="space-y-4">
394:
395:
                    <FieldInput
396:
                     label="Field Label"
                      value={newFieldData.label}
398:
                      onChange={(val) =>
399:
                        setNewFieldData({ ...newFieldData, label: val })
400:
401:
                      placeholder="e.g., Gluten Sensitivity"
402:
                     required
403:
                    />
404:
                    <FieldSelect
                      label="Category"
405:
406:
                      value={newFieldData.category}
407:
                      options={categories}
408:
                      onChange={(val) =>
409:
                        setNewFieldData({ ...newFieldData, category: val })
410:
                      }
411:
                    />
                    <div>
412:
413:
                      <FieldInput
414:
                        label="Min Score"
415:
                        type="number"
416:
                        value={newFieldData.min}
417:
                        onChange={(val) =>
418:
                          setNewFieldData({ ...newFieldData, min: Number(val) })
```

```
419:
                       }
420:
                       min={0}
421:
                       max={newFieldData.max}
422:
423:
                     <FieldInput
424:
                       label="Max Score"
425:
                       type="number"
426:
                       value={newFieldData.max}
427:
                       onChange={(val) =>
                         setNewFieldData({ ...newFieldData, max: Number(val) })
428:
429:
430:
                       min={newFieldData.min}
                     />
431:
                   </div>
432:
433:
                   <FieldTextarea
434:
                     label="High Recommendation"
435:
                     value={newFieldData.highRecommendation}
436:
                     onChange={(val) =>
437:
                       setNewFieldData({ ...newFieldData, highRecommendation: val })
438:
439:
                     placeholder="Recommendation for high score"
440:
                   />
441:
                   <FieldTextarea
442:
                     label="Normal Recommendation"
443:
                     value={newFieldData.normalRecommendation}
444:
                     onChange={(val) =>
445:
                       setNewFieldData({
446:
                         ...newFieldData,
447:
                         normalRecommendation: val,
448:
                       })
449:
450:
                     placeholder="Recommendation for normal score"
                   />
451:
                   <FieldTextarea
452:
453:
                     label="Low Recommendation"
454:
                     value={newFieldData.lowRecommendation}
455:
                     onChange={(val) =>
456:
                      setNewFieldData({ ...newFieldData, lowRecommendation: val })
457:
                     placeholder="Recommendation for low score"
458:
459:
                   />
460:
                 </div>
                 <div className="flex justify-end gap-3 mt-6">
                   <Button variant="outline" onClick={handleCreateModalClose}>
462:
463:
                     Cancel
464:
                   </Button>
465:
                   <Button onClick={addNewField}>Add Field/Button>
466:
                 </div>
467:
               </div>
468:
             </div>
469:
          ) }
470:
         </Card>
471: );
472: }
```

■ File: components\admin\dynamic-field-helpers.tsx

```
1: "use client"
2:
3: import type React from "react"
4:
5: interface FieldInputProps {
6: label: string
7: value: string | number | undefined
8: onChange: (value: string | number) => void
9: type?: React.HTMLInputTypeAttribute
10: disabled?: boolean
11: placeholder?: string
12: required?: boolean
13: min?: number
14: max?: number
```

```
15: }
16:
17: export const FieldInput: React.FC<FieldInputProps> = ({
     label,
18:
19:
     value,
20: onChange,
21: type = "text",
22:
     disabled = false,
     placeholder = ""
23:
24:
     required = false,
25: min.
26:
     max,
27: }) => (
28:
     <div className="flex flex-col">
29:
       <label className="text-sm font-medium text-gray-700 mb-1">{label}</label>
30:
       <input
31:
         type={type}
32:
         disabled={disabled}
         placeholder={placeholder}
33:
34:
         required={required}
35:
         min={min}
36:
         max={max}
37:
         className={`w-full border rounded-md px-3 py-2 text-sm focus:outline-none focus:ring-2 focus:ring-blu
38:
           disabled ? "bg-gray-100 text-gray-500 cursor-not-allowed" : "bg-white border-gray-300 hover:border-
39:
          }`}
         value={value ?? ""}
40:
41:
         onChange={(e) => onChange(type === "number" ? Number(e.target.value) : e.target.value)}
42:
43:
     </div>
44: )
45:
46: interface FieldTextareaProps {
47:
    label: string
48: value: string | undefined
49:
     onChange: (value: string) => void
50: }
51:
52: export const FieldTextarea: React.FC<FieldTextareaProps> = ({ label, value, onChange }) => (
53: <div className="flex flex-col">
       <label className="text-sm font-medium text-gray-700 mb-1">{label}</label>
54:
55:
        <textarea
56:
         rows={3}
         className="w-full border border-gray-300 rounded-md px-3 py-2 text-sm focus:outline-none focus:ring-2
58:
         value={value ?? ""}
59:
         onChange={(e) => onChange(e.target.value)}
60:
61:
     </div>
62: )
63:
64: interface FieldSelectProps {
65: label: string
66: value: string | undefined
67: options: string[]
68:
     onChange: (value: string) => void
69: }
70:
71: export const FieldSelect: React.FC<FieldSelectProps> = ({ label, value, options, onChange }) => (
72:
    <div className="flex flex-col">
73:
       <label className="text-sm font-medium text-gray-700 mb-1">{label}</label>
74:
        <select
75:
         className="w-full border border-gray-300 rounded-md px-3 py-2 text-sm focus:outline-none focus:ring-2
76:
         value={value ?? ""}
77:
         onChange={(e) => onChange(e.target.value)}
78:
          <option value="">? Select Category ?</option>
79:
:08
          \{options.map((opt, i) => (
81:
            <option key={i} value={opt}>
82:
             {opt}
83:
            </option>
         ))}
84:
85:
        </select>
86:
     </div>
87: )
```

■ File: components\admin\family-genetic-impact-admin.tsx

```
-----
 1: "use client"
 3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 4: import { Input } from "@/components/ui/input"
 5: import { Label } from "@/components/ui/label"
 6: import { Textarea } from "@/components/ui/textarea"
 7: import { Button } from "@/components/ui/button"
 8: import { Save, RotateCcw, Plus, Trash2 } from "lucide-react"
 9: import type { FamilyGeneticImpact } from "@/types/report-types"
10:
11: interface FamilyGeneticImpactAdminProps {
12: familyGeneticImpact: FamilyGeneticImpact[]
13: addFamilyGeneticImpact: () => void
14: updateFamilyGeneticImpact: (index: number, field: keyof FamilyGeneticImpact, value: string) => void
15:
     removeFamilyGeneticImpact: (index: number) => void
16:
     onSave: () => void
17: onReset: () => void
18: }
19:
20: export default function FamilyGeneticImpactAdmin({
21: familyGeneticImpact,
22: addFamilyGeneticImpact,
23: updateFamilyGeneticImpact,
24: removeFamilyGeneticImpact,
25:
     onSave.
26:
     onReset,
27: }: FamilyGeneticImpactAdminProps) {
29:
      <Card className="shadow-lg border-0 bg-white">
30:
          <CardHeader className="bg-gradient-to-r from-blue-500 to-cyan-600 text-white rounded-t-lg">
           <CardTitle className="text-2x1">??????? Family Genetic Impact</CardTitle>
31:
32:
            <CardDescription className="text-blue-100">
33:
             Manage genetic variations that may impact family members
34:
            </CardDescription>
35:
          </CardHeader>
36:
          <CardContent className="space-y-8 p-8">
37:
            {/* Action Buttons */}
38:
            <div className="flex justify-between items-center mb-6">
39:
             <Button onClick={addFamilyGeneticImpact} size="sm">
               <Plus className="h-4 w-4 mr-2" />
40:
41:
               Add Genetic Impact
42:
             </Button>
43:
             <div className="flex gap-2">
44:
               <Button onClick={onReset} variant="outline" size="sm">
45:
                 <RotateCcw className="h-4 w-4 mr-2" />
46:
                 Reset
47:
               </Rutton>
48:
               <Button onClick={onSave} size="sm">
49:
                 <Save className="h-4 w-4 mr-2" />
50:
                 Save Changes
51:
               </Button>
52:
             </div>
53:
            </div>
54:
            {/* Family Genetic Impact List */}
55:
56:
            <div className="space-y-6">
57:
             {familyGeneticImpact.length === 0 && (
58:
                <div className="text-center py-12 text-gray-500">
59:
                 <div className="text-6xl mb-4">?</div>
60:
                  No family genetic impacts added yet
61:
                  <Button onClick={addFamilyGeneticImpact} className="bg-blue-600 hover:bg-blue-700">
62:
                    <Plus className="h-4 w-4 mr-2" />
63:
                   Add First Impact
64:
                  </Button>
65:
               </div>
66:
              ) }
67:
68:
              {familyGeneticImpact.map((impact, index) => (
69:
                <Card key={index} className="border-2 border-blue-100 bg-blue-50/30">
70:
                  <CardHeader className="pb-3">
71:
                    <CardTitle className="text-lg text-blue-800 flex justify-between items-center">
```

```
72:
                      Genetic Impact #{index + 1}
 73:
                      <Button onClick={() => removeFamilyGeneticImpact(index)} size="sm" variant="destructive">
 74:
                        <Trash2 className="h-4 w-4" />
 75:
                      </Button>
 76:
                    </CardTitle>
 77:
                  </CardHeader>
 78:
                  <CardContent className="space-y-4">
 79:
                    <div className="space-v-2">
 :08
                      <Label className="text-sm font-medium">Gene</Label>
 81:
                      <Input.
 82:
                        value={impact.gene}
 83:
                        onChange={(e) => updateFamilyGeneticImpact(index, "gene", e.target.value)}
 84:
                        placeholder="e.g., MnSOD"
 85:
                        className="border-2 focus:border-blue-500 font-mono"
 86:
                      />
 87:
                    </div>
 88:
                    <div className="space-v-2">
 89:
                      <Label className="text-sm font-medium">Normal/Common Alleles</Label>
 90:
                      <Input
 91:
                        value={impact.normalAlleles}
 92:
                        onChange={(e) => updateFamilyGeneticImpact(index, "normalAlleles", e.target.value)}
                        placeholder="e.g., AA"
 93:
 94:
                        className="border-2 focus:border-blue-500 font-mono"
 95:
                      />
                    </div>
 96:
 97:
                    <div className="space-v-2">
 98:
                      <Label className="text-sm font-medium">Your Result</Label>
 99:
                      <Input
100:
                        value={impact.yourResult}
101:
                        onChange={(e) => updateFamilyGeneticImpact(index, "yourResult", e.target.value)}
102:
                        placeholder="e.g., AG"
103:
                        className="border-2 focus:border-blue-500 font-mono font-bold"
                      />
104:
                    </div>
105:
106:
                    <div className="space-v-2">
107:
                      <Label className="text-sm font-medium">Impact on Health/Label>
108:
                      <Textarea
109:
                        value={impact.healthImpact}
110:
                        onChange={(e) => updateFamilyGeneticImpact(index, "healthImpact", e.target.value)}
111:
                        rows={3}
112:
                        placeholder="e.g., INCREASED TENDENCY OF OXIDATIVE STRESS NEED OF ANTI-OXIDANT SUPPLEME
113:
                        className="border-2 focus:border-blue-500 text-sm"
114:
                      />
115:
                    </div>
116:
                  </CardContent>
117:
                </Card>
118:
              ))}
119:
            </div>
120:
             {/* Section Guidelines */}
121:
            <div className="bg-blue-50 border-2 border-blue-200 rounded-lg p-6">
122:
123:
              <h4 className="font-semibold text-blue-800 mb-2">? Family Genetic Impact Guidelines:</h4>
124:
              <div className="text-sm text-blue-700 space-y-2">
125:
                126:
                  <1i>>
127:
                    This section highlights genetic variations observed in the patient that may also be present
128:
                    family members (parents, siblings, children).
129:
                  130:
                  <1i>>
131:
                    It serves as a recommendation for family members to consider genetic testing for similar
132:
                    predispositions.
133:
                  134:
                  <
135:
                    <strong>Gene:</strong> The specific gene with a noted variation.
136:
                  137:
138:
                    <strong>Normal/Common Alleles:</strong> The typical genetic variants.
139:
                  140:
                  <1i>>
                    <strong>Your Result:
The patient's specific genetic variant.
141:
                  142:
143:
                  <
144:
                    <strong>Impact on Health:</strong> The health implications associated with the patient's ge
```

```
145:
                   which could also apply to family members.
                 146:
147:
               148:
             </div>
149:
           </div>
150:
         </CardContent>
151:
       </Card>
152:
     )
153: }
```

■ File: components\admin\gene-results-admin.tsx

```
______
 1: "use client"
 2:
 3: import { Button } from "@/components/ui/button"
 4: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 5: import { Input } from "@/components/ui/input"
 6: import { Label } from "@/components/ui/label"
 7: import { ScrollArea } from "@/components/ui/scroll-area"
 8: import { PlusCircle, Trash2, Save, RotateCcw } from "lucide-react"
 9: import type { GeneTestResult } from "@/types/report-types"
10:
 11: interface GeneResultsAdminProps {
12: geneTestResults: GeneTestResult[]
      addGeneTestResult: () => void
14: updateGeneTestResult: (index: number, field: keyof GeneTestResult, value: string) => void
15: removeGeneTestResult: (index: number) => void
16: onSave: () => void
17:
     onReset: () => void
18: }
19:
 20: export default function GeneResultsAdmin({
 21: geneTestResults,
 22:
     addGeneTestResult,
 23:
     updateGeneTestResult,
 24: removeGeneTestResult,
 25: onSave,
 26:
     onReset,
 27: }: GeneResultsAdminProps) {
 28:
     return (
       <Card className="shadow-lg border-0 bg-white">
          <CardHeader className="bg-gradient-to-r from-indigo-500 to-blue-600 text-white rounded-t-lg">
 30:
 31:
            <CardTitle className="text-2xl">? Gene Test Results</CardTitle>
 32:
            <CardDescription className="text-indigo-100">Manage the complete list of gene test results</CardDes
33:
          </CardHeader>
 34:
          <CardContent className="space-y-6 p-8">
 35:
            <div className="flex justify-between items-center">
              <h3 className="text-lg font-semibold">Gene Test Results ({geneTestResults.length})</h3>
 36:
37:
              <div className="flex gap-2">
                <Button onClick={onReset} variant="outline" size="sm">
 38:
 39:
                  <RotateCcw className="h-4 w-4 mr-2" />
 40:
                  Reset
 41:
                </Button>
                <Button onClick={onSave} size="sm">
 42:
                  <Save className="h-4 w-4 mr-2" />
 43:
 44:
                  Save Changes
 45:
                </Button>
                <Button onClick={addGeneTestResult} className="bg-indigo-600 hover:bg-indigo-700">
 46:
 47:
                  <PlusCircle className="h-4 w-4 mr-2" />
 48:
                  Add Gene Result
 49:
                </Button>
 50:
              </div>
51:
            </div>
 52:
53:
            <ScrollArea className="h-96">
 54:
              <div className="space-y-4">
 55:
                {geneTestResults.map((result, index) => (
                  <div key={index} className="border-2 border-gray-200 rounded-lg p-4 bg-gray-50">
 56:
 57:
                    <div className="flex justify-between items-start mb-4">
                      <h4 className="font-semibold text-gray-800">Gene #{index + 1}</h4>
 58:
 59:
                      <Button onClick={() => removeGeneTestResult(index)} variant="destructive" size="sm">
```

```
60:
                         <Trash2 className="h-4 w-4" />
 61:
                       </Button>
 62:
                     </div>
 63:
                     <div className="grid md:grid-cols-3 gap-4">
 64:
                       <div className="space-y-2">
 65:
                         <Label className="text-sm font-medium">Gene Name</Label>
 66:
                         <Input
 67:
                           value={result.geneName}
 68:
                           onChange={(e) => updateGeneTestResult(index, "geneName", e.target.value)}
                           placeholder="e.g., ALDH2 Aldehyde dehydrogenase 2"
 69:
 70:
                          className="border-2 focus:border-indigo-500"
 71:
                         />
 72:
                       </div>
 73:
                       <div className="space-y-2">
                         <Label className="text-sm font-medium">Variation</Label>
 74:
 75:
                         <Input
 76:
                           value={result.variation}
 77:
                           onChange={(e) => updateGeneTestResult(index, "variation", e.target.value)}
                           placeholder="e.g., G>A"
 78:
 79:
                          className="border-2 focus:border-indigo-500 font-mono"
 80:
                         />
 81:
                       </div>
 82:
                       <div className="space-y-2">
 83:
                         <Label className="text-sm font-medium">Result</Label>
 84:
 85:
                           value={result.result}
 86:
                           onChange={(e) => updateGeneTestResult(index, "result", e.target.value)}
                           placeholder="e.g., GG"
 87:
 88:
                          className="border-2 focus:border-indigo-500 font-mono font-bold"
 89:
                         />
 90:
                       </div>
 91:
                     </div>
 92:
                  </div>
                ))}
 93:
 94:
              </div>
 95:
            </ScrollArea>
 96:
 97:
            {geneTestResults.length === 0 && (
 98:
              <div className="text-center py-12 text-gray-500">
                <div className="text-6xl mb-4">?</div>
 99:
100:
                 No gene test results added yet
101:
                 <Button onClick={addGeneTestResult} className="bg-indigo-600 hover:bg-indigo-700">
                  <PlusCircle className="h-4 w-4 mr-2" />
103:
                  Add First Gene Result
104:
                 </Button>
105:
               </div>
106:
            ) }
107:
           </CardContent>
108:
        </Card>
109:
110: }
```

■ File: components\admin\genes-addiction-admin.tsx

```
1: "use client"
2:
3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
4: import { Input } from "@/components/ui/input"
5: import { Label } from "@/components/ui/label"
6: import { Textarea } from "@/components/ui/textarea"
7: import { Button } from "@/components/ui/button"
8: import { Save, RotateCcw } from "lucide-react"
9: import type { GenesAndAddiction, AddictionData } from "@/types/report-types"
10:
11: interface GenesAddictionAdminProps {
12: genesAndAddiction: GenesAndAddiction
13:
     updateGenesAndAddiction: (field: keyof GenesAndAddiction, data: Partial<AddictionData>) => void
14: onSave: () => void
15:
     onReset: () => void
16: }
17:
```

```
18: export default function GenesAddictionAdmin({
    genesAndAddiction,
20:
     {\tt updateGenesAndAddiction,}
21:
     onSave,
22:
     onReset
23: }: GenesAddictionAdminProps) {
24: const renderAddictionField = (field: keyof GenesAndAddiction, data: AddictionData, title: string) => (
25:
       <Card key={field} className="border-2 border-purple-100 bg-purple-50/30">
         <CardHeader className="pb-3">
26:
           <CardTitle className="text-lg text-purple-800">{title}</CardTitle>
27:
28:
         </CardHeader>
29:
         <CardContent className="space-y-4">
30:
            <div className="space-y-2">
31:
              <Label className="text-sm font-medium">Tendency</Label>
32:
33:
               value={data.tendency}
               onChange={(e) => updateGenesAndAddiction(field, { tendency: e.target.value })}
34:
35:
               placeholder="e.g., LOW, NORMAL, HIGH"
               className="border-2 focus:border-purple-500"
36:
37:
38:
           </div>
39:
           <div className="space-y-2">
40:
             <Label className="text-sm font-medium">Description</Label>
41:
             <Textarea
42:
               value={data.description}
               onChange={(e) => updateGenesAndAddiction(field, { description: e.target.value })}
43:
44:
               rows={3}
45:
               className="border-2 focus:border-purple-500 text-sm"
46:
             />
47:
           </div>
48:
         </CardContent>
        </Card>
49:
50:
     )
51:
52:
     return (
53:
       <Card className="shadow-lg border-0 bg-white">
54:
         <CardHeader className="bg-gradient-to-r from-purple-500 to-pink-600 text-white rounded-t-lg">
55:
           <CardTitle className="text-2xl">? Genes & Addiction</CardTitle>
56:
           <CardDescription className="text-purple-100">
57:
             Manage genetic predispositions related to various addiction tendencies
58:
            </CardDescription>
59:
         </CardHeader>
60:
         <CardContent className="space-y-8 p-8">
61:
           {/* Action Buttons */}
62:
           <div className="flex justify-end gap-2 mb-6">
63:
             <Button onClick={onReset} variant="outline" size="sm">
64:
               <RotateCcw className="h-4 w-4 mr-2" />
65:
               Reset
66:
             </Rutton>
67:
              <Button onClick={onSave} size="sm">
               <Save className="h-4 w-4 mr-2" />
68:
69:
               Save Changes
70:
             </Button>
71:
           </div>
72:
            {/* Genes & Addiction Fields */}
73:
            <div className="grid md:grid-cols-2 lg:grid-cols-2 gap-6">
74:
75:
             {Object.entries(genesAndAddiction).map(([key, item]) =>
76:
               renderAddictionField(
77:
                 key as keyof GenesAndAddiction,
78:
                 item as AddictionData,
79:
                 \label{eq:key.replace(/([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase()),}
:08
               ),
             ) }
81:
82:
           </div>
83:
           {/* Section Guidelines */}
84:
85:
            <div className="bg-purple-50 border-2 border-purple-200 rounded-lg p-6">
86:
              <h4 className="font-semibold text-purple-800 mb-2">? Genes & Addiction Guidelines:</h4>
87:
              <div className="text-sm text-purple-700 space-y-2">
88:
                89:
                 <1i>>
90:
                    <strong>Alcohol Addiction:</
```

```
91:
 92:
                <
 93:
                  <strong>Smoking Addiction:<p
 94:
                95:
 96:
                  <strong>Snacking Habits:</strong> Genetic tendency towards frequent snacking or specific fo
 97:
                98:
                <
 99:
                  <strong>Altruism:</strong> Genetic predisposition towards prosocial behaviors and helping o
100:
                Genetics influence vulnerability, but environmental factors and lifestyle choices are cru
101:
102:
                This information can help tailor prevention strategies and personalized treatment plans.
103:
              </111>
104:
             </div>
105:
           </div>
106:
         </CardContent>
107:
       </Card>
    )
108:
109: }
```

■ File: components\admin\genetic-parameters-admin.tsx

```
1: "use client";
2:
3: import React, { useCallback, useEffect, useState } from "react";
4: import { Button } from "@/components/ui/button";
5: import { Input } from "@/components/ui/input";
6: import { Card, CardContent, CardHeader, CardTitle } from "@/components/ui/card";
7: import { Textarea } from "@/components/ui/textarea";
8: import {
9: Select,
10: SelectContent,
11: SelectItem,
12:
     SelectTrigger,
13:
     SelectValue,
14: } from "@/components/ui/select";
15: import Image from "next/image";
16: import { toast } from "sonner";
17: import { X, Plus, Save, Upload, Edit3, FileImage } from "lucide-react";
18: import type {
19: GeneticParameter,
20: CategoryData,
21: ReportData,
22:
     ApiResponse,
23: } from "@/types/report-types";
24:
25: // Custom hook for data fetching
26:
27: const useReportData = () => {
28: const [data, setData] = useState<ReportData | null>(null);
29: const [loading, setLoading] = useState<boolean>(true);
30:
     const [error, setError] = useState<string | null>(null);
31:
32:
     const fetchData = useCallback(async (): Promise<void> => {
33:
      try {
34:
         setLoading(true);
35:
         const response = await fetch("/api/report-data");
36:
37:
         if (!response.ok) {
38:
            throw new Error(`HTTP error! status: ${response.status}`);
39:
          }
40:
          const jsonData: ReportData = await response.json();
41:
42:
          if (!jsonData.categories || !Array.isArray(jsonData.categories)) {
43:
44:
           throw new Error("Invalid data structure: categories must be an array");
45:
46:
47:
         setData(jsonData);
48:
         setError(null);
49:
        } catch (err) {
```

```
50:
         const errorMessage =
 51:
           err instanceof Error ? err.message : "Unknown error occurred";
 52:
          setError(errorMessage);
 53:
          console.error("Failed to fetch report data:", err);
          toast.error(`Failed to load data: ${errorMessage}`);
 54:
 55:
        } finally {
 56:
           setLoading(false);
 57:
        }
 58:
      }, []);
 59:
      return { data, loading, error, refetch: fetchData };
 60:
 61: };
 62:
 63: export default function GeneticParametersAdmin(): JSX.Element {
 64: // State with proper TypeScript types
 65:
      const [categories, setCategories] = useState<CategoryData[]>([]);
 66:
      const [geneticParameters, setGeneticParameters] = useState<</pre>
 67:
        GeneticParameter[]
 68: >([]);
 69: const [isSaving, setIsSaving] = useState<boolean>(false);
 70:
     const [imageErrors, setImageErrors] = useState<Set<string>>(new Set());
 71:
      const [isEditing, setIsEditing] = useState<boolean>(false);
 72:
      const [selectedCategory, setSelectedCategory] = useState<string>("all");
 73:
 74:
     // Use custom hook
 75:
      const { data, loading, error, refetch } = useReportData();
 76:
 77:
      // Initialize data when fetched
 78: useEffect(() => {
 79:
       if (data) {
 :08
          setCategories(data.categories | []);
 81:
           setGeneticParameters(data.geneticParameters || []);
 82:
 83:
     }, [data]);
 84:
 85:
      // Initial data fetch
 86:
      useEffect(() => {
 87:
       refetch();
 88:
     }, [refetch]);
 89:
 90:
      // Type-safe event handlers
 91:
      const handleCategoryChange = (
 92:
       categoryIndex: number,
 93:
       field: keyof CategoryData,
 94:
        value: string | boolean | number
 95:
     ): void => {
 96:
       const updated = [...categories];
 97:
        (updated[categoryIndex] as any)[field] = value;
 98:
        setCategories(updated);
 99:
100:
101: const handleParameterChange = (
102:
       categoryIndex: number,
       paramIndex: number,
103:
104:
        value: string
     ): void => {
105:
       const updated = [...categories];
106:
107:
       updated[categoryIndex].parameters[paramIndex] = value;
108:
        setCategories(updated);
109:
110:
111:
     const handleImageError = (categoryId: string): void => {
112:
       const newErrors = new Set(imageErrors);
113:
        newErrors.add(categoryId);
114:
        setImageErrors(newErrors);
115:
116:
117:
      const handleFileChange = async (
118:
        categoryIndex: number,
119:
        file: File
120:
     ): Promise<void> => {
121:
       const formData = new FormData();
122:
         formData.append("file", file);
```

```
123:
124:
       try {
125:
         const res = await fetch("/api/upload-image", {
            method: "POST",
126:
127:
            body: formData,
128:
          });
129:
           const result = await res.json();
130:
131:
          if (result.success && result.url) {
132:
            handleCategoryChange(categoryIndex, "imageUrl", result.url);
134:
135:
            const categoryId = categories[categoryIndex].id;
136:
            const newErrors = new Set(imageErrors);
137:
           newErrors.delete(categoryId);
138:
            setImageErrors(newErrors);
139:
           } else {
140:
            toast.error(result.error || "Upload failed");
          }
141:
142:
        } catch (err) {
           console.error("Upload error:", err);
143:
144:
           toast.error("Image upload failed");
145:
      };
146:
147:
148:
      const addCategory = (): void => {
149:
       const newCategory: CategoryData = {
          id: `category_${Date.now()}`,
150:
151:
          category: "NEW CATEGORY",
          imageUrl: "",
152:
153:
          description: "",
154:
          parameters: Array(21).fill(""),
          isActive: true,
155:
156:
          order: categories.length + 1,
       };
157:
158:
159:
         setCategories([...categories, newCategory]);
160:
      };
161:
162:
      const removeCategory = async (categoryId: string): Promise<void> => {
163:
        if (!window.confirm("Are you sure you want to remove this category?"))
164:
          return;
165:
166:
        const updated = categories.filter((cat) => cat.id !== categoryId);
167:
        setCategories(updated);
168:
169:
        if (selectedCategory === categoryId) {
170:
          setSelectedCategory("all");
171:
172:
173:
        try {
         const dataToSave = {
175:
            ...data,
176:
            categories: updated,
177:
            metadata: {
178:
              lastUpdated: new Date().toISOString(),
179:
              version: "1.0.0",
              totalCategories: updated.length,
180:
181:
              totalParameters: updated.reduce(
182:
                (sum, cat) => sum + cat.parameters.filter((p) => p.trim()).length,
183:
184:
              ),
185:
            },
186:
           };
187:
188:
           const response = await fetch("/api/report-data", {
189:
            method: "POST",
190:
            headers: {
               "Content-Type": "application/json",
191:
192:
             },
193:
            body: JSON.stringify(dataToSave),
194:
           });
195:
```

```
if (response.ok) {
196:
197:
            toast.success("Category deleted and changes saved");
198:
           } else {
199:
             const result = await response.json();
            toast.error(result.error || "Failed to save changes");
200:
201:
          }
202:
        } catch (error) {
203:
          console.error("Failed to save after delete:", error);
204:
           toast.error("An error occurred while saving changes");
205:
        }
206:
207:
208:
      const addParameter = (categoryIndex: number): void => {
209:
        const updated = [...categories];
        updated[categoryIndex].parameters.push("");
210:
211:
        setCategories(updated);
212:
      };
213:
214:
      const removeParameter = (categoryIndex: number, paramIndex: number): void => {
215:
       const updated = [...categories];
216:
       updated[categoryIndex].parameters.splice(paramIndex, 1);
217:
        setCategories(updated);
218:
      };
219:
220:
      const saveData = async (): Promise<void> => {
221:
       setIsSaving(true);
222:
        try {
223:
          if (!data) throw new Error("No base report data available");
225:
226:
          const dataToSave = {
227:
            ...data,
228:
            categories,
229:
            geneticParameters,
230:
            metadata: {
231:
              lastUpdated: new Date().toISOString(),
232:
              version: "1.0.0",
233:
              totalCategories: categories.length,
234:
             totalParameters: categories.reduce(
235:
                (sum, cat) => sum + cat.parameters.filter((p) => p.trim()).length,
236:
                0
237:
              ),
238:
            },
          };
239:
240:
241:
          const response = await fetch("/api/report-data", {
242:
           method: "POST",
243:
            headers: {
244:
               "Content-Type": "application/json",
245:
246:
            body: JSON.stringify(dataToSave),
247:
          });
248:
249:
          const result: ApiResponse = await response.json();
250:
251:
          if (response.ok && result.success !== false) {
            toast.success("Data saved successfully!");
252:
253:
            setIsEditing(false);
254:
           } else {
            throw new Error(result.error | | "Failed to save data");
255:
          }
256:
257:
        } catch (err) {
258:
          const errorMessage =
259:
            err instanceof Error ? err.message : "Unknown error occurred";
          console.error("Error saving data:", err);
260:
261:
          toast.error(`Save failed: ${errorMessage}`);
262:
        } finally {
263:
           setIsSaving(false);
264:
265:
      };
266:
267:
      const exportData = (): void => {
268:
         const dataToExport = { categories, geneticParameters };
```

```
269:
        const blob = new Blob([JSON.stringify(dataToExport, null, 2)], {
270:
          type: "application/json",
271:
        });
        const url = URL.createObjectURL(blob);
272:
273:
        const a = document.createElement("a");
274:
       a.href = url;
        a.download = `report-data-${new Date().toISOString().split("T")[0]}.json`;
275:
276:
        document.body.appendChild(a);
277:
        a.click();
278:
        document.body.removeChild(a);
279:
       URL.revokeObjectURL(url);
280:
     };
281:
282:
     const filteredCategories =
283:
       selectedCategory === "all"
284:
          ? categories
285:
          : categories.filter((cat) => cat.id === selectedCategory);
286:
287:
      // Loading state
288: if (loading) {
289:
       return (
290:
          <div className="flex justify-center items-center min-h-[400px]">
291:
            <div className="text-center">
292:
              <div className="animate-spin rounded-full h-12 w-12 border-b-2 border-blue-600 mx-auto mb-4"></di>
293:
              Loading genetic parameters...
294:
            </div>
295:
          </div>
        );
296:
297:
     }
298:
299:
      // Error state
300:
      if (error) {
301:
       return (
          <div className="flex justify-center items-center min-h-[400px]">
302:
303:
           <Card className="w-full max-w-md">
304:
             <CardContent className="p-6 text-center">
305:
                <div className="text-red-500 mb-4">
306:
                 <X size={48} className="mx-auto" />
307:
                </div>
                <h3 className="text-lg font-semibold mb-2">Error Loading Data</h3>
308:
309:
                {error}
                <Button onClick={refetch}>Try Again
310:
311:
              </CardContent>
312:
            </Card>
313:
          </div>
314:
        );
315:
     }
316:
317:
     return (
318:
       <div className="w-full max-w-7xl mx-auto p-4">
319:
         <Card className="mb-6">
320:
           <CardHeader>
321:
              <div className="flex flex-col lg:flex-row lg:items-center justify-between gap-4">
322:
                <div className="flex-1">
323:
                  <CardTitle className="text-xl md:text-2xl font-bold text-gray-800">
                   Genetic Parameters Table of Contents
324:
325:
                  </CardTitle>
326:
                  327:
                    ({categories.length} categories,{" "}
328:
                    {categories.reduce(
329:
                     (sum, cat) =>
330:
                       sum + cat.parameters.filter((p) => p.trim()).length,
331:
                     0
332:
                    ) } { " " }
333:
                    parameters)
334:
                  335:
                </div>
336:
337:
                <div className="flex flex-col sm:flex-row gap-2">
338:
                 <Select
339:
                    value={selectedCategory}
340:
                    onValueChange={setSelectedCategory}
341:
```

```
342:
                     <SelectTrigger className="w-full sm:w-48">
343:
                       <SelectValue placeholder="Filter by category" />
344:
                     </SelectTrigger>
345:
                     <SelectContent>
                       <SelectItem value="all">All Categories</SelectItem>
346:
347:
                       {categories.map((cat) => (
348:
                          <SelectItem key={cat.id} value={cat.id}>
349:
                           {cat.category}
350:
                          </SelectItem>
                       ))}
351:
352:
                     </SelectContent>
353:
                   </Select>
354:
                   <Button onClick={exportData} variant="outline" className="gap-2">
355:
356:
                     <FileImage size={16} />
357:
                     Export JSON
358:
                   </Button>
359:
360:
                   <But.t.on
361:
                     onClick={() => setIsEditing(!isEditing)}
362:
                     variant="outline"
363:
                     className="gap-2"
364:
                     <Edit3 size={16} />
365:
366:
                      {isEditing ? "View Mode" : "Edit Mode"}
367:
                   </Button>
368:
                   {isEditing && (
369:
370:
                     <>
371:
                        <Button
372:
                         onClick={addCategory}
373:
                         variant="outline"
374:
                         className="gap-2"
375:
376:
                         <Plus size={16} />
377:
                         Add Category
378:
                       </Button>
379:
                       <Button
380:
                         onClick={saveData}
                         disabled={isSaving}
381:
382:
                         className="gap-2"
383:
384:
                          <Save size={16} />
                          {isSaving ? "Saving..." : "Save Changes"}
385:
386:
                       </Button>
387:
                   ) }
388:
389:
                 </div>
390:
               </div>
391:
             </CardHeader>
392:
393:
             <CardContent>
394:
               {/* Category Table */}
395:
               <div className="overflow-x-auto">
396:
                 <div className="min-w-full border border-gray-300 rounded-lg">
397:
                   {filteredCategories.map((category, categoryIndex) => {
398:
                     const actualIndex = categories.findIndex(
399:
                       (cat) => cat.id === category.id
400:
                     );
401:
                     return (
402:
                       <div
403:
                         key={category.id}
404:
                          className="border-b border-black last:border-b-0"
405:
                          {/* Category Row */}
406:
407:
                          <div className="border-b border-gray-300 last:border-b-0">
408:
                            <div className="grid grid-cols-4 min-h-[140px]">
409:
                              {/* Category Name & Image Column */}
410:
                              <div className="border-r border-gray-300 p-4 flex flex-col items-center justify-cen</pre>
411:
                                {isEditing ? (
412:
                                  <div className="space-y-3 w-full">
413:
                                    <Input.
414:
                                      value={category.category}
```

```
415:
                                       onChange={(e) =>
416:
                                         handleCategoryChange(
417:
                                           actualIndex,
418:
                                           "category",
419:
                                           e.target.value
420:
421:
422:
                                       className="text-center font-bold text-sm bg-white"
423:
                                      placeholder="Category Name"
424:
425:
426:
                                     <Textarea
427:
                                       value={category.description || ""}
428:
                                       onChange={(e) =>
429:
                                        handleCategoryChange(
430:
                                           actualIndex,
431:
                                           "description",
432:
                                           e.target.value
433:
                                         )
434:
                                       }
435:
                                       className="text-xs bg-white resize-none h-16"
436:
                                      placeholder="Category description..."
437:
438:
439:
                                     <div className="flex flex-col items-center space-y-2">
                                       {category.imageUrl &&
440:
441:
                                       !imageErrors.has(category.id) ? (
442:
                                         <Image
443:
                                           src={category.imageUrl}
444:
                                           alt={category.category}
445:
                                           width={60}
446:
                                           height={60}
447:
                                           className="rounded-full border object-cover"
448:
                                           onError={() =>
449:
                                             handleImageError(category.id)
450:
                                           }
451:
                                         />
452:
453:
                                         <div className="w-[60px] h-[60px] bg-white rounded-full border-2 border-d</pre>
454:
                                           <Upload
455:
                                             size={20}
                                            className="text-gray-400"
456:
457:
                                           />
                                         </div>
458:
459:
                                       ) }
460:
461:
                                       <label className="cursor-pointer">
462:
463:
                                           type="file"
                                           accept="image/*"
464:
465:
                                           className="hidden"
466:
                                           onChange={(e) => {
467:
                                             const file = e.target.files?.[0];
468:
                                             if (file) {
469:
                                               handleFileChange(actualIndex, file);
470:
471:
                                           }}
472:
473:
                                         <div className="text-xs text-blue-600 hover:text-blue-800 underline">
474:
                                           Upload
475:
                                         </div>
476:
                                       </label>
477:
                                     </div>
478:
479:
                                     <But.t.on
480:
                                      variant="destructive"
481:
                                       size="sm"
482:
                                      onClick={() => removeCategory(category.id)}
483:
                                       className="gap-1 w-full"
484:
485:
                                      Remove
486:
                                     </But.ton>
487:
                                   </div>
```

```
488:
                             ) : (
489:
                               <div className="text-center">
490:
                                <h2 className="text-base font-bold text-gray-700 mb-2">
491:
                                  {category.category}
492:
                                 </h2>
493:
494:
                                 {category.description && (
495:
                                  496:
                                    {category.description}
497:
                                  498:
                                 ) }
499:
500:
                                 {category.imageUrl &&
501:
                                 !imageErrors.has(category.id) ? (
502:
                                  <Image
503:
                                    src={category.imageUrl}
504:
                                    alt={category.category}
505:
                                    width={70}
506:
                                    height={70}
507:
                                    className="rounded-full border object-cover mx-auto"
508:
                                    onError={() => handleImageError(category.id)}
509:
                                  />
510:
                                ) : (
511:
                                  <div className="w-[70px] h-[70px] bg-gray-100 rounded-full border-2 border-</pre>
512:
                                    <Upload size={24} className="text-gray-400" />
513:
                                  </div>
514:
                                ) }
                               </div>
515:
                             ) }
516:
517:
                           </div>
518:
519:
                           {/* Parameters Columns */}
520:
                           <div className="col-span-3 ">
521:
                             522:
                               523:
                                 {Array.from({
524:
                                  length: Math.ceil(
525:
                                    category.parameters.length / 3
526:
527:
                                 }).map((_, rowIndex) => (
528:
                                  {[0, 1, 2].map((colIndex) => {
529:
530:
                                      const paramIndex =
                                        colIndex *
531:
532:
                                          Math.ceil(
533:
                                            category.parameters.length / 3
534:
                                          ) +
535:
                                        rowIndex;
536:
                                      const parameter =
537:
                                        538:
539:
                                      return (
540:
                                        <td
541:
                                          key={colIndex}
542:
                                          className="border border-gray-300 p-1"
543:
544:
                                          {isEditing ? (
                                            <div className="flex items-center space-x-1 w-full">
545:
546:
547:
                                               value={parameter}
548:
                                               onChange={(e) =>
549:
                                                 handleParameterChange(
550:
                                                   actualIndex,
551:
                                                   paramIndex,
552:
                                                   e.target.value
553:
554:
                                                }
555:
                                               placeholder="Parameter name"
556:
                                               className="text-sm h-7 w-full"
557:
                                              {paramIndex <
558:
559:
                                                category.parameters.length && (
560:
                                                <Button
```

```
variant="ghost"
561:
562:
                                                    size="sm"
563:
                                                    onClick={() =>
564:
                                                      removeParameter(
565:
                                                        actualIndex,
                                                        paramIndex
566:
                                                      )
567:
568:
                                                     }
569:
                                                    className="h-7 w-7 p-0 opacity-0 group-hover:opacity-100 tr
570:
571:
                                                     <X size={12} />
572:
                                                   </Button>
573:
                                                 ) }
574:
                                               </div>
575:
                                            ) : (
576:
                                               parameter && (
577:
                                                 <span className="text-sm text-gray-700">
578:
                                                  {parameter}
579:
                                                 </span>
580:
                                            ) }
581:
582:
                                          );
583:
584:
                                      })}
585:
                                     586:
                                  ))}
587:
                                 588:
                               589:
590:
                               {isEditing && (
591:
                                 <Button
592:
                                  variant="ghost"
593:
                                  size="sm"
594:
                                  onClick={() => addParameter(actualIndex)}
595:
                                  className="mt-2 w-full text-xs text-gray-500 hover:text-gray-700"
596:
597:
                                   <Plus size={12} className="mr-1" />
598:
                                  Add Parameter
599:
                                 </Button>
600:
                              ) }
601:
                            </div>
602:
                           </div>
603:
                        </div>
604:
                      </div>
605:
                    );
                  })}
606:
607:
                 </div>
608:
               </div>
609:
610:
              {categories.length === 0 && (
                <div className="text-center py-12">
611:
                  <div className="text-gray-400 mb-4">
612:
613:
                    <FileImage size={48} className="mx-auto" />
614:
                   </div>
615:
                  <h3 className="text-lg font-semibold text-gray-700 mb-2">
616:
                   No Categories Found
617:
                   </h3>
                  618:
                    Get started by adding your first category
619:
620:
                   <Button onClick={addCategory} className="gap-2">
621:
622:
                    <Plus size={16} />
623:
                    Add First Category
624:
                   </Button>
625:
                 </div>
626:
              ) }
627:
            </CardContent>
628:
          </Card>
629:
         </div>
630:
     );
631: }
```

■ File: components\admin\import-export-admin.tsx

```
-----
 1: "use client"
 2:
 3: import type React from "react"
 4: import { Button } from "@/components/ui/button"
 5: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 6: import { Label } from "@/components/ui/label"
 7: import { Download, Upload } from "lucide-react"
 8: import type { ComprehensiveReportData } from "@/types/report-types"
 9: import { useToast } from "@/components/ui/use-toast"
10:
11: interface ImportExportAdminProps {
12: reportData: ComprehensiveReportData
13:
     setReportData: (data: ComprehensiveReportData) => void
14: }
15:
16: export default function ImportExportAdmin({ reportData, setReportData }: ImportExportAdminProps) {
     const { toast } = useToast()
17:
     const exportData = () => {
19:
20:
      try {
21:
          const dataStr = JSON.stringify(reportData, null, 2)
22:
         const dataBlob = new Blob([dataStr], { type: "application/json" })
         const url = URL.createObjectURL(dataBlob)
23:
24:
          const link = document.createElement("a")
25:
          link.href = url
          link.download = `genomics-report-${new Date().toISOString().split("T")[0]}.json`
26:
27:
         link.click()
28:
         URL.revokeObjectURL(url)
29:
         toast({
30:
           title: "Export Successful!",
           description: "Report data has been downloaded as a JSON file.",
31:
32:
         })
      } catch (error) {
33:
34:
          console.error("Error exporting data:", error)
35:
          toast({
36:
           title: "Export Failed!",
37:
            description: "There was an error exporting the data. Please try again.",
38:
            variant: "destructive",
39:
          })
40:
        }
41:
     }
42:
43:
     const importData = (event: React.ChangeEvent<HTMLInputElement>) => {
44:
        const file = event.target.files?.[0]
45:
        if (file) {
46:
         const reader = new FileReader()
47:
         reader.onload = (e) => {
48:
           try {
             const importedData = JSON.parse(e.target?.result as string) as ComprehensiveReportData
49:
50:
              // Basic validation to ensure it's a report data structure
51:
             if (importedData && importedData.patientInfo && importedData.content) {
52:
               setReportData(importedData)
53:
                toast({
                 title: "Import Successful!",
54:
                  description: "Report data has been imported successfully.",
55:
56:
                })
57:
              } else {
                throw new Error("Invalid file format or missing essential data.")
58:
59:
60:
           } catch (error: any) {
61:
             console.error("Error importing data:", error)
62:
              toast({
                title: "Import Failed!",
63:
64:
                description: `Error importing data: ${error.message || "Please check the file format."}`,
65:
                variant: "destructive",
66:
              })
           }
67:
68:
69:
          reader.readAsText(file)
70:
        }
71:
      }
```

```
72:
 73:
 74:
        <Card className="shadow-lg border-0 bg-white">
 75:
          <CardHeader className="bg-gradient-to-r from-orange-500 to-red-600 text-white rounded-t-lg">
 76:
            <CardTitle className="text-2xl">? Import/Export Data</CardTitle>
 77:
            <CardDescription className="text-orange-100">Backup and restore your report data</CardDescription>
 78:
          </CardHeader>
 79:
          <CardContent className="space-y-8 p-8">
 :08
            <div className="grid md:grid-cols-2 gap-8">
              <div className="space-y-4">
 81:
                <h3 className="text-xl font-semibold text-gray-800">? Export Data</h3>
 82:
 83:
                84:
                  Download your current report configuration as a JSON file for backup or sharing.
 25:
                <Button onClick={exportData} className="w-full bg-orange-600 hover:bg-orange-700">
 86:
 87:
                  <Download className="h-4 w-4 mr-2" />
 88:
                  Export Current Data
 89:
                </Button>
 90:
              </div>
 91:
 92:
              <div className="space-y-4">
 93:
                <h3 className="text-xl font-semibold text-gray-800">? Import Data</h3>
 94:
                Upload a previously exported JSON file to restore report configura
 95:
                <div className="border-2 border-dashed border-gray-300 rounded-lg p-6 text-center">
                  <input type="file" accept=".json" onChange={importData} className="hidden" id="import-file" /</pre>
 96:
                  <Label htmlFor="import-file" className="cursor-pointer">
 97:
 98:
                    <Upload className="h-8 w-8 mx-auto mb-2 text-gray-400" />
 99:
                    <span className="text-sm text-gray-600">Click to select JSON file</span>
100:
                  </Label>
101:
                </div>
102:
              </div>
103:
            </div>
104:
            <div className="bg-yellow-50 border-2 border-yellow-200 rounded-lg p-6">
105:
              <h4 className="font-semibold text-yellow-800 mb-2">?? Important Notes:</h4>
106:
107:
              108:
                < Importing data will completely replace your current configuration</li>
109:
                < Always export your current data before importing new data</li>
110:
                < Only import JSON files that were exported from this system</li>
111:
                ? Make sure to save your changes after importing
112:
              113:
            </div>
114:
          </CardContent>
115:
        </Card>
116:
      )
117: }
```

■ File: components\admin\lifestyle-conditions-admin.tsx

```
______
 1: "use client"
 2:
 3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 4: import { Label } from "@/components/ui/label"
 5: import { SelectContent, SelectItem, SelectTrigger, SelectValue } from "@/components/ui/select"
 6: import { Button } from "@/components/ui/button"
 7: import { Save, RotateCcw } from "lucide-react"
 8: import { useState } from "react"
 9: import type { LifestyleConditions, HealthConditionStatus } from "@/types/report-types"
10:
11: interface LifestyleConditionsAdminProps {
12:
     lifestyleConditions: LifestyleConditions
     updateLifestyleCondition: (
 13:
       section: keyof LifestyleConditions,
14:
15:
       field: string,
       status: HealthConditionStatus["status"],
16:
 17:
      ) => void
      onSave: () => void
18:
19:
     onReset: () => void
 20: }
 21:
 22: export default function LifestyleConditionsAdmin({
```

```
23:
    lifestyleConditions.
24: updateLifestyleCondition,
25: onSave,
26:
     onReset,
27: }: LifestyleConditionsAdminProps) {
28: const [activeSection, setActiveSection] = useState<keyof LifestyleConditions>("heartVascularHealth")
29:
30:
    const renderConditionField = (
31:
       section: keyof LifestyleConditions,
32:
       field: string,
      data: HealthConditionStatus,
33:
34:
      title: string,
35:
     ) => (
       <div key={field} className="grid grid-cols-3 gap-4 items-center border-b pb-2">
36:
37:
        <Label className="font-medium text-gray-700">{title}</Label>
38:
         <div className="col-span-2">
39:
           <Select
40:
             value={data.status}
             onValueChange={(value: HealthConditionStatus["status"]) => updateLifestyleCondition(section, fiel
41:
43:
             <SelectTrigger className="border-2 focus:border-yellow-500">
44:
               <SelectValue />
45:
             </SelectTrigger>
46:
             <SelectContent>
47:
               <SelectItem value="strength">Strength (?)</SelectItem>
48:
               <SelectItem value="improvement">Improvement Needed (?)
49:
             </SelectContent>
50:
           </Select>
51:
         </div>
52:
       </div>
53:
     )
54:
55:
    const getSectionTitle = (section: keyof LifestyleConditions) => {
     switch (section) {
57:
       case "heartVascularHealth":
58:
          return "?? Heart & Vascular Health"
59:
        case "diabesity":
60:
          return "? Diabesity (Diabetes & Obesity)"
61:
       case "liverHealth":
          return "? Liver Health"
62:
63:
         case "boneHealth":
64:
          return "? Bone Health"
65:
       case "gutHealth":
66:
          return "? Gut Health"
67:
        case "hormoneSystem":
68:
           return "? Hormone System"
69:
         default:
70:
           return section
71:
       }
72:
73:
    const getSectionIcon = (section: keyof LifestyleConditions) => {
75:
      switch (section) {
76:
       case "heartVascularHealth":
77:
           return "??"
        case "diabesity":
78:
79:
          return "?"
80:
        case "liverHealth":
81:
          return "?"
82:
         case "boneHealth":
83:
          return "?"
84:
        case "gutHealth":
85:
          return "?"
86:
         case "hormoneSystem":
87:
          return "?"
88:
         default:
           return "?"
89:
90:
       }
    }
91:
92:
93:
94:
       <Card className="shadow-lg border-0 bg-white">
95:
         <CardHeader className="bg-gradient-to-r from-yellow-500 to-orange-600 text-white rounded-t-lg">
```

```
<CardTitle className="text-2xl">? Lifestyle Conditions</CardTitle>
 96:
 97:
             <CardDescription className="text-yellow-100">
 98:
              Manage genetic predispositions for common lifestyle-related health conditions
 99:
             </CardDescription>
100:
           </CardHeader>
           <CardContent className="space-y-8 p-8">
101:
102:
             {/* Action Buttons */}
103:
             <div className="flex justify-between items-center">
104:
               <div className="flex gap-2 flex-wrap">
105:
                {(Object.keys(lifestyleConditions) as Array<keyof LifestyleConditions>).map((section) => (
106:
                   <Button
107:
                     key={section}
                     variant={activeSection === section ? "default" : "outline"}
108:
109:
                     size="sm"
110:
                     onClick={() => setActiveSection(section)}
111:
                     className="flex items-center gap-2"
112:
113:
                     <span>{getSectionIcon(section)}</span>
                     $$ \span className="capitalize">{section.replace(/([A-Z])/g, " $1")}</span> $$
114:
115:
                   </Button>
116:
                ))}
117:
              </div>
118:
              <div className="flex gap-2">
119:
                <Button onClick={onReset} variant="outline" size="sm">
                   <RotateCcw className="h-4 w-4 mr-2" />
120:
121:
                  Reset
122:
                 </But.ton>
                <Button onClick={onSave} size="sm">
123:
124:
                  <Save className="h-4 w-4 mr-2" />
125:
                  Save Changes
126:
                </Button>
127:
              </div>
128:
             </div>
129:
            {/* Section Content */}
130:
131:
             <div className="space-y-6">
132:
              <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-yellow-200 pb-2">
133:
                {getSectionTitle(activeSection)}
134:
              </h3>
135:
136:
              <div className="grid md:grid-cols-2 gap-6">
137:
                {Object.entries(lifestyleConditions[activeSection]).map(([key, item]) =>
138:
                  renderConditionField(
139:
                     activeSection,
140:
                     key,
141:
                     item as HealthConditionStatus,
142:
                     key.replace(/([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase()),
143:
                ) }
144:
145:
               </div>
146:
             </div>
147:
148:
             {/* Section Guidelines */}
149:
             <div className="bg-yellow-50 border-2 border-yellow-200 rounded-lg p-6">
150:
               <h4 className="font-semibold text-yellow-800 mb-2">? Lifestyle Conditions Guidelines:</h4>
               <div className="text-sm text-yellow-700 space-y-2">
151:
                152:
153:
                   <1i>>
154:
                     <strong>Strength (?):</strong> Indicates a genetic predisposition that is favorable or prot
155:
                     against the condition.
156:
                   157:
                   <1i>>
158:
                     <strong>Improvement Needed (?):</strong> Indicates a genetic predisposition that suggests a
159:
                     or vulnerability to the condition, requiring proactive lifestyle interventions.
160:
                   161:
162:
                     This section highlights areas where personalized interventions (diet, exercise, screenings)
163:
                     impactful.
164:
165:
                   Genetic predispositions are not deterministic; lifestyle and environment play crucial rol
                166:
               </div>
167:
168:
             </div>
```

```
169:
170:
             {/* Summary Statistics */}
171:
             <div className="grid md:grid-cols-2 gap-4">
172:
               <div className="bg-green-50 border border-green-200 rounded-lg p-4 text-center">
173:
                 <div className="text-2xl font-bold text-green-600">
174:
175:
                     Object.values(lifestyleConditions[activeSection]).filter((item: any) => item.status === "st
176:
                       .length
177:
                 </div>
178:
                 <div className="text-sm text-green-700">Your Strengths</div>
179:
180:
               </div>
181:
               <div className="bg-red-50 border border-red-200 rounded-lg p-4 text-center">
182:
                <div className="text-2xl font-bold text-red-600">
183:
184:
                     Object.values(lifestyleConditions[activeSection]).filter((item: any) => item.status === "im
185:
                       .length
186:
187:
                 </div>
188:
                 <div className="text-sm text-red-700">Improvement Needed</div>
189:
               </div>
190:
             </div>
191:
          </CardContent>
192:
        </Card>
193: )
194: }
```

■ File: components\admin\metabolic-core-admin.tsx

```
______
 1: "use client"
 2:
 3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 4: import { Input } from "@/components/ui/input"
 5: import { Label } from "@/components/ui/label"
 6: import { Textarea } from "@/components/ui/textarea"
 7: import { Button } from "@/components/ui/button"
 8: import { Badge } from "@/components/ui/badge"
 9: import { Save, RotateCcw, Plus, Trash2, Copy } from "lucide-react"
 10: import { useState } from "react"
11: import type { MetabolicCore, MetabolicGeneData } from "@/types/report-types"
13: interface MetabolicCoreAdminProps {
14: metabolicCore: MetabolicCore
 15:
      updateMetabolicCore: (field: keyof MetabolicCore, data: Partial<MetabolicGeneData>) => void
16: onSave: () => void
17: onReset: () => void
18: }
19:
20: export default function MetabolicCoreAdmin({
 21: metabolicCore,
 22: updateMetabolicCore,
    onSave,
 23:
 24:
      onReset,
 25: }: MetabolicCoreAdminProps) {
     const [searchTerm, setSearchTerm] = useState("")
 27:
 28:
     const metabolicAreas = Object.keys(metabolicCore) as Array<keyof MetabolicCore>
 29:
 30:
     const filteredAreas = metabolicAreas.filter((area) => {
 31:
       const data = metabolicCore[area]
 32:
       const matchesSearch =
 33:
          area.toLowerCase().includes(searchTerm.toLowerCase()) | |
          data.impact.toLowerCase().includes(searchTerm.toLowerCase()) | |
34:
 35:
          data.advice.toLowerCase().includes(searchTerm.toLowerCase()) ||
36:
          data.genes.some((gene) => gene.toLowerCase().includes(searchTerm.toLowerCase()))
 37:
        return matchesSearch
38:
     })
39:
 40:
     const getImpactColor = (impact: string) => {
      if (impact.toLowerCase().includes("high") || impact.toLowerCase().includes("increased")) {
 41:
 42:
          return "bg-red-100 border-red-300 text-red-800"
```

```
43:
 44:
         if (impact.toLowerCase().includes("low") || impact.toLowerCase().includes("reduced")) {
 45:
           return "bg-green-100 border-green-300 text-green-800"
 46:
 47:
         if (
 48:
           impact.toLowerCase().includes("normal") ||
 49:
           impact.toLowerCase().includes("average") | |
 50:
           impact.toLowerCase().includes("balanced")
 51:
          return "bg-blue-100 border-blue-300 text-blue-800"
 52:
         }
 53:
 54:
         return "bg-gray-100 border-gray-300 text-gray-800"
 55:
 56:
 57:
       const getImpactIcon = (impact: string) => {
 58:
         if (impact.toLowerCase().includes("high") || impact.toLowerCase().includes("increased")) {
 59:
          return "??"
 60:
         if (impact.toLowerCase().includes("low") || impact.toLowerCase().includes("reduced")) {
 61:
 62:
           return "?"
 63:
 64:
         if (
 65:
           impact.toLowerCase().includes("normal") | |
           impact.toLowerCase().includes("average") ||
 66:
 67:
           impact.toLowerCase().includes("balanced")
         ) {
 68:
 69:
          return "?"
 70:
 71:
         return "?"
 72:
       }
 73:
 74:
       const addGene = (area: keyof MetabolicCore) => {
 75:
         const currentGenes = metabolicCore[area].genes
 76:
         updateMetabolicCore(area, { genes: [...currentGenes, ""] })
 77:
 78:
       const removeGene = (area: keyof MetabolicCore, index: number) => {
 79:
 80:
        const currentGenes = metabolicCore[area].genes
 81:
         const newGenes = currentGenes.filter((_, i) => i !== index)
 82:
         updateMetabolicCore(area, { genes: newGenes })
 83:
 84:
      const updateGene = (area: keyof MetabolicCore, index: number, value: string) => {
 86:
         const currentGenes = [...metabolicCore[area].genes]
 87:
         currentGenes[index] = value
 88:
         updateMetabolicCore(area, { genes: currentGenes })
 89:
 90:
 91:
       const copyToClipboard = (text: string) => {
 92:
        navigator.clipboard.writeText(text)
 93:
         // You could add a toast notification here
 94:
      }
 95:
 96:
      return (
 97:
         <Card className="shadow-lg border-0 bg-white">
           <CardHeader className="bg-gradient-to-r from-purple-500 to-indigo-600 text-white rounded-t-lg">
 98:
             <CardTitle className="text-2xl">? Metabolic Core Analysis</CardTitle>
 99:
100:
             <CardDescription className="text-purple-100">
101:
               Comprehensive gene analysis and metabolic impacts - The STAR feature of genomics reporting
102:
             </CardDescription>
103:
           </CardHeader>
104:
           <CardContent className="space-y-8 p-8">
105:
             {/* Action Bar */}
             <div className="flex flex-col md:flex-row justify-between items-start md:items-center gap-4">
106:
107:
               <div className="flex-1">
108:
                 <Input
109:
                   placeholder="Search metabolic areas or impacts..."
110:
                   value={searchTerm}
111:
                   onChange={(e) => setSearchTerm(e.target.value)}
                   className="border-2 focus:border-purple-500"
112:
113:
                 />
               </div>
114:
115:
               <div className="flex gap-2">
```

```
<Button onClick={onReset} variant="outline" size="sm">
116:
                   <RotateCcw className="h-4 w-4 mr-2" />
117:
118:
                   Reset.
119:
                 </Button>
                 <Button onClick={onSave} size="sm">
120:
121:
                   <Save className="h-4 w-4 mr-2" />
122:
                   Save Changes
123:
                 </Button>
124:
               </div>
125:
             </div>
126:
127:
             {/* Summary Statistics */}
128:
             <div className="grid md:grid-cols-4 gap-4">
129:
               <div className="bg-red-50 border border-red-200 rounded-lg p-4 text-center">
130:
                 <div className="text-2xl font-bold text-red-600">
131:
                   {
132:
                     metabolicAreas.filter(
133:
                       (area) =>
                         metabolicCore[area].impact.toLowerCase().includes("high") ||
134:
135:
                         metabolicCore[area].impact.toLowerCase().includes("increased"),
136:
                     ).length
137:
                   }
138:
                 </div>
139:
                 <div className="text-sm text-red-700">High Risk Areas</div>
140:
               <div className="bq-green-50 border border-green-200 rounded-lg p-4 text-center">
141:
142:
                 <div className="text-2xl font-bold text-green-600">
143:
144:
                     metabolicAreas.filter(
145:
                       (area) =>
146:
                         metabolicCore[area].impact.toLowerCase().includes("normal") | |
147:
                         metabolicCore[area].impact.toLowerCase().includes("low") | |
                         metabolicCore[area].impact.toLowerCase().includes("reduced") | |
148:
149:
                         metabolicCore[area].impact.toLowerCase().includes("balanced"),
150:
                     ).length
151:
                   }
152:
                 </div>
153:
                 <div className="text-sm text-green-700">Normal/Low Risk</div>
154:
               </div>
               <div className="bg-blue-50 border border-blue-200 rounded-lg p-4 text-center">
155:
156:
                 <div className="text-2xl font-bold text-blue-600">
157:
                   {metabolicAreas.reduce((total, area) => total + metabolicCore[area].genes.length, 0)}
158:
                 </div>
                 <div className="text-sm text-blue-700">Total Genes</div>
159:
160:
               </div>
161:
               <div className="bg-purple-50 border border-purple-200 rounded-lg p-4 text-center">
162:
                 <div className="text-2xl font-bold text-purple-600">{metabolicAreas.length}</div>
163:
                 <div className="text-sm text-purple-700">Metabolic Areas</div>
164:
               </div>
165:
             </div>
166:
167:
             {/* Metabolic Areas */}
168:
             <div className="space-y-6">
169:
              {filteredAreas.map((area) => {
170:
                 const data = metabolicCore[area]
171:
                 return (
                   <Card key={area} className="border-2 border-purple-100 bg-purple-50/30">
172:
173:
                     <CardHeader className="pb-4">
174:
                       <div className="flex items-center justify-between">
175:
                          <CardTitle className="text-lg text-purple-800 flex items-center gap-2">
176:
                            <span>{getImpactIcon(data.impact)}</span>
177:
                            \label{eq:convergence} $$\sup_{\alpha \in \mathbb{R}^2}(([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase())} 
178:
                          </CardTitle>
179:
                          <Badge className={`${getImpactColor(data.impact)} border`}>{data.impact}/Badge>
180:
                       </div>
181:
                     </CardHeader>
182:
                     <CardContent className="space-y-6">
183:
                        {/* Genes Section */}
184:
                       <div className="space-y-3">
185:
                         <div className="flex items-center justify-between">
                            <Label className="text-sm font-semibold">Genes (Alleles)</Label>
186:
187:
                           <Button onClick={() => addGene(area)} size="sm" variant="outline" className="text-xs"
188:
                              <Plus className="h-3 w-3 mr-1" />
```

```
189:
                              Add Gene
190:
                            </Button>
191:
                          </div>
                          <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-2">
192:
                            {data.genes.map((gene, index) => (
193:
194:
                              <div key={index} className="flex gap-2">
195:
                                <Input
196:
                                  value={gene}
197:
                                  onChange={(e) => updateGene(area, index, e.target.value)}
                                  placeholder="e.g., MTHFR (A>C)"
198:
199:
                                  className="border-2 focus:border-purple-500 font-mono text-sm"
200:
                                />
201:
                                <Button
202:
                                  onClick={() => removeGene(area, index)}
203:
                                  size="sm"
204:
                                  variant="destructive"
205:
                                  className="px-2"
206:
                                  <Trash2 className="h-3 w-3" />
207:
208:
                                </Button>
209:
                              </div>
210:
                            ))}
211:
                          </div>
212:
                        </div>
213:
                        {/* Genotype */}
214:
215:
                        <div className="space-y-2">
216:
                          <Label className="text-sm font-semibold">Your Genotype</Label>
217:
                          <div className="flex gap-2">
218:
                            <Input
219:
                              value={data.genotype}
220:
                              onChange={(e) => updateMetabolicCore(area, { genotype: e.target.value })}
                              \verb|placeholder="e.g., TT, GG, GG, GG, CC"||
221:
222:
                              className="border-2 focus:border-purple-500 font-mono"
                            />
223:
224:
                            <Button
225:
                              onClick={() => copyToClipboard(data.genotype)}
226:
                              size="sm"
227:
                              variant="outline"
228:
                              className="px-3"
229:
230:
                              <Copy className="h-4 w-4" />
231:
                            </Button>
232:
                          </div>
233:
                        </div>
234:
235:
                        {/* Impact */}
236:
                        <div className="space-y-2">
237:
                          <Label className="text-sm font-semibold">Genetic Impact</Label>
238:
                          <Input
239:
                            value={data.impact}
240:
                            onChange={(e) => updateMetabolicCore(area, { impact: e.target.value })}
241:
                            placeholder="e.g., NORMAL METHYLATION"
242:
                            className="border-2 focus:border-purple-500 font-semibold"
243:
                          />
                        </div>
244:
245:
                        {/* Advice */}
246:
247:
                        <div className="space-y-2">
248:
                          <Label className="text-sm font-semibold">Advice & Recommendations</Label>
249:
                          <Textarea
250:
                            value={data.advice}
251:
                            onChange={(e) => updateMetabolicCore(area, { advice: e.target.value })}
252:
253:
                            placeholder="Detailed advice based on genetic analysis..."
254:
                            className="border-2 focus:border-purple-500 text-sm"
255:
                          />
256:
                        </div>
257:
                     </CardContent>
258:
                   </Card>
259:
                 )
260:
               })}
261:
             </div>
```

```
263:
           {filteredAreas.length === 0 && (
264:
             <div className="text-center py-12">
               <div className="text-6xl mb-4">?</div>
265:
               <h3 className="text-xl font-semibold text-gray-700 mb-2">No results found</h3>
266:
267:
               Try adjusting your search terms
268:
             </div>
269:
           ) }
270:
           {/* Information Panel */}
271:
           <div className="bg-purple-50 border-2 border-purple-200 rounded-lg p-6">
272:
273:
             <h4 className="font-semibold text-purple-800 mb-3">? Metabolic Core - The STAR Feature</h4>
             <div className="text-sm text-purple-700 space-y-2">
275:
              >
276:
                <strong>Metabolic Core</strong> is the most comprehensive section that allows trained nutrige
277:
                experts to provide the best solutions for current health conditions and help prevent future r
278:
               <q\>
279:
               <div className="grid md:grid-cols-2 gap-4 mt-4">
280:
                <div>
281:
                  <h5 className="font-semibold mb-2">Key Features:</h5>
282:
                  283:
                    Gene-by-gene analysis with specific alleles
284:
                    Personalized genotype results
285:
                    Direct health impact assessment
286:
                    Actionable advice for each metabolic area
287:
                  </111>
288:
                </div>
289:
                <div>
                  <h5 className="font-semibold mb-2">Expert Usage:</h5>
291:
                  292:
                    Functional medicine practitioners love this section
293:
                    Enables precise intervention strategies
294:
                    Supports both preventive and active management
295:
                    Provides scientific basis for recommendations
296:
                  </111>
297:
                </div>
298:
              </div>
299:
             </div>
300:
           </div>
301:
         </CardContent>
302:
        </Card>
303: )
304: }
```

■ File: components\admin\nutrition-admin.tsx

262:

```
______
 1: "use client";
 2:
 3: import {
 4: Card,
 5: CardContent,
 6:
     CardDescription,
 7:
     CardHeader,
    CardTitle,
 8:
 9: } from "@/components/ui/card";
10: import { Input } from "@/components/ui/input";
11: import { Label } from "@/components/ui/label";
12: import {
13: Select,
14: SelectContent,
15:
     SelectItem,
16:
     SelectTrigger,
    SelectValue,
17:
18: } from "@/components/ui/select";
19: import { Button } from "@/components/ui/button";
20: import { Badge } from "@/components/ui/badge";
21: import {
22: Dialog,
23: DialogContent,
24:
     DialogDescription,
25:
     DialogFooter,
```

```
26: DialogHeader,
27: DialogTitle,
28: DialogTrigger,
29: } from "@/components/ui/dialog";
30: import { Save, RotateCcw, Plus, Trash2, Edit3 } from "lucide-react";
31: import { useState } from "react";
32:
33: interface NutrientData {
34:
    score: number;
35: healthImpact: string;
36: intakeLevel: string;
37: source: string;
38: }
39:
40: interface NutritionData {
41: vitamins: Record<string, NutrientData>;
42: fattyAcids: Record<string, NutrientData>;
43:
     elements: Record<string, NutrientData>;
44: complexNutrients: Record<string, NutrientData>;
45: }
46:
47: interface NutritionAdminProps {
48: nutritionData?: NutritionData;
49: updateNutritionData?: (
50: section: keyof NutritionData,
      field: string,
51:
52:
       data: Partial<NutrientData>
53: ) => void;
54: onSave?: () => void;
55: onReset?: () => void;
56: }
57:
58: export default function NutritionAdmin({
59: nutritionData: propNutritionData,
61: onSave: propOnSave,
62: onResot:
60: updateNutritionData: propUpdateNutritionData,
     onReset: propOnReset,
63: }: NutritionAdminProps) {
64: // Default data structure
65:
     const defaultNutrientData: NutrientData = {
66:
       score: 5,
      healthImpact: "",
67:
68:
      intakeLevel: "NORMAL INTAKE",
69:
       source: "DIET",
70:
     };
71:
72:
     const initialNutritionData: NutritionData = {
73:
      vitamins: {
74:
         vitaminA: {
75:
           score: 6,
           healthImpact: "Vision & Immune",
76:
           intakeLevel: "ENHANCED INTAKE",
77:
78:
           source: "DIET",
79:
         },
:08
         vitaminB12: {
81:
           score: 8,
82:
           healthImpact: "Energy & Nerves",
           intakeLevel: "ENHANCED INTAKE (METHYLCOBALAMIN)",
83:
           source: "SUPPLEMENTS",
84:
         },
85:
86:
         vitaminC: {
87:
           score: 4,
88:
           healthImpact: "Immune & Collagen",
            intakeLevel: "NORMAL INTAKE",
89:
           source: "DIET",
90:
91:
         },
92:
         vitaminD: {
93:
           score: 9,
           healthImpact: "Bones & Immune",
94:
           intakeLevel: "ENHANCED INTAKE & SUN EXPOSURE",
95:
96:
           source: "DIET & SUN EXPOSURE",
97:
98:
          folate: {
```

```
99:
           score: 7.
100:
           healthImpact: "DNA & Blood",
101:
            intakeLevel: "ENHANCED INTAKE (L METHYLFOLATE)",
            source: "DIET & SUPPLEMENTS",
102:
         },
103:
104:
       },
105:
       fattyAcids: {
106:
         omega3: {
107:
            score: 8,
           healthImpact: "Heart & Brain",
108:
           intakeLevel: "ENHANCED INTAKE",
109:
           source: "ENHANCED INTAKE (VEG/FISH OIL) & DIET",
110:
111:
         },
        omega6: {
112:
113:
          score: 3,
114:
           healthImpact: "Inflammation",
           intakeLevel: "RESTRICTED INTAKE",
115:
116:
            source: "DIET",
117:
         },
118:
       },
119:
       elements: {
        iron: {
120:
         score: 6,
121:
           healthImpact: "Blood & Energy",
122:
123:
           intakeLevel: "ENHANCED INTAKE (VEG SOURCES)",
            source: "DIET",
124:
125:
         },
126:
          zinc: {
           score: 5,
128:
           healthImpact: "Immune & Healing",
           intakeLevel: "NORMAL INTAKE",
129:
130:
            source: "DIET",
         },
131:
132:
        magnesium: {
133:
          score: 7,
134:
            healthImpact: "Muscle & Nerve",
            intakeLevel: "ENHANCED INTAKE",
135:
            source: "DIET & SUPPLEMENTS",
136:
137:
         },
138:
      },
       complexNutrients: {
139:
140:
        antioxidants: {
         score: 5,
           healthImpact: "Cell Protection",
142:
           intakeLevel: "ENHANCED INTAKE",
143:
144:
            source: "DIET",
145:
         },
146:
        polyphenols: {
          score: 4,
147:
148:
            healthImpact: "Anti-inflammatory",
           intakeLevel: "ENHANCED INTAKE",
149:
           source: "DIET",
151:
          },
152:
        },
153:
      };
154:
      // State management
155:
156:
      const [nutritionData, setNutritionData] = useState<NutritionData>(
157:
       propNutritionData || initialNutritionData
158:
159: const [activeSection, setActiveSection] =
160:
      useState<keyof NutritionData>("vitamins");
      const [isAddDialogOpen, setIsAddDialogOpen] = useState(false);
161:
162:
      const [newNutrientName, setNewNutrientName] = useState("");
163: const [isEditMode, setIsEditMode] = useState<string | null>(null);
164: const [editingName, setEditingName] = useState("");
165:
166:
      // CRUD Operations
167:
      const updateNutritionData = (
168:
      section: keyof NutritionData,
       field: string,
169:
170:
       data: Partial<NutrientData>
     ) => {
171:
```

```
172:
       setNutritionData((prev) => ({
173:
          ...prev,
174:
          [section]: {
175:
            ...prev[section],
176:
             [field]: {
              ...prev[section][field],
177:
178:
              ...data,
179:
            },
         },
180:
         }));
181:
182:
        // Call prop function if provided
183:
184:
        if (propUpdateNutritionData) {
185:
          propUpdateNutritionData(section, field, data);
186:
         }
187:
      };
188:
189:
      const addNutrient = (section: keyof NutritionData, name: string) => {
190:
       if (
          !name.trim() ||
192:
          nutritionData[section][name.toLowerCase().replace(/\s+/g, "")]
193:
        ) {
194:
          return false;
195:
        }
196:
        const fieldName = name.toLowerCase().replace(/\s+/g, "");
197:
198:
        setNutritionData((prev) => ({
199:
           ...prev,
          [section]: {
201:
             ...prev[section],
202:
            [fieldName]: { ...defaultNutrientData },
203:
204:
        }));
205:
        return true;
      };
206:
207:
      const deleteNutrient = (section: keyof NutritionData, field: string) => {
208:
209:
       setNutritionData((prev) => {
210:
         const newSection = { ...prev[section] };
211:
          delete newSection[field];
212:
          return {
213:
            ...prev,
214:
            [section]: newSection,
          };
215:
216:
        });
     };
217:
218:
219:
      const renameNutrient = (
      section: keyof NutritionData,
220:
221:
        oldField: string,
222:
        newName: string
223: ) => {
       if (
224:
225:
          !newName.trim() ||
226:
          newName.toLowerCase().replace(/\s+/g, "") === oldField
227:
        ) {
228:
          return false;
229:
230:
        const\ newFieldName\ =\ newName.toLowerCase().replace(/\s+/g,\ "");
231:
232:
        if (nutritionData[section][newFieldName] && newFieldName !== oldField) {
233:
         return false; // Name already exists
234:
        }
235:
        setNutritionData((prev) => {
236:
237:
         const newSection = { ...prev[section] };
238:
          const data = newSection[oldField];
239:
          delete newSection[oldField];
240:
          newSection[newFieldName] = data;
241:
242:
         return {
243:
            ...prev,
244:
            [section]: newSection,
```

```
245:
         };
246:
       });
247:
        return true;
248:
249:
250:
      const onSave = () => {
251:
       console.log("Saving nutrition data:", nutritionData);
252:
       if (propOnSave) {
253:
          propOnSave();
         } else {
254:
255:
          alert("Nutrition data saved successfully!");
256:
        }
257:
258:
259:
       const onReset = () => {
260:
       setNutritionData(initialNutritionData);
261:
       if (propOnReset) {
262:
          propOnReset();
263:
264:
      };
265:
266:
      const handleAddNutrient = () => {
267:
        if (addNutrient(activeSection, newNutrientName)) {
268:
           setNewNutrientName("");
269:
          setIsAddDialogOpen(false);
270:
        } else {
271:
          alert("Invalid name or nutrient already exists!");
272:
      };
273:
274:
275:
       const handleRename = (field: string) => {
276:
        if (renameNutrient(activeSection, field, editingName)) {
277:
           setIsEditMode(null);
278:
          setEditingName("");
279:
        } else {
280:
          alert("Invalid name or nutrient already exists!");
281:
282:
      };
283:
284:
      const renderNutrientField = (
285:
        section: keyof NutritionData,
286:
        field: string,
287:
        data: NutrientData,
288:
        title: string
289:
      ) => (
290:
        <Card key={field} className="border-2 border-green-100 bg-green-50/30">
291:
           <CardHeader className="pb-3">
292:
             <CardTitle className="text-lg text-green-800 flex items-center justify-between">
293:
               {isEditMode === field ? (
294:
                 <div className="flex items-center gap-2 flex-1">
295:
                   <Input
296:
                     value={editingName}
297:
                     onChange={(e) => setEditingName(e.target.value)}
298:
                     className="text-lg font-semibold border-2 focus:border-green-500"
299:
                     onKeyPress={(e) => e.key === "Enter" && handleRename(field)}
300:
                   />
301:
                   <Button size="sm" onClick={() => handleRename(field)}>
302:
                     2
303:
                   </Button>
304:
                   <But.t.on
305:
                    size="sm"
306:
                     variant="outline"
307:
                     onClick={() => {
308:
                      setIsEditMode(null);
309:
                       setEditingName("");
310:
                     }}
311:
                   >
312:
                     ?
313:
                   </Button>
314:
                 </div>
315:
               ) : (
316:
                 <div className="flex items-center gap-2 flex-1">
317:
                   <span>{title}</span>
```

```
318:
                   <But.ton
319:
                     size="sm"
320:
                     variant="ghost"
321:
                     onClick={() => {
                      setIsEditMode(field);
322:
323:
                       setEditingName(title);
324:
                     }}
325:
326:
                     <Edit3 className="h-3 w-3" />
327:
                   </Button>
328:
                 </div>
               ) }
329:
330:
               <div className="flex items-center gap-2">
331:
332:
                 <Badge
333:
                   variant="outline"
334:
                  className={ `${
335:
                     data.score >= 7
                       ? "border-red-500 text-red-700"
336:
337:
                       : data.score >= 4
338:
                       ? "border-yellow-500 text-yellow-700"
339:
                       : "border-green-500 text-green-700"
                   }`}
340:
341:
342:
                   Score: {data.score}/10
343:
                 </Badge>
344:
                 <Button
                  size="sm"
345:
346:
                  variant="ghost"
347:
                  onClick={() => deleteNutrient(section, field)}
348:
                  className="text-red-600 hover:bg-red-100"
349:
                   <Trash2 className="h-4 w-4" />
350:
                 </Button>
351:
352:
               </div>
353:
             </CardTitle>
354:
          </CardHeader>
355:
          <CardContent className="space-y-4">
356:
            <div className="grid grid-cols-2 gap-4">
357:
              <div className="space-y-2">
358:
                 <Label className="text-sm font-medium">Score (1-10)</Label>
359:
                 <Input.
360:
                   type="number"
361:
                  min="1"
362:
                   max="10"
363:
                   value={data.score}
364:
                   onChange=\{(e) => \{
365:
                     const score = Math.max(
366:
                       1.
367:
                       Math.min(10, Number.parseInt(e.target.value) |  1)
368:
                     );
369:
                     updateNutritionData(section, field, { score });
                   }}
370:
371:
                   className="border-2 focus:border-green-500"
372:
                 />
               </div>
373:
374:
               <div className="space-y-2">
375:
                 <Label className="text-sm font-medium">Health Impact</Label>
376:
                 <Input
377:
                   value={data.healthImpact}
378:
                   onChange={(e) =>
379:
                     updateNutritionData(section, field, {
380:
                       healthImpact: e.target.value,
381:
382:
383:
                   placeholder="e.g., Skin & Vision"
384:
                   className="border-2 focus:border-green-500"
385:
                 />
386:
               </div>
387:
            </div>
388:
389:
             <div className="space-y-2">
390:
               <Label className="text-sm font-medium">Intake Level</Label>
```

```
391:
              <Select
392:
                value={data.intakeLevel}
393:
                onValueChange={(value) =>
                  updateNutritionData(section, field, { intakeLevel: value })
394:
395:
396:
397:
                <SelectTrigger className="border-2 focus:border-green-500">
398:
                  <SelectValue />
399:
                </SelectTrigger>
400:
                <SelectContent>
                  <SelectItem value="ENHANCED INTAKE">ENHANCED INTAKE
                  <SelectItem value="NORMAL INTAKE">NORMAL INTAKE<//selectItem>
402:
403:
                  <SelectItem value="RESTRICTED INTAKE">
404:
                    RESTRICTED INTAKE
405:
                  </SelectItem>
406:
                  <SelectItem value="ENHANCED INTAKE (METHYLCOBALAMIN)">
407:
                    ENHANCED INTAKE (METHYLCOBALAMIN)
408:
                  </SelectItem>
                  <Selectitem value="ENHANCED INTAKE (L METHYLFOLATE)">
409:
410:
                   ENHANCED INTAKE (L METHYLFOLATE)
411:
                  </SelectItem>
412:
                  <SelectItem value="ENHANCED INTAKE & SUN EXPOSURE">
413:
                    ENHANCED INTAKE & SUN EXPOSURE
414:
                  </SelectItem>
                  <SelectItem value="ENHANCED INTAKE (VEG SOURCES)">
415:
                    ENHANCED INTAKE (VEG SOURCES)
416:
417:
                  </SelectItem>
418:
                </SelectContent>
419:
              </Select>
420:
           </div>
421:
422:
           <div className="space-y-2">
423:
             <Label className="text-sm font-medium">Source</Label>
424:
             <Select
425:
               value={data.source}
426:
               onValueChange={(value) =>
                  updateNutritionData(section, field, { source: value })
427:
428:
               }
429:
430:
                <SelectTrigger className="border-2 focus:border-green-500">
431:
                  <SelectValue />
432:
                </SelectTrigger>
433:
               <SelectContent>
                  <SelectItem value="DIET">DIET</SelectItem>
434:
435:
                  <SelectItem value="SUPPLEMENTS">SUPPLEMENTS/SelectItem>
436:
                  <SelectItem value="DIET & SUPPLEMENTS">
437:
                   DIET & SUPPLEMENTS
438:
                  </SelectItem>
                  <SelectItem value="DIET & SUN EXPOSURE">
439:
440:
                    DIET & SUN EXPOSURE
441:
                  </SelectItem>
442:
                  <SelectItem value="ENHANCED INTAKE (VEG/FISH OIL) & DIET">
443:
                    ENHANCED INTAKE (VEG/FISH OIL) & DIET
444:
                  </SelectItem>
445:
                </SelectContent>
              </Select>
446:
447:
            </div>
448:
          </CardContent>
449:
        </Card>
     );
450:
451:
452: const getSectionTitle = (section: keyof NutritionData) => {
453:
      switch (section) {
454:
         case "vitamins":
           return "? Vitamins";
455:
456:
         case "fattyAcids":
457:
           return "? Fatty Acids";
458:
          case "elements":
459:
           return "? Essential Elements";
460:
          case "complexNutrients":
461:
           return "? Complex Nutrients";
        default:
462:
463:
            return section;
```

```
464:
        }
465:
466:
467:
      const getSectionIcon = (section: keyof NutritionData) => {
468:
       switch (section) {
469:
         case "vitamins":
470:
            return "?";
471:
          case "fattyAcids":
472:
            return "?";
          case "elements":
473:
474:
            return "?";
475:
           case "complexNutrients":
476:
            return "?";
477:
           default:
478:
            return "?";
479:
        }
480:
      };
481:
482:
      return (
        <Card className="shadow-lg border-0 bg-white">
484:
           <CardHeader className="bg-gradient-to-r from-green-500 to-emerald-600 text-white rounded-t-lg">
485:
             <CardTitle className="text-2xl">? Nutrition Analysis</CardTitle>
486:
             <CardDescription className="text-green-100">
487:
               Configure vitamins, minerals, fatty acids, and complex nutrients with
               full CRUD operations
488:
489:
             </CardDescription>
490:
           </CardHeader>
491:
           <CardContent className="space-y-8 p-8">
492:
             {/* Action Buttons */}
493:
             <div className="flex justify-between items-center flex-wrap gap-4">
494:
               <div className="flex gap-2 flex-wrap">
495:
                 {(Object.keys(nutritionData) as Array<keyof NutritionData>).map(
496:
                   (section) => (
497:
                     <Button
498:
                       key={section}
499:
                       variant={activeSection === section ? "default" : "outline"}
500:
                       size="sm"
501:
                       onClick={() => setActiveSection(section)}
502:
                       className="flex items-center gap-2"
503:
504:
                       <span>{getSectionIcon(section)}</span>
505:
                       <span className="capitalize">
506:
                        {section.replace(/([A-Z])/g, " $1")}
507:
                       </span>
508:
                     </Button>
509:
                   )
                ) }
510:
511:
               </div>
512:
513:
               <div className="flex gap-2 flex-wrap">
514:
                 <Dialog open={isAddDialogOpen} onOpenChange={setIsAddDialogOpen}>
515:
                   <DialogTrigger asChild>
516:
                     <Button
517:
                       variant="outline"
518:
                       size="sm"
                       className="bg-green-50 border-green-200 text-green-700 hover:bg-green-100"
519:
520:
521:
                       <Plus className="h-4 w-4 mr-2" />
522:
                       Add New
523:
                     </Button>
524:
                   </DialogTrigger>
525:
                   <DialogContent>
526:
                     <DialogHeader>
527:
                       <DialogTitle>
                         Add New{" "}
528:
529:
                         {getSectionTitle(activeSection).replace(/[^\w\s]/gi, "")}{" "}
530:
                         Item
531:
                       </DialogTitle>
532:
                       <DialogDescription>
533:
                         Enter the name for the new nutrient in the {activeSection}{" "}
534:
535:
                       </DialogDescription>
536:
                     </DialogHeader>
```

```
537:
                     <div className="space-y-4 py-4">
                       <div className="space-y-2">
538:
539:
                         <Label htmlFor="nutrientName">Nutrient Name</Label>
540:
541:
                           id="nutrientName"
542:
                           value={newNutrientName}
543:
                           onChange={(e) => setNewNutrientName(e.target.value)}
544:
                           placeholder="e.g., Vitamin E, Selenium, etc."
545:
                           onKeyPress={(e) =>
                             e.key === "Enter" && handleAddNutrient()
546:
547:
548:
                         />
                       </div>
549:
550:
                     </div>
551:
                     <DialogFooter>
552:
                       <Button
553:
                         variant="outline"
554:
                         onClick={() => {
                           setIsAddDialogOpen(false);
555:
556:
                            setNewNutrientName("");
557:
                         }}
558:
559:
                         Cancel
560:
                       </But.ton>
561:
                       <Button
                         onClick={handleAddNutrient}
562:
563:
                         disabled={!newNutrientName.trim()}
564:
565:
                         Add Nutrient
566:
                       </Button>
567:
                     </DialogFooter>
568:
                   </DialogContent>
569:
                 </Dialog>
570:
                 <Button onClick={onReset} variant="outline" size="sm">
571:
572:
                   <RotateCcw className="h-4 w-4 mr-2" />
573:
                   Reset
574:
                 </Button>
575:
                 <Button onClick={onSave} size="sm">
                   <Save className="h-4 w-4 mr-2" />
576:
577:
                   Save Changes
578:
                 </But.ton>
579:
               </div>
580:
            </div>
581:
             {/* Section Content */}
582:
583:
             <div className="space-y-6">
584:
               <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-green-200 pb-2">
585:
                 {getSectionTitle(activeSection)}
586:
               </h3>
587:
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
589:
                 {Object.entries(nutritionData[activeSection]).map(([key, item]) =>
590:
                   renderNutrientField(
591:
                     activeSection,
592:
                     key,
593:
                     item as NutrientData,
594:
                     key
595:
                       .replace(/([A-Z])/g, " $1")
                        .replace(/^./, (str) => str.toUpperCase())
596:
597:
                   )
598:
                 ) }
599:
               </div>
600:
               {\tt \{Object.keys(nutritionData[activeSection]).length === 0 \&\& (
601:
602:
                 <div className="text-center py-12 bg-gray-50 rounded-lg border-2 border-dashed border-gray-300"</pre>
603:
                   <div className="text-gray-500 text-lg mb-2">
604:
                     No items in this section
605:
                   </div>
606:
                   <div className="text-gray-400 text-sm">
607:
                     Click "Add New" to add your first nutrient
608:
                   </div>
609:
                 </div>
```

```
) }
610:
611:
           </div>
612:
613:
           {/* Section Guidelines */}
           <div className="bg-green-50 border-2 border-green-200 rounded-lg p-6">
614:
615:
             <h4 className="font-semibold text-green-800 mb-2">
616:
               ? {getSectionTitle(activeSection)} Guidelines:
617:
             </h4>
618:
             <div className="text-sm text-green-700 space-y-2">
              {activeSection === "vitamins" && (
619:
                620:
621:
                  <
622:
                    Score 1-3: Low requirement, normal dietary intake sufficient
623:
                  624:
                  <
625:
                    Score 4-6: Moderate requirement, enhanced dietary intake
626:
                    recommended
627:
628:
                  <1i>>
629:
                    Score 7-10: High requirement, supplementation may be needed
630:
631:
                  Consider bioavailable forms for better absorption
632:
                633:
              ) }
               {activeSection === "elements" && (
634:
                635:
636:
                   Essential minerals required for various metabolic processes
637:
638:
                  639:
                  <1i>>
640:
                    Balance is key - both deficiency and excess can be harmful
641:
642:
                  Consider interactions between different minerals
643:
                  Monitor through regular blood tests
                644:
645:
               ) }
               {activeSection === "fattyAcids" && (
646:
647:
                648:
649:
                    Omega-3 fatty acids are essential for heart and brain health
650:
                  651:
                  Consider EPA:DHA ratio for optimal benefits
652:
653:
                    Vegetarian sources include flaxseed, chia seeds, walnuts
654:
                  655:
                  Fish oil supplements for non-vegetarians
656:
                657:
               ) }
               {activeSection === "complexNutrients" && (
658:
                659:
660:
                  Antioxidants help protect against cellular damage
661:
                  Anti-inflammatory compounds reduce chronic inflammation
662:
                  Best obtained from colorful fruits and vegetables
663:
                  Synergistic effects when consumed together
664:
                ) }
665:
             </div>
666:
667:
           </div>
668:
           {/* Summary Statistics */}
669:
670:
           <div className="grid md:grid-cols-4 gap-4">
671:
             <div className="bg-red-50 border border-red-200 rounded-lg p-4 text-center">
672:
               <div className="text-2xl font-bold text-red-600">
673:
674:
                  Object.values(nutritionData[activeSection]).filter(
675:
                    (item: any) => item.score >= 7
676:
                  ).length
677:
                }
678:
               </div>
679:
              <div className="text-sm text-red-700">High Priority</div>
680:
             </div>
681:
             <div className="bg-yellow-50 border border-yellow-200 rounded-lg p-4 text-center">
682:
               <div className="text-2xl font-bold text-yellow-600">
```

```
683:
684:
                     Object.values(nutritionData[activeSection]).filter(
685:
                       (item: any) => item.score >= 4 && item.score < 7
686:
                     ).length
                  }
687:
688:
                 </div>
689:
                 <div className="text-sm text-yellow-700">Moderate Priority</div>
690:
               </div>
691:
               <div className="bg-green-50 border border-green-200 rounded-lg p-4 text-center">
                 <div className="text-2xl font-bold text-green-600">
692:
693:
694:
                     Object.values(nutritionData[activeSection]).filter(
                       (item: any) => item.score < 4
696:
                     ).length
697:
                   }
698:
                 </div>
699:
                 <div className="text-sm text-green-700">Low Priority</div>
700:
               <div className="bg-blue-50 border border-blue-200 rounded-lg p-4 text-center">
701:
702:
                <div className="text-2xl font-bold text-blue-600">
703:
                   {Object.keys(nutritionData[activeSection]).length}
704:
705:
                 <div className="text-sm text-blue-700">Total Items</div>
706:
               </div>
707:
             </div>
708:
          </CardContent>
709:
         </Card>
710: );
711: }
```

■ File: components\admin\patient-info-admin.tsx

```
______
 1: "use client";
 2:
 3: import {
 4: Card,
 5: CardContent,
 6: CardDescription,
 7:
      CardHeader,
 8: CardTitle,
 9: } from "@/components/ui/card";
 10: import { Textarea } from "@/components/ui/textarea";
 11: import { Input } from "@/components/ui/input";
 12: import { Label } from "@/components/ui/label";
13: import {
14: Select,
15: SelectContent,
16:
      SelectItem,
17: SelectTrigger,
18: SelectValue,
19: } from "@/components/ui/select";
 20: import { Button } from "@/components/ui/button";
 21: import { Save, RotateCcw, Upload, X } from "lucide-react";
 22: import { useRef } from "react";
 23: import type { PatientInfo } from "@/types/report-types";
 24:
 25: interface PatientInfoAdminProps {
 26: patientInfo: PatientInfo;
 27: updatePatientInfo: (field: keyof PatientInfo, value: string) => void;
 28: onSave: () => void;
 29:
     onReset: () => void;
 30: }
 31:
 32: export default function PatientInfoAdmin({
33: patientInfo,
34: updatePatientInfo,
35: onSave,
 36: onReset,
 37: }: PatientInfoAdminProps) {
38: const fileInput1Ref = useRef<HTMLInputElement>(null);
39: const fileInput2Ref = useRef<HTMLInputElement>(null);
     const fileInput2Ref = useRef<HTMLInputElement>(null);
```

```
40:
 41:
      const handleImageUpload = (
 42:
      e: React.ChangeEvent<HTMLInputElement>,
        key: "signature1" | "signature2"
 43:
 44:
      ) => {
 45:
       const file = e.target.files?.[0];
 46:
        if (!file) return;
 47:
 48:
         const imageUrl = URL.createObjectURL(file);
 49:
         updatePatientInfo(key, imageUrl);
 50:
 51:
 52:
      const removeSignature = (
       key: "signature1" | "signature2",
 53:
 54:
        ref: React.RefObject<HTMLInputElement>
 55:
      ) => {
       updatePatientInfo(key, null);
 56:
 57:
         if (ref.current) ref.current.value = "";
 58:
 59:
 60:
      return (
 61:
        <Card className="shadow-lg border-0 bg-white">
 62:
           <CardHeader className="bg-gradient-to-r from-blue-500 to-purple-600 text-white rounded-t-lg">
 63:
             <CardTitle className="text-2xl">? Patient Information</CardTitle>
 64:
             <CardDescription className="text-blue-100">
 65:
               Complete patient details as they appear on the report cover page
 66:
             </CardDescription>
 67:
           </CardHeader>
 68:
           <CardContent className="space-y-6 p-8">
 69:
             {/* Action Buttons */}
 70:
             <div className="flex justify-end gap-2 mb-6">
 71:
               <Button onClick={onReset} variant="outline" size="sm">
                <RotateCcw className="h-4 w-4 mr-2" />
 72:
 73:
                Reset
               </Button>
 74:
 75:
               <Button onClick={onSave} size="sm">
 76:
                 <Save className="h-4 w-4 mr-2" />
 77:
                 Save Changes
 78:
               </Button>
 79:
             </div>
 80:
 81:
            {/* Basic Information */}
             <div className="space-y-4">
 83:
              <h3 className="text-lg font-semibold text-gray-800 pb-2">
 84:
                 Personal Information
 85:
               </h3>
 86:
               <div className="grid md:grid-cols-3 gap-6">
 87:
                 <div className="space-y-2">
 88:
                   <Tabel
 89:
                     htmlFor="name"
 90:
                     className="text-sm font-semibold text-gray-700 required"
 91:
 92:
                    Patient Name *
 93:
                   </Label>
 94:
                   <Input
                     id="name"
 95:
 96:
                     value={patientInfo.name}
                     onChange={(e) => updatePatientInfo("name", e.target.value)}
 97:
 98:
                     placeholder="Enter full patient name"
                     className="border-2 focus:border-blue-500"
 99:
100:
                     required
101:
                   />
102:
                 </div>
103:
                 <div className="space-y-2">
104:
                   <Label
105:
                     htmlFor="gender"
                     className="text-sm font-semibold text-gray-700 required"
106:
107:
108:
                    Gender *
109:
                   </Label>
110:
                   <Select
111:
                     value={patientInfo.gender}
112:
                     onValueChange={(value) => updatePatientInfo("gender", value)}
```

```
113:
114:
                     <SelectTrigger className="border-2 focus:border-blue-500">
115:
                       <SelectValue placeholder="Select gender" />
116:
                     </SelectTrigger>
117:
                     <SelectContent>
118:
                       <SelectItem value="MALE">Male/SelectItem>
119:
                       <SelectItem value="FEMALE">Female</SelectItem>
120:
                       <SelectItem value="OTHER">Other</SelectItem>
121:
                     </SelectContent>
                   </Select>
122:
                 </div>
123:
124:
                <div className="space-y-2">
125:
                   <Label
126:
                    htmlFor="birthDate"
127:
                    className="text-sm font-semibold text-gray-700 required"
128:
129:
                    Birth Date *
130:
                   </Label>
131:
                   <Input
132:
                    id="birthDate"
133:
                    type="date"
134:
                    value={patientInfo.birthDate}
                     onChange={(e) => updatePatientInfo("birthDate", e.target.value)}
135:
136:
                    className="border-2 focus:border-blue-500"
137:
                    required
                  />
138:
139:
                 </div>
              </div>
140:
141:
            </div>
142:
143:
            {/* Sample Information */}
144:
            <div className="space-y-4">
              <h3 className="text-lg font-semibold text-gray-800 border-b pb-2">
145:
146:
                Sample Information
147:
              </h3>
148:
              <div className="grid md:grid-cols-3 gap-6">
149:
                <div className="space-y-2">
150:
                  <Label
151:
                    htmlFor="sampleCode"
                    className="text-sm font-semibold text-gray-700 required"
152:
153:
154:
                     Sample Code *
155:
                   </Label>
156:
                   <Input
157:
                     id="sampleCode"
158:
                     value={patientInfo.sampleCode}
159:
                    onChange={(e) =>
160:
                      updatePatientInfo("sampleCode", e.target.value)
161:
162:
                     placeholder="e.g., DNL1000000110"
163:
                    className="border-2 focus:border-blue-500 font-mono"
164:
                    required
165:
                   />
166:
                   167:
                    Unique identifier for the DNA sample
                   168:
169:
                 </div>
170:
                 <div className="space-y-2">
171:
                   <Label
                     htmlFor="sampleDate"
172:
173:
                     className="text-sm font-semibold text-gray-700 required"
174:
175:
                    Sample Collection Date *
176:
                   </Label>
177:
                   <Input
178:
                     id="sampleDate"
179:
                     type="date"
180:
                     value={patientInfo.sampleDate}
181:
                     onChange={(e) =>
182:
                      updatePatientInfo("sampleDate", e.target.value)
183:
184:
                     className="border-2 focus:border-blue-500"
185:
                     required
```

```
186:
                 />
187:
                </div>
188:
               <div className="space-y-2">
189:
                 <Label
190:
                   htmlFor="reportDate"
191:
                   className="text-sm font-semibold text-gray-700 required"
192:
193:
                   Report Date *
194:
                 </Label>
195:
                 <Input
196:
                   id="reportDate"
197:
                   type="date"
198:
                   value={patientInfo.reportDate}
199:
                   onChange={(e) =>
200:
                     updatePatientInfo("reportDate", e.target.value)
201:
202:
                   className="border-2 focus:border-blue-500"
203:
                   required
                 />
204:
205:
               </div>
206:
              </div>
207:
            </div>
208:
209:
            {/* Authorization & Verification */}
210:
            <div className="space-y-6 border-t border-black py-6">
            {/* Section Title */}
211:
212:
             <h2 className="text-center text-lg md:text-xl font-bold text-gray-800 pb-2">
213:
               REPORT AUTHENTICATION & ANALYTICS
214:
              </h2>
215:
216:
             {/* Roles */}
217:
              <div className="grid md:grid-cols-2 gap-6 text-center">
218:
219:
                 220:
                   Genomic Data Analytics
221:
                   <br />
222:
                   Checked & Verified By
223:
                 224:
               </div>
225:
               <div>
226:
                 227:
                   Scientific Content
228:
                   <br />
229:
                   Checked & Verified By
230:
                 231:
               </div>
232:
              </div>
233:
              {/* Signature Previews */}
234:
235:
              <div className="grid md:grid-cols-2 gap-6 text-center mt-4">
               {/* Signature 1 */}
236:
               <div className="space-y-2">
238:
                 {patientInfo.signature1 ? (
239:
                   <div className="relative w-full border rounded bg-white p-3">
240:
                     <img
241:
                       src={patientInfo.signature1}
242:
                       alt="Primary Signature"
243:
                       className="max-h-24 mx-auto object-contain"
244:
245:
                     <But.t.on
246:
                       onClick={() => removeSignature("signature1", fileInput1Ref)}
247:
                       variant="outline"
248:
                       size="sm"
249:
                       className="absolute top-1 right-1 h-6 w-6 p-0"
250:
251:
                       <X className="h-3 w-3" />
                     </Button>
252:
253:
                   </div>
254:
                 ) : (
255:
                   <div className="border-2 border-dashed border-gray-300 rounded-lg p-4 bg-gray-50">
256:
                     <Upload className="h-8 w-8 text-gray-400 mx-auto mb-2" />
257:
                     258:
                       Upload primary signature
```

```
259:
                     260:
                     <Button
261:
                       onClick={() => fileInput1Ref.current?.click()}
                       variant="outline"
262:
                       size="sm"
263:
264:
265:
                       <Upload className="h-4 w-4 mr-2" />
266:
                       Choose File
267:
                     </Button>
268:
                   </div>
269:
                 ) }
270:
                  <input
271:
                   ref={fileInput1Ref}
272:
                   type="file"
273:
                   accept="image/*"
274:
                   onChange={(e) => handleImageUpload(e, "signature1")}
                   className="hidden"
275:
276:
                  277:
278:
                   {patientInfo.checkedBy | | "Dr. Amol D Raut (PhD)"}
279:
                  280:
               </div>
281:
282:
               {/* Signature 2 */}
283:
               <div className="space-y-2">
                  {patientInfo.signature2 ? (
284:
285:
                   <div className="relative w-full border rounded bg-white p-3">
286:
                     <img
287:
                       src={patientInfo.signature2}
288:
                       alt="Secondary Signature"
289:
                       className="max-h-24 mx-auto object-contain"
290:
291:
                     <But.t.on
292:
                       onClick={() => removeSignature("signature2", fileInput2Ref)}
293:
                       variant="outline"
294:
                       size="sm"
                       className="absolute top-1 right-1 h-6 w-6 p-0"
295:
296:
297:
                       <X className="h-3 w-3" />
298:
                     </Button>
299:
                   </div>
300:
                  ) : (
                    <div className="border-2 border-dashed border-gray-300 rounded-lg p-4 bg-gray-50">
                     <Upload className="h-8 w-8 text-gray-400 mx-auto mb-2" />
302:
303:
                     304:
                       Upload secondary signature
305:
                     306:
                     <Button
                       onClick={() => fileInput2Ref.current?.click()}
307:
308:
                       variant="outline"
309:
                       size="sm"
310:
311:
                       <Upload className="h-4 w-4 mr-2" />
312:
                       Choose File
313:
                     </Button>
314:
                   </div>
315:
                 ) }
316:
                  <input
317:
                   ref={fileInput2Ref}
318:
                   type="file"
                   accept="image/*"
319:
320:
                   onChange={(e) => handleImageUpload(e, "signature2")}
321:
                   className="hidden"
322:
                  323:
324:
                   {patientInfo.scientificContent || "Dr. Gouri A Raut (PhD)"}
325:
                 326:
               </div>
327:
              </div>
328:
329:
              {/* Optional Text Fields (if editing verifier names manually) */}
              <div className="grid md:grid-cols-2 gap-6 mt-6">
330:
331:
               <div className="space-y-2">
```

```
332:
                   <Label
333:
                     htmlFor="checkedBy"
334:
                     className="text-sm font-semibold text-gray-700"
335:
                    Checked & Verified By
336:
337:
                  </Label>
338:
                  <Input
339:
                    id="checkedBy"
340:
                     value={patientInfo.checkedBy}
                     onChange={(e) => updatePatientInfo("checkedBy", e.target.value)}
341:
                    placeholder="Enter verifier name"
342:
343:
                    className="border-2 focus:border-blue-500"
                  />
344:
                </div>
345:
                <div className="space-y-2">
346:
347:
                  <Label
                    htmlFor="scientificContent"
348:
349:
                    className="text-sm font-semibold text-gray-700"
350:
351:
                    Scientific Content Verified By
352:
                   </Label>
353:
                   <Input
354:
                     id="scientificContent"
355:
                     value={patientInfo.scientificContent}
356:
                    onChange={(e) =>
357:
                      updatePatientInfo("scientificContent", e.target.value)
358:
                     placeholder="Enter scientific content verifier"
359:
                    className="border-2 focus:border-blue-500"
360:
361:
                   />
362:
                 </div>
363:
              </div>
364:
            </div>
365:
            <div className="space-y-3">
366:
367:
              <Label
368:
                htmlFor="disclaimer"
369:
                className="text-lg font-semibold text-gray-800"
370:
371:
                Disclaimer
372:
              </Label>
373:
              <Textarea
374:
                id="disclaimer"
                value={patientInfo.disclaimer}
375:
376:
                onChange={(e) => updatePatientInfo("disclaimer", e.target.value)}
377:
                 placeholder="Enter disclaimer text"
378:
                rows={10}
379:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
380:
               />
381:
            </div>
382:
            <style jsx>{`
383:
384:
              .required::after {
                content: " *";
385:
386:
                 color: #ef4444;
387:
               }
             `}</style>
388:
389:
           </CardContent>
390:
        </Card>
391: );
392: }
```

■ File: components\admin\pdf-generator.tsx

```
1: "use client"
2:
3: import { Button } from "@/components/ui/button"
4: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
5: import { Download, Printer, Eye } from "lucide-react"
6: import { useState } from "react"
7: import type { ComprehensiveReportData } from "@/types/report-types"
```

```
8: import { useToast } from "@/components/ui/use-toast" // Import useToast
10: interface PDFGeneratorProps {
11:
     reportData: ComprehensiveReportData
12: }
13:
14: export default function PDFGenerator({ reportData }: PDFGeneratorProps) {
15: const [isGenerating, setIsGenerating] = useState(false)
     const { toast } = useToast() // Initialize useToast
16:
17:
     // State for PDF settings (can be expanded if more options are needed for actual PDF generation)
18:
19:
     const [pdfSettings, setPdfSettings] = useState({
20:
       format: "A4",
       orientation: "portrait",
21:
22:
       margins: "normal",
23:
       quality: "high",
24:
       includeGraphics: true,
25:
       includeColors: true,
    })
26:
27:
     const handlePrintOrDownload = async (action: "print" | "download") => {
28:
29:
        setIsGenerating(true)
        try {
30:
          // Open a new window to the PDF generation page
31:
          const printWindow = window.open("/report/pdf", "_blank")
32:
33:
34:
         if (printWindow) {
35:
            // Wait for the content to load in the new window
36:
            printWindow.onload = () => {
37:
              \ensuremath{//} Give a small delay to ensure all content and styles are rendered
38:
              setTimeout(() => {
39:
                if (action === "print") {
                  printWindow.print()
40:
41:
                    title: "Print Dialog Opened",
42:
43:
                    description: "Please select 'Save as PDF' or your printer in the dialog.",
                  })
44:
45:
                } else {
46:
                  // For download, the browser's print dialog usually offers "Save as PDF"
47:
                  // We trigger print, and the user saves it.
48:
                  printWindow.print()
49:
                  toast({
                    title: "Download Initiated",
50:
                    description: "Please select 'Save as PDF' in the print dialog to download.",
51:
52:
                  })
53:
                }
54:
                setIsGenerating(false)
55:
              }, 1500) // Increased delay for better rendering
56:
57:
           printWindow.onerror = () => {
58:
              toast({
59:
               title: "Error",
60:
                description: "Could not open print window. Please check pop-up blockers.",
61:
                variant: "destructive",
62:
              })
              setIsGenerating(false)
63:
64:
            }
65:
          } else {
66:
            toast({
              title: "Error",
67:
68:
             description: "Pop-up blocked or window could not be opened. Please allow pop-ups for this site.",
69:
              variant: "destructive",
70:
            })
71:
            setIsGenerating(false)
72:
73:
        } catch (error) {
74:
         console.error("Error handling PDF:", error)
75:
          toast({
            title: "Error",
76:
77:
           description: "An unexpected error occurred during PDF generation.",
78:
           variant: "destructive",
79:
          })
:08
          setIsGenerating(false)
```

```
}
 81:
 82:
 83:
 84:
      const previewPDF = () => {
         window.open("/report/preview", "_blank")
 85:
 86:
 87:
           title: "Preview Opened",
 88:
           description: "Your report preview is open in a new tab.",
 89:
      }
 90:
 91:
 92:
       return (
 93:
         <Card className="shadow-lg border-0 bg-white">
           <CardHeader className="bg-gradient-to-r from-red-500 to-pink-600 text-white rounded-t-lg">
 94:
 95:
             <CardTitle className="text-2xl">? PDF Generation</CardTitle>
 96:
             <CardDescription className="text-red-100">Generate and download professional PDF reports/CardDescr
 97:
           </CardHeader>
 98:
           <CardContent className="space-y-6 p-8">
 99:
             {/* Quick Actions */}
             <div className="grid md:grid-cols-3 gap-4">
               <Button
101:
102:
                 onClick={previewPDF}
103:
                 variant="outline"
104:
                 className="h-20 flex flex-col items-center justify-center gap-2 bg-transparent"
105:
                 disabled={isGenerating}
106:
107:
                 <Eye className="h-6 w-6" />
108:
                 <span>Preview Report</span>
109:
               </Button>
110:
111:
               <Button
112:
                 onClick={() => handlePrintOrDownload("print")}
113:
                 disabled={isGenerating}
                 className="h-20 flex flex-col items-center justify-center gap-2 bg-blue-600 hover:bg-blue-700"
114:
115:
116:
                 <Printer className="h-6 w-6" />
                 <span>{isGenerating ? "Generating..." : "Print Report"}</span>
117:
118:
               </Button>
119:
120:
               <Button
121:
                 onClick={() => handlePrintOrDownload("download")}
                 disabled={isGenerating}
122:
123:
                 className="h-20 flex flex-col items-center justify-center gap-2 bg-green-600 hover:bg-green-700
124:
125:
                 <Download className="h-6 w-6" />
126:
                 <span>{isGenerating ? "Preparing..." : "Download PDF"}</span>
127:
               </Button>
128:
             </div>
129:
             {/* PDF Settings */}
130:
131:
             <div className="space-y-4">
132:
               <h3 className="text-lg font-semibold text-gray-800">PDF Settings (for Print Dialog)</h3>
133:
               <div className="grid md:grid-cols-2 gap-6">
134:
                 <div className="space-y-4">
135:
                   <div>
136:
                     <label className="block text-sm font-medium text-gray-700 mb-2">Page Format</label>
137:
138:
                       value={pdfSettings.format}
139:
                       onChange={(e) => setPdfSettings((prev) => ({ ...prev, format: e.target.value }))}
140:
                       className="w-full border border-gray-300 rounded-md px-3 py-2 focus:outline-none focus:ri
141:
142:
                       <option value="A4">A4 (210 \times 297 mm)
143:
                       <option value="Letter">Letter (8.5 \times 11 in)
144:
                       <option value="Legal">Legal (8.5 \times 14 in)/option>
                     </select>
145:
146:
                   </div>
147:
148:
149:
                     <label className="block text-sm font-medium text-gray-700 mb-2">Orientation</label>
150:
                       value={pdfSettings.orientation}
151:
                       onChange={(e) => setPdfSettings((prev) => ({ ...prev, orientation: e.target.value }))}
152:
153:
                       className="w-full border border-gray-300 rounded-md px-3 py-2 focus:outline-none focus:ri
```

```
154:
                       <option value="portrait">Portrait</option>
155:
156:
                       <option value="landscape">Landscape</option>
157:
158:
                   </div>
159:
160:
                   <div>
161:
                     <label className="block text-sm font-medium text-gray-700 mb-2">Margins</label>
162:
                       value={pdfSettings.margins}
163:
                       onChange={(e) => setPdfSettings((prev) => ({ ...prev, margins: e.target.value }))}
164:
165:
                       className="w-full border border-gray-300 rounded-md px-3 py-2 focus:outline-none focus:ri
166:
167:
                       <option value="none">None</option>
168:
                       <option value="minimum">Minimum</option>
169:
                       <option value="normal">Normal</option>
170:
                       <option value="maximum">Maximum</option>
171:
                   </div>
172:
173:
                 </div>
174:
175:
                 <div className="space-y-4">
176:
177:
                     <label className="block text-sm font-medium text-gray-700 mb-2">Quality</label>
178:
179:
                       value={pdfSettings.quality}
180:
                       onChange={(e) => setPdfSettings((prev) => ({ ...prev, quality: e.target.value }))}
181:
                       className="w-full border border-gray-300 rounded-md px-3 py-2 focus:outline-none focus:ri
182:
183:
                       <option value="draft">Draft</option>
184:
                       <option value="normal">Normal</option>
185:
                       <option value="high">High</option>
186:
                       <option value="maximum">Maximum</option>
187:
                     </select>
                   </div>
188:
189:
190:
                   <div className="space-y-3">
191:
                     <label className="flex items-center">
192:
                       <input
193:
                         type="checkbox"
194:
                         checked={pdfSettings.includeGraphics}
195:
                         onChange={(e) => setPdfSettings((prev) => ({ ...prev, includeGraphics: e.target.checked
196:
                         className="mr-2"
197:
                       />
198:
                       <span className="text-sm text-gray-700">Include Graphics</span>
199:
                     </label>
200:
201:
                     <label className="flex items-center">
202:
                       <input
203:
                         type="checkbox"
204:
                         checked={pdfSettings.includeColors}
205:
                         onChange={(e) => setPdfSettings((prev) => ({ ...prev, includeColors: e.target.checked }
206:
207:
208:
                       <span className="text-sm text-gray-700">Include Colors</span>
209:
                     </label>
210:
                   </div>
211:
                 </div>
212:
               </div>
213:
             </div>
214:
215:
             {/* Report Information */}
216:
             <div className="bg-gray-50 border border-gray-200 rounded-lg p-4">
217:
               <h4 className="font-semibold text-gray-800 mb-3">? Report Information</h4>
               <div className="grid md:grid-cols-2 gap-4 text-sm">
218:
219:
                   <span className="font-medium">Patient:</span> {reportData.patientInfo.name || "Not specified"
220:
221:
                 </div>
222:
                 <div>
                   <span className="font-medium">Sample Code:</span> {reportData.patientInfo.sampleCode || "Not
223:
224:
                 </div>
225:
                 <div>
226:
                   <span className="font-medium">Report Date:</span> {reportData.patientInfo.reportDate || "Not
```

```
227:
               </div>
228:
               <div>
229:
                 <span className="font-medium">Total Pages:</span> ~47 pages (estimate)
230:
231:
             </div>
232:
           </div>
233:
234:
           {/* Instructions */}
           <div className="bg-blue-50 border border-blue-200 rounded-lg p-4">
235:
             <h4 className="font-semibold text-blue-800 mb-2">? PDF Generation Instructions</h4>
236:
             237:
               ? Click "Preview Report" to review the content before generating PDF.
238:
               < Use "Print Report" or "Download PDF" to open your browser's print dialog.</li>
239:
240:
               ? In the print dialog, select "Save as PDF" as the destination to download the report.
241:
               <1i>>
242:
                 ? For optimal appearance, ensure "Background graphics" is enabled and margins are set to "Non
243:
                 print settings.
244:
               < The report is optimized for A4 paper size in portrait orientation.</li>
245:
246:
             247:
           </div>
248:
         </CardContent>
249:
        </Card>
250: )
251: }
```

■ File: components\admin\preventive-health-admin.tsx

```
______
 1: "use client"
 2:
 3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 4: import { Input } from "@/components/ui/input"
 5: import { Label } from "@/components/ui/label"
 6: import { Button } from "@/components/ui/button"
 7: import { Save, RotateCcw, Plus, Trash2 } from "lucide-react"
 8: import { Checkbox } from "@/components/ui/checkbox"
 9: import type { PreventiveHealth } from "@/types/report-types"
10:
11: interface PreventiveHealthAdminProps {
12: preventiveHealth: PreventiveHealth
13: updatePreventiveHealth: (section: keyof PreventiveHealth, data: any) => void
14: onSave: () \Rightarrow void
15:
     onReset: () => void
16: }
17:
 18: export default function PreventiveHealthAdmin({
19: preventiveHealth,
 20:
      updatePreventiveHealth,
21: onSave,
     onReset,
 23: }: PreventiveHealthAdminProps) {
 24:
     const addDiagnosticTest = (type: "halfYearly" | "yearly") => {
 25:
        updatePreventiveHealth("diagnosticTests", {
 26:
          ...preventiveHealth.diagnosticTests,
 27:
          [type]: [...preventiveHealth.diagnosticTests[type], ""],
 28:
        })
 29:
      }
 30:
      const updateDiagnosticTest = (type: "halfYearly" | "yearly", index: number, value: string) => {
 31:
 32:
       const newTests = [...preventiveHealth.diagnosticTests[type]]
 33:
        newTests[index] = value
 34:
        updatePreventiveHealth("diagnosticTests", {
 35:
          ...preventiveHealth.diagnosticTests,
 36:
          [type]: newTests,
37:
        })
 38:
      }
 39:
      const removeDiagnosticTest = (type: "halfYearly" | "yearly", index: number) => {
 40:
        updatePreventiveHealth("diagnosticTests", {
 41:
 42:
          ...preventiveHealth.diagnosticTests,
 43:
          [type]: preventiveHealth.diagnosticTests[type].filter((_, i) => i !== index),
```

```
44:
         })
 45:
 46:
 47:
       const addNutritionalSupplement = () => {
 48:
         updatePreventiveHealth("nutritionalSupplements", [
 49:
           ...preventiveHealth.nutritionalSupplements,
 50:
           { supplement: "", needed: true },
 51:
         1)
 52:
       }
 53:
       const updateNutritionalSupplement = (index: number, field: "supplement" | "needed", value: string | boole
 54:
 55:
         const newSupplements = [...preventiveHealth.nutritionalSupplements]
 56:
         newSupplements[index] = { ...newSupplements[index], [field]: value }
 57:
         updatePreventiveHealth("nutritionalSupplements", newSupplements)
 58:
 59:
 60:
       const removeNutritionalSupplement = (index: number) => {
 61:
         updatePreventiveHealth(
           "nutritionalSupplements",
 62:
 63:
           preventiveHealth.nutritionalSupplements.filter((_, i) => i !== index),
 64:
         )
 65:
       }
 66:
 67:
       return (
         <Card className="shadow-lg border-0 bg-white">
 68:
           <CardHeader className="bq-gradient-to-r from-teal-500 to-cyan-600 text-white rounded-t-lq">
 69:
 70:
             <CardTitle className="text-2xl">? Preventive Health</CardTitle>
 71:
             <CardDescription className="text-teal-100">
 72:
               Manage recommended diagnostic tests and nutritional supplements based on genetic insights
 73:
             </CardDescription>
 74:
           </CardHeader>
 75:
           <CardContent className="space-y-8 p-8">
             {/* Action Buttons */}
 76:
 77:
             <div className="flex justify-end gap-2 mb-6">
               <Button onClick={onReset} variant="outline" size="sm">
 78:
 79:
                 <RotateCcw className="h-4 w-4 mr-2" />
 80:
                 Reset
 81:
               </Rutton>
 82:
               <Button onClick={onSave} size="sm">
 83:
                 <Save className="h-4 w-4 mr-2" />
 84:
                 Save Changes
 85:
               </But.ton>
 86:
             </div>
 87:
 88:
             {/* Diagnostic Tests Section */}
 89:
             <div className="space-y-4">
 90:
               <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-teal-200 pb-2">? Diagnostic
 91:
               <div className="grid md:grid-cols-2 gap-6">
                 {/* Half-Yearly Tests */}
 92:
 93:
                 <Card className="border-2 border-blue-100 bg-blue-50/30">
 94:
                   <CardHeader className="pb-3">
 95:
                     <CardTitle className="text-lg text-blue-800 flex justify-between items-center">
 96:
                       Half-Yearly Tests
 97:
                       <Button
 98:
                         onClick={() => addDiagnosticTest("halfYearly")}
 99:
                         size="sm"
100:
                         variant="outline"
101:
                         className="text-xs"
102:
                         <Plus className="h-3 w-3 mr-1" /> Add Test
103:
                       </Button>
104:
105:
                     </CardTitle>
106:
                   </CardHeader>
107:
                   <CardContent className="space-y-3">
108:
                     {preventiveHealth.diagnosticTests.halfYearly.map((test, index) => (
109:
                        <div key={index} className="flex items-center gap-2">
110:
                         <Input
111:
                           value={test}
112:
                           onChange={(e) => updateDiagnosticTest("halfYearly", index, e.target.value)}
                           placeholder="e.g., PLASMA SUGAR (FASTING & PP)"
113:
114:
                           className="border-2 focus:border-blue-500 text-sm"
                         />
115:
116:
                          <Button
```

```
117:
                          onClick={() => removeDiagnosticTest("halfYearly", index)}
118:
119:
                          variant="destructive"
120:
                          className="px-2"
121:
122:
                          <Trash2 className="h-3 w-3" />
123:
                        </Button>
124:
                      </div>
125:
                     ))}
                     {preventiveHealth.diagnosticTests.halfYearly.length === 0 && (
126:
                      No half-yearly tests added.
127:
128:
                    ) }
129:
                  </CardContent>
130:
                </Card>
131:
132:
                {/* Yearly Tests */}
133:
                <Card className="border-2 border-green-100 bg-green-50/30">
134:
                  <CardHeader className="pb-3">
                    <CardTitle className="text-lg text-green-800 flex justify-between items-center">
135:
136:
                      Yearly Tests
137:
                      <Button onClick={() => addDiagnosticTest("yearly")} size="sm" variant="outline" className
138:
                        <Plus className="h-3 w-3 mr-1" /> Add Test
139:
                       </Button>
140:
                    </CardTitle>
                  </CardHeader>
141:
                  <CardContent className="space-y-3">
142:
                     {preventiveHealth.diagnosticTests.yearly.map((test, index) => (
144:
                      <div key={index} className="flex items-center gap-2">
145:
                        <Input
146:
                          value={test}
147:
                          onChange={(e) => updateDiagnosticTest("yearly", index, e.target.value)}
148:
                          placeholder="e.g., HbA1c"
                          className="border-2 focus:border-green-500 text-sm"
149:
150:
151:
                        <Button
152:
                          onClick={() => removeDiagnosticTest("yearly", index)}
                          size="sm"
153:
154:
                          variant="destructive"
155:
                          className="px-2"
156:
157:
                          <Trash2 className="h-3 w-3" />
158:
                        </But.ton>
                      </div>
160:
                    ))}
161:
                     {preventiveHealth.diagnosticTests.yearly.length === 0 && (
162:
                      No yearly tests added.
163:
                    ) }
164:
                  </CardContent>
165:
                </Card>
              </div>
166:
167:
            </div>
168:
169:
             {/* Nutritional Supplements Section */}
170:
            <div className="space-y-4">
171:
              <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-teal-200 pb-2">
                ? Nutritional Supplements
172:
              </h3>
173:
174:
              <Card className="border-2 border-purple-100 bg-purple-50/30">
175:
                <CardHeader className="pb-3">
176:
                  <CardTitle className="text-lg text-purple-800 flex justify-between items-center">
177:
                    Recommended Supplements
178:
                    <But.ton
179:
                      onClick={addNutritionalSupplement}
180:
                      size="sm"
                      variant="outline"
181:
182:
                      className="text-xs bg-transparent"
183:
184:
                      <Plus className="h-3 w-3 mr-1" /> Add Supplement
185:
                    </Button>
                  </CardTitle>
186:
187:
                </CardHeader>
188:
                <CardContent className="space-y-3">
189:
                   {preventiveHealth.nutritionalSupplements.map((supplement, index) => (
```

```
190:
                    <div key={index} className="grid grid-cols-[1fr_auto_auto] items-center gap-2">
191:
192:
                       value={supplement.supplement}
193:
                        onChange={(e) => updateNutritionalSupplement(index, "supplement", e.target.value)}
194:
                       placeholder="e.g., VITAMIN D"
195:
                       className="border-2 focus:border-purple-500 text-sm"
196:
197:
                      <div className="flex items-center space-x-2">
198:
                        <Checkbox
                         id={ `needed-${index} `}
199:
200:
                         checked={supplement.needed}
201:
                         onCheckedChange={(checked: boolean) => updateNutritionalSupplement(index, "needed", c
202:
                        <Label htmlFor={`needed-${index}`} className="text-sm">
203:
204:
205:
                        </Label>
206:
                      </div>
207:
                       onClick={() => removeNutritionalSupplement(index)}
208:
209:
                       size="sm"
210:
                       variant="destructive"
211:
                       className="px-2"
212:
                        <Trash2 className="h-3 w-3" />
213:
214:
                      </Button>
                    </div>
215:
216:
                  ))}
217:
                  {preventiveHealth.nutritionalSupplements.length === 0 && (
                    No nutritional supplements added.
218:
219:
                  ) }
220:
                </CardContent>
221:
              </Card>
222:
            </div>
223:
            {/* Section Guidelines */}
224:
225:
            <div className="bg-teal-50 border-2 border-teal-200 rounded-lg p-6">
226:
              <h4 className="font-semibold text-teal-800 mb-2">? Preventive Health Guidelines:</h4>
227:
              <div className="text-sm text-teal-700 space-y-2">
228:
                229:
                  <
230:
                    This section helps determine the requirement of nutrients in form of supplements and period
231:
                    parameters.
232:
                  233:
                  <1i>>
234:
                    <strong>Diagnostic Tests:</strong> Suggests blood tests or other diagnostics to be done hal
235:
                    yearly based on genetic predispositions.
                  236:
237:
                  <1i>>
238:
                    <strong>Nutritional Supplements:Strong> Recommends specific supplements and indicates whe
239:
                    needed based on genetic analysis.
240:
                  241:
                  Always consult with a healthcare professional before initiating supplement consumption./
242:
                243:
              </div>
244:
            </div>
245:
          </CardContent>
246:
        </Card>
247:
     )
248: }
```

■ File: components\admin\report-content-admin.tsx

```
1: "use client"
2:
3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
4: import { Label } from "@/components/ui/label"
5: import { Textarea } from "@/components/ui/textarea"
6: import { Button } from "@/components/ui/button"
7: import { Save, RotateCcw } from "lucide-react"
8: import type { ReportContent } from "@/types/report-types"
```

```
10: interface ReportContentAdminProps {
     content: ReportContent
12:
     updateContent: (field: keyof ReportContent, value: string) => void
13:
     onSave: () => void
14:
     onReset: () => void
15: }
16:
17: export default function ReportContentAdmin({ content, updateContent, onSave, onReset }: ReportContentAdminP
18:
       <Card className="shadow-lg border-0 bg-white">
19:
         <CardHeader className="bg-gradient-to-r from-green-500 to-teal-600 text-white rounded-t-lg">
20:
21:
            <CardTitle className="text-2xl"> Report Content</CardTitle>
22:
            <CardDescription className="text-green-100">Edit the main content sections of the report</CardDescr
23:
          </CardHeader>
24:
          <CardContent className="space-y-8 p-8">
25:
            {/* Action Buttons */}
26:
            <div className="flex justify-end gap-2 mb-6">
27:
              <Button onClick={onReset} variant="outline" size="sm">
                <RotateCcw className="h-4 w-4 mr-2" />
28:
29:
                Reset
30:
              </Button>
31:
              <Button onClick={onSave} size="sm">
32:
                <Save className="h-4 w-4 mr-2" />
33:
                Save Changes
              </Button>
34:
           </div>
35:
36:
           {/* <div className="space-y-3">
37:
38:
              <Label htmlFor="disclaimer" className="text-lg font-semibold text-gray-800">
39:
                ?? Disclaimer
40:
              </Label>
41:
              <Textarea
               id="disclaimer"
42:
43:
                value={content.disclaimer}
                onChange={(e) => updateContent("disclaimer", e.target.value)}
44:
45:
                placeholder="Enter disclaimer text"
46:
                rows={10}
47:
               className="border-2 focus:border-green-500 text-sm leading-relaxed"
48:
              />
49:
            </div> */}
50:
            <div className="space-y-3">
51:
              <Label htmlFor="introduction" className="text-lg font-semibold text-gray-800">
52:
                ? Welcome Letter Introduction
53:
              </Label>
54:
              <Textarea
55:
                id="introduction"
56:
                value={content.introduction}
57:
                onChange={(e) => updateContent("introduction", e.target.value)}
                placeholder="Enter introduction text"
58:
59:
                rows={8}
               className="border-2 focus:border-green-500 text-sm leading-relaxed"
60:
             />
61:
62:
           </div>
63:
            <div className="space-y-3">
64:
              <Label htmlFor="genomicsExplanation" className="text-lg font-semibold text-gray-800">
               ? What is Genomics?
65:
              </Label>
66:
67:
              <Textarea
68:
                id="genomicsExplanation"
69:
                value={content.genomicsExplanation}
70:
               onChange={(e) => updateContent("genomicsExplanation", e.target.value)}
71:
               placeholder="Enter genomics explanation"
72:
                rows={8}
73:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
              />
74:
75:
            </div>
76:
            <div className="space-y-3">
77:
              <Label htmlFor="genesHealthImpact" className="text-lg font-semibold text-gray-800">
78:
               ? Genes and Health Impact
79:
              </Label>
:08
              <Textarea
81:
                id="genesHealthImpact"
82:
                value={content.genesHealthImpact}
```

```
onChange={(e) => updateContent("genesHealthImpact", e.target.value)}
 83:
 84:
                 placeholder="Enter genes and health impact content"
 85:
                 rows={8}
 86:
                 className="border-2 focus:border-green-500 text-sm leading-relaxed"
 87:
              />
 88:
            </div>
 89:
            <div className="space-y-3">
 90:
              <Label htmlFor="fundamentalsPRS" className="text-lg font-semibold text-gray-800">
                 ? Fundamentals and PRS
 91:
 92:
              </Label>
 93:
               <Textarea
                id="fundamentalsPRS"
 94:
 95:
                 value={content.fundamentalsPRS}
                onChange={(e) => updateContent("fundamentalsPRS", e.target.value)}
 96:
 97:
                placeholder="Enter fundamentals and PRS content"
 98:
 99:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
100:
            </div>
101:
102:
            <div className="space-y-3">
103:
              <Label htmlFor="utilityDoctors" className="text-lg font-semibold text-gray-800">
104:
                ???? Utility for Doctors and Dietitians
105:
               </Label>
106:
              <Textarea
                id="utilityDoctors"
107:
                value={content.utilityDoctors}
108:
109:
                 onChange={(e) => updateContent("utilityDoctors", e.target.value)}
110:
                placeholder="Enter utility for doctors content"
111:
                rows={8}
112:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
113:
               />
114:
            </div>
115:
            <div className="space-y-3">
             <Label htmlFor="microarrayExplanation" className="text-lg font-semibold text-gray-800">
117:
                ? Microarray Explanation
118:
               </Label>
119:
              <Textarea
120:
                id="microarrayExplanation"
121:
                value={content.microarrayExplanation}
                onChange={(e) => updateContent("microarrayExplanation", e.target.value)}
122:
123:
                placeholder="Enter microarray explanation"
124:
                rows={8}
125:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
126:
              />
127:
            </div>
128:
            <div className="space-y-3">
129:
             <Label htmlFor="microarrayData" className="text-lq font-semibold text-gray-800">
130:
                ? Your Microarray Data
131:
              </Label>
132:
              <Textarea
133:
                id="microarrayData"
                value={content.microarrayData}
135:
                onChange={(e) => updateContent("microarrayData", e.target.value)}
136:
                placeholder="Enter microarray data content"
137:
                 rows={8}
138:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
139:
               />
             </div>
140:
141:
          </CardContent>
142:
         </Card>
143: )
144: }
```

■ File: components\admin\report-settings-admin.tsx

```
1: "use client"
2:
3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
4: import { Input } from "@/components/ui/input"
5: import { Label } from "@/components/ui/label"
6: import { Button } from "@/components/ui/button"
```

```
7: import { Save, RotateCcw } from "lucide-react"
8: import type { ReportSettings } from "@/types/report-types"
9:
10: interface ReportSettingsAdminProps {
11: settings: ReportSettings
12: updateSettings: (field: keyof ReportSettings, value: string) => void
13: onSave: () => void
14:
     onReset: () => void
15: }
16:
17: export default function ReportSettingsAdmin({ settings, updateSettings, onSave, onReset }: ReportSettingsAd
18:
    return (
19:
        <Card className="shadow-lg border-0 bg-white">
          <CardHeader className="bg-gradient-to-r from-purple-500 to-pink-600 text-white rounded-t-lg">
20:
            <CardTitle className="text-2xl">? Report Settings</CardTitle>
21:
22:
            <CardDescription className="text-purple-100">
23:
             Customize the appearance and branding of your report
24:
            </CardDescription>
          </CardHeader>
25:
          <CardContent className="space-y-6 p-8">
27:
            {/* Action Buttons */}
28:
            <div className="flex justify-end gap-2 mb-6">
29:
              <Button onClick={onReset} variant="outline" size="sm">
                <RotateCcw className="h-4 w-4 mr-2" />
30:
31:
                Reset
             </Rutton>
32:
33:
             <Button onClick={onSave} size="sm">
34:
                <Save className="h-4 w-4 mr-2" />
                Save Changes
36:
              </Button>
37:
            </div>
38:
39:
           <div className="grid md:grid-cols-2 gap-6">
40:
             <div className="space-y-2">
               <Label htmlFor="title" className="text-sm font-semibold text-gray-700">
41:
42:
                 Report Title
43:
                </Label>
44:
                <Input
45:
                 id="title"
46:
                 value={settings.title}
47:
                  onChange={(e) => updateSettings("title", e.target.value)}
48:
                 className="border-2 focus:border-purple-500 font-bold"
49:
                 placeholder="e.g., Comprehensive Health Report"
                />
50:
51:
              </div>
52:
              <div className="space-y-2">
53:
               <Label htmlFor="subtitle" className="text-sm font-semibold text-gray-700">
54:
                 Report Subtitle
55:
                </Label>
56:
                <Input
57:
                 id="subtitle"
58:
                 value={settings.subtitle}
59:
                  onChange={(e) => updateSettings("subtitle", e.target.value)}
60:
                  className="border-2 focus:border-purple-500"
61:
                 placeholder="e.g., A Detailed Analysis of Your Genetics"
               />
62:
             </div>
63:
64:
              <div className="space-y-2">
65:
                <Label htmlFor="companyName" className="text-sm font-semibold text-gray-700">
66:
                  Company Name
67:
                </Label>
68:
                <Input
69:
                  id="companyName"
70:
                  value={settings.companyName}
                  onChange={(e) => updateSettings("companyName", e.target.value)}
71:
72:
                  className="border-2 focus:border-purple-500"
73:
                 placeholder="e.g., Health Solutions Inc."
74:
                />
75:
             </div>
76:
              <div className="space-y-2">
77:
               <Label htmlFor="headerColor" className="text-sm font-semibold text-gray-700">
78:
                 Header Color
79:
                </Label>
```

```
80:
                 <div className="flex gap-2">
 81:
 82:
                     id="headerColor"
 83:
                     type="color"
 84:
                     value={settings.headerColor}
 85:
                     onChange={(e) => updateSettings("headerColor", e.target.value)}
 86:
                     className="w-16 h-10 border-2 focus:border-purple-500"
 87:
                   />
 88:
                   <Input
 89:
                     value={settings.headerColor}
                     onChange={(e) => updateSettings("headerColor", e.target.value)}
 90:
 91:
                     className="flex-1 border-2 focus:border-purple-500 font-mono"
 92:
                     placeholder="#2C3E50"
 93:
                   />
 94:
                 </div>
 95:
               </div>
 96:
               <div className="space-v-2">
 97:
                 <Label htmlFor="accentColor" className="text-sm font-semibold text-gray-700">
 98:
                   Accent Color
 99:
                 </Label>
100:
                 <div className="flex gap-2">
101:
                   <Input
102:
                     id="accentColor"
103:
                     t.vpe="color"
                     value={settings.accentColor}
104:
                     onChange={(e) => updateSettings("accentColor", e.target.value)}
105:
106:
                     className="w-16 h-10 border-2 focus:border-purple-500"
                   />
107:
108:
                   <Input
109:
                     value={settings.accentColor}
110:
                     onChange={(e) => updateSettings("accentColor", e.target.value)}
111:
                     className="flex-1 border-2 focus:border-purple-500 font-mono"
                     placeholder="#E74C3C"
112:
                   />
113:
                 </div>
114:
115:
               </div>
116:
             </div>
117:
118:
             <div className="space-y-4">
119:
               <h3 className="text-lq font-semibold text-gray-800 border-b pb-2">Font Settings</h3>
120:
               <div className="grid md:grid-cols-3 gap-6">
                 <div className="space-y-2">
121:
122:
                   <Label htmlFor="primaryFont" className="text-sm font-semibold text-gray-700">
123:
                     Primary Font
124:
                   </Label>
125:
                   <Input
126:
                     id="primaryFont"
127:
                     value={settings.fonts.primary}
128:
                     onChange={(e) =>
129:
                       updateSettings("fonts", JSON.stringify({ ...settings.fonts, primary: e.target.value }))
130:
131:
                     className="border-2 focus:border-purple-500"
132:
                     placeholder="e.g., Helvetica, Arial, sans-serif"
133:
                   />
134:
                 </div>
135:
                 <div className="space-y-2">
                   <Label htmlFor="secondaryFont" className="text-sm font-semibold text-gray-700">
136:
137:
                     Secondary Font
138:
                   </Label>
139:
                   <Input
140:
                     id="secondaryFont"
141:
                     value={settings.fonts.secondary}
142:
                     onChange={(e) =>
143:
                       updateSettings("fonts", JSON.stringify({ ...settings.fonts, secondary: e.target.value }))
144:
145:
                     className="border-2 focus:border-purple-500"
146:
                     placeholder="e.g., Georgia, serif"
147:
                   />
148:
                 </div>
149:
                 <div className="space-v-2">
150:
                   <Label htmlFor="monoFont" className="text-sm font-semibold text-gray-700">
151:
                     Monospace Font.
152:
                   </Label>
```

```
153:
                 <Input.
154:
                   id="monoFont"
155:
                   value={settings.fonts.mono}
                   onChange={(e) => updateSettings("fonts", JSON.stringify({ ...settings.fonts, mono: e.target
156:
157:
                   className="border-2 focus:border-purple-500"
158:
                   placeholder="e.g., Courier New, monospace"
159:
                 />
160:
               </div>
              </div>
161:
            </div>
162:
           <div className="bg-purple-50 border-2 border-purple-200 rounded-lg p-4">
164:
165:
              <h4 className="font-semibold text-purple-800 mb-2">? Customization Tips:</h4>
166:
              167:
               < Use hex codes for precise color matching (e.g., #RRGGBB).</li>
168:
                ? Choose fonts that align with your brand's aesthetic.
169:
               < Ensure sufficient contrast for readability, especially for text.</li>
170:
            </div>
171:
172:
          </CardContent>
173:
        </Card>
174:
      )
175: }
```

■ File: components\admin\report-summaries-admin.tsx

```
______
 1: "use client"
 2:
 3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 4: import { Label } from "@/components/ui/label"
 5: import { Textarea } from "@/components/ui/textarea"
 6: import { Button } from "@/components/ui/button"
 7: import { Save, RotateCcw } from "lucide-react"
 8: import type { ReportSummaries } from "@/types/report-types"
 9:
10: interface ReportSummariesAdminProps {
11: summaries: ReportSummaries
12:
      updateSummaries: (field: keyof ReportSummaries, value: string) => void
13:
      onSave: () => void
14:
      onReset: () => void
15: }
16:
17: export default function ReportSummariesAdmin({
 18:
      summaries,
19: updateSummaries,
 20: onSave,
 21:
     onReset,
 22: }: ReportSummariesAdminProps) {
     return (
23:
       <Card className="shadow-lg border-0 bg-white">
 25:
          <CardHeader className="bg-gradient-to-r from-violet-500 to-purple-600 text-white rounded-t-lg">
 26:
            <CardTitle className="text-2xl">? Report Summaries</CardTitle>
 27:
            <CardDescription className="text-violet-100">Edit the summary sections for experts</CardDescription
 28:
          </CardHeader>
          <CardContent className="space-y-8 p-8">
 29:
 30:
            {/* Action Buttons */}
 31:
            <div className="flex justify-end gap-2 mb-6">
 32:
              <Button onClick={onReset} variant="outline" size="sm">
 33:
                <RotateCcw className="h-4 w-4 mr-2" />
 34:
                Reset
 35:
              </Button>
              <Button onClick={onSave} size="sm">
 36:
37:
                <Save className="h-4 w-4 mr-2" />
 38:
                Save Changes
39:
              </Button>
 40:
            </div>
41:
42:
            <div className="grid md:grid-cols-2 gap-8">
 43:
              <div className="space-y-3">
                <Label htmlFor="nutrigenomicsSummary" className="text-lg font-semibold text-gray-800">
 44:
 45:
                  ? Nutrigenomics Summary
```

```
46:
              </Label>
47:
              For the nutrigenomics expert
48:
              <Textarea
49:
                id="nutrigenomicsSummary"
50:
                value={summaries.nutrigenomicsSummary}
51:
                onChange={(e) => updateSummaries("nutrigenomicsSummary", e.target.value)}
52:
53:
                className="border-2 focus:border-violet-500"
                placeholder="Based on the overall nutrigenomics analysis, provide expert summary for personal
54:
              />
55:
            </div>
56:
57:
            <div className="space-y-3">
58:
              <Label htmlFor="exerciseGenomicsSummary" className="text-lg font-semibold text-gray-800">
59:
                ???? Exercise Genomics Summary
60:
              </Label>
61:
              For the fitness genomics expert
62:
              <Textarea
63:
                id="exerciseGenomicsSummary"
64:
                value={summaries.exerciseGenomicsSummary}
65:
                onChange={(e) => updateSummaries("exerciseGenomicsSummary", e.target.value)}
66:
                rows={8}
67:
                className="border-2 focus:border-violet-500"
68:
                placeholder="Based on the overall genomics analysis, provide expert summary for personalized
69:
              />
70:
            </div>
          </div>
71:
72:
          <div className="bg-blue-50 border-2 border-blue-200 rounded-lg p-6">
73:
74:
            <h4 className="font-semibold text-blue-800 mb-2">? Expert Summary Guidelines:</h4>
75:
            76:
              Provide actionable insights based on genetic analysis
77:
              < Include specific recommendations for healthcare professionals</li>
              ? Reference key genetic markers and their implications
78:
79:
              < Suggest monitoring parameters and intervention strategies</li>
80:
              < Keep language professional yet accessible</li>
81:
            82:
           </div>
83:
         </CardContent>
84:
       </Card>
85:
    )
86: }
```

■ File: components\admin\settings-admin.tsx

```
1: "use client"
 2:
 3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
 4: import { Input } from "@/components/ui/input
 5: import { Label } from "@/components/ui/label"
 6: import { Button } from "@/components/ui/button" // Import Button
 7: import { Save, RotateCcw } from "lucide-react" // Import icons
 8: import type { ReportSettings } from "@/types/report-types"
 9:
10: interface SettingsAdminProps {
11: settings: ReportSettings
     updateSettings: (field: keyof ReportSettings, value: string) => void
12:
13:
      onSave: () => void // Added onSave
      onReset: () => void // Added onReset
14:
15: }
16:
17: export default function SettingsAdmin({ settings, updateSettings, onSave, onReset }: SettingsAdminProps) {
18:
19:
        <Card className="shadow-lg border-0 bg-white">
20:
          <CardHeader className="bg-gradient-to-r from-purple-500 to-pink-600 text-white rounded-t-lg">
21:
            <CardTitle className="text-2xl">? Report Settings</CardTitle>
22:
           <CardDescription className="text-purple-100">
23:
             Customize the appearance and branding of your report
24:
           </CardDescription>
25:
          </CardHeader>
          <CardContent className="space-y-6 p-8">
26:
27:
            {/* Action Buttons */}
```

```
28:
             <div className="flex justify-end gap-2 mb-6">
 29:
               <Button onClick={onReset} variant="outline" size="sm">
 30:
                 <RotateCcw className="h-4 w-4 mr-2" />
 31:
32:
              </Button>
33:
              <Button onClick={onSave} size="sm">
 34:
                 <Save className="h-4 w-4 mr-2" />
 35:
                 Save Changes
 36:
               </Button>
37:
            </div>
 38:
 39:
            <div className="grid md:grid-cols-2 gap-6">
 40:
              <div className="space-y-2">
41:
                 <Label htmlFor="title" className="text-sm font-semibold text-gray-700">
 42:
                   Report Title
43:
                 </Label>
44:
                <Input
 45:
                   id="title"
                   value={settings.title}
46:
 47:
                   onChange={(e) => updateSettings("title", e.target.value)}
 48:
                  className="border-2 focus:border-purple-500 font-bold"
 49:
                />
50:
               </div>
               <div className="space-y-2">
51:
                <Label htmlFor="subtitle" className="text-sm font-semibold text-gray-700">
 52:
                  Report Subtitle
53:
 54:
                 </Label>
55:
                 <Input
 56:
                  id="subtitle"
57:
                   value={settings.subtitle}
                   onChange={(e) => updateSettings("subtitle", e.target.value)}
 58:
59:
                   className="border-2 focus:border-purple-500"
                />
60:
               </div>
 61:
               <div className="space-y-2">
 62:
 63:
                <Label htmlFor="companyName" className="text-sm font-semibold text-gray-700">
64:
                   Company Name
65:
                </Label>
 66:
                 <Input
 67:
                   id="companyName"
 68:
                   value={settings.companyName}
 69:
                   onChange={(e) => updateSettings("companyName", e.target.value)}
 70:
                   className="border-2 focus:border-purple-500"
                />
71:
 72:
               </div>
 73:
               <div className="space-y-2">
 74:
                <Label htmlFor="headerColor" className="text-sm font-semibold text-gray-700">
75:
                   Header Color
 76:
                 </Label>
 77:
                 <div className="flex gap-2">
78:
                  <Input
 79:
                     id="headerColor"
80:
                     type="color"
 81:
                     value={settings.headerColor}
82:
                     onChange={(e) => updateSettings("headerColor", e.target.value)}
                     className="w-16 h-10 border-2 focus:border-purple-500"
83:
 84:
                   />
85:
                   <Input
 86:
                     value={settings.headerColor}
                     onChange={(e) => updateSettings("headerColor", e.target.value)}
87:
 88:
                    className="flex-1 border-2 focus:border-purple-500 font-mono"
 89:
                   />
90:
                 </div>
               </div>
 91:
               <div className="space-y-2">
92:
 93:
                <Label htmlFor="accentColor" className="text-sm font-semibold text-gray-700">
94:
                  Accent Color
 95:
                 </Label>
96:
                 <div className="flex gap-2">
97:
                  <Input
98:
                     id="accentColor"
99:
                     type="color"
100:
                     value={settings.accentColor}
```

```
101:
                     onChange={(e) => updateSettings("accentColor", e.target.value)}
                     className="w-16 h-10 border-2 focus:border-purple-500"
102:
103:
                   />
104:
                   <Input
105:
                     value={settings.accentColor}
106:
                    onChange={(e) => updateSettings("accentColor", e.target.value)}
107:
                    className="flex-1 border-2 focus:border-purple-500 font-mono"
108:
                  />
                 </div>
109:
              </div>
110:
              <div className="space-y-2">
112:
                <Label htmlFor="primaryFont" className="text-sm font-semibold text-gray-700">
113:
                   Primary Font
114:
                 </Label>
115:
                <Input
116:
                  id="primaryFont"
117:
                  value={settings.fonts.primary}
118:
                  onChange={(e) => updateSettings("fonts", { ...settings.fonts, primary: e.target.value })}
119:
                  placeholder="e.g., Helvetica, Arial, sans-serif"
120:
                  className="border-2 focus:border-purple-500"
121:
                />
122:
              </div>
123:
              <div className="space-y-2">
124:
                <Label htmlFor="secondaryFont" className="text-sm font-semibold text-gray-700">
125:
                  Secondary Font
126:
                </Label>
127:
                <Input
128:
                  id="secondaryFont"
                  value={settings.fonts.secondary}
130:
                  onChange={(e) => updateSettings("fonts", { ...settings.fonts, secondary: e.target.value })}
131:
                  placeholder="e.g., Georgia, serif"
132:
                  className="border-2 focus:border-purple-500"
133:
                />
              </div>
134:
             <div className="space-y-2">
135:
136:
                <Label htmlFor="monoFont" className="text-sm font-semibold text-gray-700">
137:
                  Monospace Font
138:
                </Label>
139:
                <Input
140:
                  id="monoFont"
141:
                  value={settings.fonts.mono}
                  onChange={(e) => updateSettings("fonts", { ...settings.fonts, mono: e.target.value })}
142:
143:
                  placeholder="e.g., Courier New, monospace"
144:
                  className="border-2 focus:border-purple-500"
145:
                />
146:
              </div>
147:
            </div>
148:
          </CardContent>
149:
       </Card>
150:
151: }
```

```
■ File: components\admin\sleep-rest-admin.tsx
______
```

```
1: "use client"
2:
3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
4: import { Input } from "@/components/ui/input'
5: import { Label } from "@/components/ui/label"
6: import { Textarea } from "@/components/ui/textarea"
7: import { Button } from "@/components/ui/button"
8: import { Save, RotateCcw } from "lucide-react"
9: import type { SleepAndRest, SleepData } from "@/types/report-types"
10:
11: interface SleepRestAdminProps {
12: sleepAndRest: SleepAndRest
13:
     updateSleepAndRest: (field: keyof SleepAndRest, data: Partial<SleepData>) => void
14: onSave: () => void
15:
     onReset: () => void
16: }
17:
```

```
18: export default function SleepRestAdmin({ sleepAndRest, updateSleepAndRest, onSave, onReset }: SleepRestAdmi
     const renderSleepField = (field: keyof SleepAndRest, data: SleepData, title: string) => (
20:
       <Card key={field} className="border-2 border-indigo-100 bg-indigo-50/30">
21:
          <CardHeader className="pb-3">
            <CardTitle className="text-lg text-indigo-800">{title}</CardTitle>
22:
23:
         </CardHeader>
24:
         <CardContent className="space-y-4">
25:
           <div className="space-v-2">
              <Label className="text-sm font-medium">Genetic Impact</Label>
26:
27:
              <Input.
28:
               value={data.impact}
29:
               onChange={(e) => updateSleepAndRest(field, { impact: e.target.value })}
30:
               placeholder="e.g., DELAYED SLEEP CYCLE"
31:
               className="border-2 focus:border-indigo-500"
32:
             />
33:
           </div>
           <div className="space-v-2">
34:
35:
              <Label className="text-sm font-medium">Intervention Needed</Label>
36:
              <Textarea
37:
               value={data.intervention}
38:
               onChange={(e) => updateSleepAndRest(field, { intervention: e.target.value })}
39:
               rows={3}
40:
               className="border-2 focus:border-indigo-500 text-sm"
               placeholder="e.g., EXERCISE IN THE EVENING AVOID CARBS DURING BREAKFAST"
41:
              />
42:
            </div>
43:
44:
          </CardContent>
45:
        </Card>
46:
    )
47:
48:
     return (
49:
        <Card className="shadow-lg border-0 bg-white">
50:
          <CardHeader className="bg-gradient-to-r from-indigo-500 to-blue-600 text-white rounded-t-lg">
           <CardTitle className="text-2xl">? Sleep & Rest</CardTitle>
52:
           <CardDescription className="text-indigo-100">
53:
             Manage genetic influences on sleep patterns, quality, and stress sensitivity
54:
            </CardDescription>
55:
         </CardHeader>
56:
         <CardContent className="space-y-8 p-8">
57:
            {/* Action Buttons */}
58:
            <div className="flex justify-end gap-2 mb-6">
59:
             <Button onClick={onReset} variant="outline" size="sm">
60:
                <RotateCcw className="h-4 w-4 mr-2" />
61:
               Reset
62:
             </Button>
63:
              <Button onClick={onSave} size="sm">
64:
               <Save className="h-4 w-4 mr-2" />
65:
               Save Changes
66:
              </Rutton>
67:
            </div>
68:
69:
            {/* Sleep & Rest Fields */}
70:
            <div className="grid md:grid-cols-2 lg:grid-cols-2 gap-6">
71:
             {Object.entries(sleepAndRest).map(([key, item]) =>
72:
               renderSleepField(
73:
                 key as keyof SleepAndRest,
74:
                  item as SleepData,
                 \verb|key.replace(/([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase()), |
75:
76:
               ),
             ) }
77:
78:
            </div>
79:
:08
            {/* Section Guidelines */}
            <div className="bg-indigo-50 border-2 border-indigo-200 rounded-lg p-6">
81:
              <h4 className="font-semibold text-indigo-800 mb-2">? Sleep & Rest Guidelines:</h4>
82:
83:
              <div className="text-sm text-indigo-700 space-y-2">
84:
                85:
                  <1i>>
86:
                    <strong>Sleep Cycle:</strong> Genetic influence on circadian rhythms and sleep timing.
87:
                  88:
                  <1i>>
89:
                   <strong>Sleep Apnea:</strong> Genetic predisposition to sleep-disordered breathing.
90:
```

```
91:
                  <1i>>
 92:
                    <strong>Sleep Depth:</strong> Genetic factors affecting the quality and restorative nature
 93:
                  94:
                  <1i>>
                    <strong>Stress Sensitivity:</strong> Genetic tendency to react to stress, impacting sleep.
 95:
 96:
                  97:
                  Understanding these factors can guide personalized approaches to sleep health management.
 98:
                  Sleep is crucial for overall physical and mental well-being.
 99:
100:
              </div>
101:
           </div>
102:
          </CardContent>
103:
        </Card>
104: )
105: }
```

■ File: components\admin\sports-fitness-admin.tsx

```
1: "use client"
2:
3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
4: import { Input } from "@/components/ui/input"
5: import { Label } from "@/components/ui/label"
6: import { Textarea } from "@/components/ui/textarea"
7: import { Button } from "@/components/ui/button"
8: import { Save, RotateCcw } from "lucide-react"
9: import { useState } from "react"
10: import type { SportsAndFitness, ExerciseData } from "@/types/report-types"
11:
12: interface SportsFitnessAdminProps {
13: sportsAndFitness: SportsAndFitness
14: updateSportsAndFitness: (section: keyof SportsAndFitness, field: string, data: Partial<ExerciseData>) =>
15: onSave: () => void
16:
     onReset: () => void
17: }
19: export default function SportsFitnessAdmin({
20: sportsAndFitness,
21:
     updateSportsAndFitness,
22: onSave,
23: onReset,
24: }: SportsFitnessAdminProps) {
25:
     const [activeSection, setActiveSection] = useState<keyof SportsAndFitness>("exerciseType")
26:
27:
     const renderExerciseField = (section: keyof SportsAndFitness, field: string, data: ExerciseData, title: s
28:
      <Card key={field} className="border-2 border-green-100 bg-green-50/30">
         <CardHeader className="pb-3">
29:
30:
            <CardTitle className="text-lg text-green-800">{title}</CardTitle>
31:
         </CardHeader>
32:
         <CardContent className="space-y-4">
33:
           <div className="space-y-2">
34:
             <Label className="text-sm font-medium">Level</Label>
35:
             <Input
36:
               value={data.level}
               onChange={(e) => updateSportsAndFitness(section, field, { level: e.target.value })}
37:
38:
               placeholder="e.g., High Endurance Potential"
39:
               className="border-2 focus:border-green-500"
             />
40:
41:
           </div>
42:
           <div className="space-y-2">
43:
             <Label className="text-sm font-medium">Description</Label>
44:
               value={data.description}
45:
46:
               onChange={(e) => updateSportsAndFitness(section, field, { description: e.target.value })}
47:
48:
               className="border-2 focus:border-green-500 text-sm"
49:
             />
50:
           </div>
51:
          </CardContent>
52:
       </Card>
53:
```

```
54:
 55:
      const getSectionTitle = (section: keyof SportsAndFitness) => {
 56:
       switch (section) {
 57:
         case "exerciseType":
            return "????? Exercise Type Suitability"
 58:
 59:
          case "performance":
 60:
            return "? Performance Factors"
 61:
          default:
 62:
            return section
         }
 63:
      }
 64:
 65:
 66:
      const getSectionIcon = (section: keyof SportsAndFitness) => {
 67:
        switch (section) {
 68:
         case "exerciseType":
 69:
            return "????"
 70:
          case "performance":
 71:
            return "?"
 72:
           default:
 73:
            return "?"
 74:
         }
 75:
      }
 76:
 77:
      return (
        <Card className="shadow-lg border-0 bg-white">
 78:
          <CardHeader className="bg-gradient-to-r from-green-500 to-emerald-600 text-white rounded-t-lg">
 79:
 :08
             <CardTitle className="text-2xl">???? Sports & Fitness</CardTitle>
             <CardDescription className="text-green-100">
 81:
 82:
               Configure exercise type suitability and performance factors
 83:
             </CardDescription>
           </CardHeader>
 84:
 85:
           <CardContent className="space-y-8 p-8">
             {/* Action Buttons */}
 86:
 87:
             <div className="flex justify-between items-center">
               <div className="flex gap-2 flex-wrap">
 88:
 89:
                 {(Object.keys(sportsAndFitness) as Array<keyof SportsAndFitness>).map((section) => (
 90:
                   <Button
 91:
                     key={section}
 92:
                     variant={activeSection === section ? "default" : "outline"}
 93:
                     size="sm"
 94:
                     onClick={() => setActiveSection(section)}
 95:
                     className="flex items-center gap-2"
 96:
 97:
                     <span>{getSectionIcon(section)}</span>
 98:
                     <span className="capitalize">{section.replace(/([A-Z])/g, " $1")}</span>
 99:
                   </Button>
100:
                ))}
101:
               </div>
               <div className="flex gap-2">
102:
103:
                 <Button onClick={onReset} variant="outline" size="sm">
                   <RotateCcw className="h-4 w-4 mr-2" />
104:
105:
                  Reset
106:
                 </Button>
                 <Button onClick={onSave} size="sm">
107:
108:
                   <Save className="h-4 w-4 mr-2" />
109:
                   Save Changes
110:
                 </Button>
111:
               </div>
112:
             </div>
113:
114:
             {/* Section Content */}
115:
             <div className="space-y-6">
116:
              <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-green-200 pb-2">
117:
                 {getSectionTitle(activeSection)}
118:
               </h3>
119:
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
120:
121:
                 {Object.entries(sportsAndFitness[activeSection]).map(([key, item]) =>
122:
                   renderExerciseField(
123:
                     activeSection,
124:
125:
                     item as ExerciseData.
126:
                     key.replace(/([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase()),
```

```
127:
                 ),
128:
               ) }
129:
             </div>
130:
           </div>
131:
132:
           {/* Section Guidelines */}
133:
           <div className="bg-green-50 border-2 border-green-200 rounded-lg p-6">
             <h4 className="font-semibold text-green-800 mb-2">? {getSectionTitle(activeSection)} Guidelines:
134:
             <div className="text-sm text-green-700 space-y-2">
135:
               {activeSection === "exerciseType" && (
136:
                 137:
138:
                   <
139:
                    <strong>Endurance Potential:</strong> Genetic predisposition for long-duration activities
140:
                   141:
                   <1i>>
142:
                    <strong>Power Potential:</strong> Capacity for short, intense bursts of energy.
143:
                   144:
                    <strong>Strength Profile:</strong> Genetic tendency for muscle strength and growth.
145:
146:
147:
                   <
148:
                    <strong>Exercise Time:Cystrong> Optimal time of day for exercise based on circadian rhyth
149:
                   150:
               ) }
151:
               {activeSection === "performance" && (
152:
153:
                 154:
                  <
155:
                    <strong>Endurance Capacity:</strong> Aerobic efficiency and stamina.
156:
                   157:
                   <
158:
                     <strong>Fatigue Resistance:</strong> Ability to resist muscle fatigue during prolonged ac
159:
                   160:
                    <strong>Blood Flow:</strong> Efficiency of blood circulation during exercise.
161:
162:
                   163:
                   <
164:
                    <strong>Oxygen Efficiency (VO2 Max):</strong> Body's ability to use oxygen during intense
165:
                   166:
                   <
167:
                     <strong>Water Loss:</strong> Tendency for fluid and electrolyte loss.
                   168:
169:
170:
                    <strong>Lactate Clearing:</strong> Efficiency in removing lactic acid from muscles.
171:
                   172:
                   <
173:
                    <strong>Recovery Efficiency:</strong> Speed and effectiveness of post-exercise recovery.
174:
                   175:
                   <1i>>
176:
                    <strong>Body Composition:</strong> Genetic predisposition for muscle mass vs. fat accumul
177:
                   178:
179:
                    <strong>Injury Risk:</strong> Genetic susceptibility to various sports-related injuries.
180:
                   181:
                   <1i>>
                    <strong>Achilles Tendon/Ligament/Rupture/Muscle Cramps:
182:
                   183:
184:
                 185:
               ) }
186:
             </div>
187:
           </div>
188:
          </CardContent>
189:
        </Card>
     )
190:
191: }
```

■ File: components\admin\summaries-admin.tsx

```
1: "use client"
2:
3: import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
```

```
4: import { Label } from "@/components/ui/label"
5: import { Textarea } from "@/components/ui/textarea"
6: import { Button } from "@/components/ui/button"
7: import { Save, RotateCcw } from "lucide-react"
8: import type { ReportSummaries } from "@/types/report-types"
10: interface ReportSummariesAdminProps {
11:
    summaries: ReportSummaries
     updateSummaries: (field: keyof ReportSummaries, value: string) => void
12:
13:
     onSave: () => void
    onReset: () => void
14:
15: }
16:
17: export default function ReportSummariesAdmin({
18: summaries.
19: updateSummaries,
20: onSave,
21:
     onReset,
22: }: ReportSummariesAdminProps) {
23: return (
24:
       <Card className="shadow-lg border-0 bg-white">
25:
         <CardHeader className="bg-gradient-to-r from-violet-500 to-purple-600 text-white rounded-t-lg">
26:
           <CardTitle className="text-2xl">? Report Summaries</CardTitle>
27:
           <CardDescription className="text-violet-100">Edit the summary sections for experts</CardDescription
28:
         </CardHeader>
         <CardContent className="space-y-8 p-8">
29:
30:
           {/* Action Buttons */}
31:
           <div className="flex justify-end gap-2 mb-6">
32:
             <Button onClick={onReset} variant="outline" size="sm">
33:
               <RotateCcw className="h-4 w-4 mr-2" />
34:
               Reset
35:
             </Button>
             <Button onClick={onSave} size="sm">
36:
37:
               <Save className="h-4 w-4 mr-2" />
38:
               Save Changes
39:
             </Button>
40:
           </div>
41:
42:
           <div className="grid md:grid-cols-2 gap-8">
43:
             <div className="space-y-3">
44:
               <Label htmlFor="nutrigenomicsSummary" className="text-lg font-semibold text-gray-800">
45:
                 ? Nutrigenomics Summary
46:
               </Label>
47:
               For the nutrigenomics expert
48:
               <Textarea
49:
                 id="nutrigenomicsSummary"
50:
                 value={summaries.nutrigenomicsSummary}
51:
                 onChange={(e) => updateSummaries("nutrigenomicsSummary", e.target.value)}
52:
53:
                 className="border-2 focus:border-violet-500"
54:
                 placeholder="Based on the overall nutrigenomics analysis, provide expert summary for personal
              />
55:
56:
             </div>
57:
             <div className="space-y-3">
58:
               <Label htmlFor="exerciseGenomicsSummary" className="text-lg font-semibold text-gray-800">
59:
                 ???? Exercise Genomics Summary
60:
61:
               For the fitness genomics expert
               <Textarea
62:
63:
                 id="exerciseGenomicsSummary"
64:
                 value={summaries.exerciseGenomicsSummary}
65:
                 onChange={(e) => updateSummaries("exerciseGenomicsSummary", e.target.value)}
66:
                 rows={8}
67:
                 className="border-2 focus:border-violet-500"
68:
                 placeholder="Based on the overall genomics analysis, provide expert summary for personalized
69:
               />
70:
             </div>
71:
           </div>
72:
73:
           <div className="bq-blue-50 border-2 border-blue-200 rounded-lq p-6">
             <h4 className="font-semibold text-blue-800 mb-2">? Expert Summary Guidelines:</h4>
74:
75:
             76:
               ? Provide actionable insights based on genetic analysis
```

```
77:
              < Include specific recommendations for healthcare professionals</li>
78:
              ? Reference key genetic markers and their implications
79:
              <1i>? Suggest monitoring parameters and intervention strategies
80:
              ? Keep language professional yet accessible
81:
            82:
          </div>
83:
        </CardContent>
84:
      </Card>
85:
86: }
```

■ File: components\comprehensive-report-viewer.tsx

```
______
 1: "use client";
 2: import type {
 3:
     ComprehensiveReportData,
 4:
     AllergyData,
 5: } from "@/types/report-types";
 6: import React from "react";
 7: import { Card, CardContent, CardHeader, CardTitle } from "@/components/ui/card";
 8: import { Badge } from "@/components/ui/badge";
 9: import { Separator } from "@/components/ui/separator";
10:
11: interface ComprehensiveReportViewerProps {
12:
     reportData: ComprehensiveReportData;
13: }
15: const SectionTitle = ({ title, icon }: { title: string; icon: string }) => (
16: <div className="w-full mb-8 mt-12 first:mt-0">
17:
       <h2 className="text-2xl sm:text-3xl font-bold text-gray-800 mb-6 flex flex-col sm:flex-row items-start</pre>
         <span className="text-3xl sm:text-4xl">{icon}</span>
18:
         <span className="break-words">{title}</span>
 19:
 20:
       </h2>
 21:
     </div>
 22: );
 24: const SubSectionTitle = ({ title, icon }: { title: string; icon?: string }) => (
 25: <div className="w-full mb-6 mt-8">
 26:
        <h3 className="text-xl sm:text-2xl font-semibold text-gray-700 mb-4 flex flex-col sm:flex-row items-sta</pre>
 27:
         {icon && <span className="text-xl sm:text-2xl">{icon}</span>}
          <span className="break-words">{title}</span>
       </h3>
 29:
 30:
     </div>
 31: );
32:
 33: const DataCard = ({
 34: title,
 35:
      children,
     className = "",
36:
 37: }: {
 38: title: string;
 39: children: React.ReactNode;
 40:
      className?: string;
 41: }) => (
     <Card
 42:
 43:
       className={`border-2 border-gray-200 bg-gray-50/50 shadow-sm h-fit ${className}`}
 44:
 45:
       <CardHeader className="pb-3">
 46:
         <CardTitle className="text-base sm:text-lq font-semibold text-gray-800 break-words">
 47:
            {title}
 48:
          </CardTitle>
 49:
        </CardHeader>
        <CardContent className="text-sm text-gray-700 space-y-2">
 50:
 51:
          {children}
52:
        </CardContent>
 53:
     </Card>
54: );
 55:
 56: export default function ComprehensiveReportViewer({
     reportData.
 57:
 58: }: ComprehensiveReportViewerProps) {
```

```
59:
      const {
        patientInfo,
 60:
 61:
         content,
 62:
        settings,
 63:
        dynamicDietFieldDefinitions,
 64:
        patientDietAnalysisResults,
 65:
        nutritionData,
 66:
        sportsAndFitness,
 67:
         lifestyleConditions,
 68:
        metabolicCore,
 69:
        digestiveHealth,
 70:
        genesAndAddiction,
 71:
        sleepAndRest,
 72:
        allergiesAndSensitivity,
 73:
        geneTestResults.
 74:
        preventiveHealth,
 75:
        familyGeneticImpact,
 76:
         summaries,
 77:
       } = reportData;
 78:
 79:
       const getImpactColor = (impact: string) => {
 :08
 81:
           impact.toLowerCase().includes("high") ||
 82:
           impact.toLowerCase().includes("increased")
 83:
          return "bg-red-100 text-red-800 border-red-300";
 84:
 85:
 86:
         if (
 87:
           impact.toLowerCase().includes("low") ||
 88:
           impact.toLowerCase().includes("reduced")
 89:
         ) {
 90:
           return "bg-green-100 text-green-800 border-green-300";
         }
 91:
 92:
           impact.toLowerCase().includes("normal") ||
 93:
 94:
           impact.toLowerCase().includes("average") ||
           impact.toLowerCase().includes("balanced")
 95:
 96:
         ) {
 97:
          return "bg-blue-100 text-blue-800 border-blue-300";
 98:
         }
 99:
         return "bg-gray-100 text-gray-800 border-gray-300";
100:
101:
102:
       const getStatusColor = (status: "strength" | "improvement") => {
103:
       return status === "strength"
104:
           ? "bg-green-100 text-green-800 border-green-300"
105:
           : "bg-red-100 text-red-800 border-red-300";
106:
107:
108:
       // Helper to group dynamic diet fields by category
109:
       const groupedDietFields = patientDietAnalysisResults.reduce((acc, result) => {
110:
         const fieldDef = dynamicDietFieldDefinitions.find(
111:
          (def) => def.id === result.fieldId
112:
         );
113:
         if (fieldDef) {
          if (!acc[fieldDef.category]) {
114:
             acc[fieldDef.category] = [];
115:
116:
117:
          acc[fieldDef.category].push({ ...result, label: fieldDef.label });
118:
119:
        return acc;
120:
      }, {} as Record<string, (typeof patientDietAnalysisResults)[0] & { label: string }[]>);
121:
122:
123:
        <div className="w-full max-w-6xl mx-auto py-6 sm:py-10 px-4 sm:px-6 bg-white shadow-lg min-h-screen">
124:
           {/* Report Header */}
125:
           <header
126:
             className="text-center mb-8 sm:mb-12 py-6 sm:py-8 rounded-1g px-4"
127:
             style={{ backgroundColor: settings.headerColor, color: "#fff" }}
128:
129:
130:
               className="text-3xl sm:text-4xl lg:text-5xl font-extrabold mb-2 break-words"
131:
               style={{ fontFamily: settings.fonts.primary }}
```

```
132:
133:
             {settings.title}
134:
           </h1>
135:
           <p
             className="text-lg sm:text-xl lg:text-2xl font-light mb-4"
136:
137:
             style={{ fontFamily: settings.fonts.secondary }}
138:
139:
             {settings.subtitle}
140:
           <div className="space-y-2 text-sm sm:text-base lg:text-lg">
141:
             142:
               Patient:{" "}
143:
144:
               <span className="font-semibold break-words">
145:
                 {patientInfo.name}
146:
               </span>
147:
             148:
149:
              Sample Code:{" "}
               <span className="font-mono break-all">
150:
151:
                {patientInfo.sampleCode}
152:
              </span>
153:
             154:
             <p
155:
              className="text-xs sm:text-sm lg:text-base"
               style={{ fontFamily: settings.fonts.secondary }}
156:
157:
158:
               Report Date: {patientInfo.reportDate} | Generated by:{" "}
159:
               {settings.companyName}
160:
             161:
           </div>
162:
         </header>
163:
         {/* Patient Information */}
164:
         <SectionTitle title="Patient Information" icon="?" />
165:
166:
         <div className="grid grid-cols-1 sm:grid-cols-2 gap-4 sm:gap-6 mb-8">
167:
           <DataCard title="Name">
168:
             {patientInfo.name}
169:
           </DataCard>
170:
           <DataCard title="Gender">
171:
             {patientInfo.gender}
172:
           </DataCard>
173:
           <DataCard title="Birth Date">
174:
            {patientInfo.birthDate}
175:
           </DataCard>
176:
           <DataCard title="Sample Code">
177:
             {patientInfo.sampleCode}
178:
           </DataCard>
179:
           <DataCard title="Sample Collection Date">
180:
             {patientInfo.sampleDate}
181:
182:
           <DataCard title="Report Generation Date">
183:
             {patientInfo.reportDate}
184:
           </DataCard>
185:
         </div>
186:
         {/* Authentication Section */}
187:
         <div className="mt-8 mb-8">
188:
           <Separator className="mb-6" />
189:
190:
           <h3 className="text-center font-bold mb-6 text-gray-600 text-lg">
191:
             Report Authentication & Analytics
192:
           </h3>
193:
194:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-6 mb-6">
195:
             <div className="text-center space-y-4">
               196:
197:
                Genomic Data Analytics - Checked & Verified By
198:
               199:
               <div className="flex justify-center">
200:
                 {patientInfo.signature1 ? (
201:
                  <ima
202:
                    src={patientInfo.signature1 || "/placeholder.svg"}
203:
                    alt="Primary Signature"
204:
                    className="max-h-24 sm:max-h-32 w-auto object-contain"
```

```
205:
                />
206:
               ) : (
207:
                 No signature available
               ) }
208:
209:
              </div>
210:
             {patientInfo.checkedBy}
211:
            </div>
212:
213:
            <div className="text-center space-y-4">
             214:
               Scientific Content - Checked & Verified By
215:
216:
             217:
             <div className="flex justify-center">
218:
               {patientInfo.signature2 ? (
219:
                 <ima
220:
                  src={patientInfo.signature2 | | "/placeholder.svg"}
221:
                  alt="Secondary Signature"
222:
                  className="max-h-24 sm:max-h-32 w-auto object-contain"
                />
223:
224:
               ) : (
                 No signature available
225:
226:
               ) }
227:
              </div>
228:
              229:
               {patientInfo.scientificContent}
230:
             231:
            </div>
232:
          </div>
233:
234:
          <DataCard title="Disclaimer" className="mt-6">
235:
            236:
             {patientInfo.disclaimer}
237:
            <a><</a>
238:
          </DataCard>
239:
         </div>
240:
241:
         <Separator className="my-8 sm:my-12" />
242:
243:
        {/* Preface Section */}
244:
         <div className="text-center mb-6">
245:
          <h2 className="text-2xl sm:text-3xl font-bold mb-3 bg-blue-600 text-white py-3 px-4 rounded">
246:
           PREFACE
247:
          </h2>
248:
        </div>
249:
250:
        <div className="space-y-6 sm:space-y-8 mb-8">
251:
          <DataCard title="Welcome Letter Introduction">
252:
            253:
             {content.introduction}
254:
            <q\>
255:
          </DataCard>
256:
257:
          <div className="text-center mb-6">
258:
           <h2 className="text-2xl sm:text-3xl font-bold mb-3 bg-blue-600 text-white py-3 px-4 rounded">
259:
             WELCOME TO THE WORLD OF GENOMICS
           </h2>
260:
          </div>
261:
262:
263:
          {/* Genomics Explanation */}
          <div className="grid grid-cols-1 lg:grid-cols-2 gap-6 mb-8">
264:
265:
            <DataCard title="What is Genomics?">
266:
              267:
               {content.genomicsExplanation}
268:
              </DataCard>
269:
270:
            <div className="flex justify-center items-center">
271:
             <img
272:
               src="/assets/genomics.png"
273:
               alt="What is Genomics Illustration"
               className="w-full max-w-md h-auto object-contain rounded"
274:
275:
             />
276:
            </div>
277:
          </div>
```

```
278:
279:
           {/* Genes & Health Impact */}
280:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-6 mb-8">
281:
             <DataCard title="Genes and Health Impact">
               282:
283:
                {content.genesHealthImpact}
284:
               285:
             </DataCard>
286:
             <div className="flex justify-center items-center">
287:
              <ima
288:
                src="/assets/genes-impact.jpg"
289:
                alt="Genes and Health Impact Illustration"
290:
                className="w-full max-w-md h-auto object-contain rounded"
291:
               />
292:
             </div>
293:
           </div>
294:
295:
           <Separator className="my-8 sm:my-12" />
296:
297:
           <div className="text-center mb-6">
298:
             <h2 className="text-2xl sm:text-3xl font-bold mb-3 bg-blue-600 text-white py-3 px-4 rounded">
299:
               WHAT IS NUTRIGENOMICS
300:
             </h2>
301:
           </div>
302:
           {/* Fundamentals and PRS */}
303:
304:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-6 mb-8">
305:
             <DataCard title="Fundamentals and PRS">
               306:
307:
                 {content.fundamentalsPRS}
308:
               309:
             </DataCard>
             <div className="flex justify-center items-center">
310:
311:
312:
                src="/assets/genomics.png"
313:
                alt="Fundamentals and PRS Illustration"
314:
                className="w-full max-w-md h-auto object-contain rounded"
315:
              />
316:
             </div>
317:
           </div>
318:
319:
           {/* Utility for Doctors */}
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-6 mb-8">
             <DataCard title="Utility for Doctors and Dietitians">
321:
322:
               323:
                {content.utilityDoctors}
324:
               325:
             </DataCard>
326:
             <div className="flex justify-center items-center">
327:
                src="/assets/genomics.png"
328:
329:
                alt="Utility for Doctors and Dietitians Illustration"
330:
                className="w-full max-w-md h-auto object-contain rounded"
331:
               />
332:
             </div>
333:
           </div>
334:
335:
           <Separator className="my-8 sm:my-12" />
336:
337:
           <div className="text-center mb-6">
338:
             <h2 className="text-2xl sm:text-3xl font-bold mb-3 bq-blue-600 text-white py-3 px-4 rounded">
339:
              ABOUT MICROARRAY
340:
             </h2>
341:
           </div>
342:
343:
           {/* Microarray Explanation */}
344:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-6 mb-8">
345:
             <DataCard title="Microarray Explanation">
346:
               347:
                {content.microarrayExplanation}
348:
               349:
             </DataCard>
350:
             <div className="flex justify-center items-center">
```

```
351:
                <ima
352:
                  src="/assets/genomics.png"
353:
                  alt="Microarray Explanation Illustration"
                  className="w-full max-w-md h-auto object-contain rounded"
354:
355:
                />
356:
              </div>
357:
            </div>
358:
359:
            {/* Your Microarray Data */}
            <div className="grid grid-cols-1 lg:grid-cols-2 gap-6 mb-8">
360:
              <DataCard title="Your Microarray Data">
361:
362:
                363:
                  {content.microarrayData}
364:
                365:
              </DataCard>
366:
              <div className="flex justify-center items-center">
367:
                <ima
368:
                  src="/assets/genomics.png"
                  alt="Your Microarray Data Illustration"
369:
370:
                  className="w-full max-w-md h-auto object-contain rounded"
371:
                />
372:
              </div>
373:
            </div>
374:
          </div>
375:
376:
          <Separator className="my-8 sm:my-12" />
377:
          {/* Categories Section */}
378:
379:
          {reportData?.categories?.map((category) => {
380:
            const columns: string[][] = [[], [], []];
381:
            category.parameters.forEach((param, index) => {
382:
              columns[index % 3].push(param);
            });
383:
384:
385:
            return (
386:
              <div key={category.id} className="mb-8 border-b border-gray-300 pb-6">
387:
                <div className="flex flex-col lg:flex-row gap-6">
388:
                  {/* Title and Image Section */}
389:
                  <div className="lg:w-1/4 w-full">
390:
                    <div className="flex flex-col sm:flex-row lq:flex-col items-center gap-4 mb-4 lq:mb-0">
391:
                      <h2 className="text-lg font-bold text-gray-800 uppercase text-center lg:text-left break-w</pre>
392:
                        {category.category}
393:
                      </h2>
394:
                      {category.imageUrl && (
395:
                        <imq
396:
                          src={category.imageUrl || "/placeholder.svg"}
397:
                          alt={category.category}
398:
                          className="w-16 h-16 object-cover rounded-full border flex-shrink-0"
399:
400:
                      ) }
401:
                    </div>
402:
                  </div>
403:
404:
                  {/* Parameters Section */}
405:
                  <div className="lg:w-3/4 w-full">
                    <div className="grid grid-cols-1 sm:grid-cols-2 lg:grid-cols-3 gap-4">
406:
407:
                      {columns.map((col, colIndex) => (
408:
                        409:
                          \{col.map((param, idx) => (
410:
                            <li
411:
                              kev={idx}
412:
                              className="text-gray-800 text-sm break-words"
413:
414:
                              {param}
415:
                            416:
                          ))}
417:
                        418:
                      ))}
419:
                    </div>
420:
                  </div>
421:
                </div>
              </div>
422:
423:
            );
```

```
424:
          })}
425:
426:
          <Separator className="my-8 sm:my-12" />
427:
428:
          {/* Dynamic Diet Analysis */}
429:
          <SectionTitle title="Diet Analysis" icon="?" />
430:
          {Object.keys(groupedDietFields).length === 0 && (
             431:
432:
              No diet analysis results available.
433:
             434:
          {Object.entries(groupedDietFields).map(([category, fields]) => (
435:
436:
             <React.Fragment key={category}>
               <SubSectionTitle title={category} icon="??" />
437:
438:
              <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
439:
                {fields.map((data, index) => (
                  <DataCard key={index} title={data.label}>
440:
441:
                     <div className="space-y-1">
442:
                      >
443:
                        <strong>Score:</strong> {data.score}/10
444:
                      445:
                      >
446:
                        <strong>Level:</strong> {data.level}
447:
                      448:
449:
                        <strong>Recommendation:</strong> {data.recommendation}
450:
                      451:
                    </div>
452:
                  </DataCard>
453:
                ))}
454:
              </div>
455:
             </React.Fragment>
456:
          ))}
457:
458:
          <Separator className="my-8 sm:my-12" />
459:
          {/* Nutrition Data */}
460:
461:
          <SectionTitle title="Nutrition Analysis" icon="?" />
462:
463:
          <SubSectionTitle title="Vitamins" icon="?" />
464:
          <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
465:
             {Object.entries(nutritionData.vitamins).map(([key, data]) => (
466:
               <DataCard
467:
                key={key}
468:
                title={key
469:
                  .replace(/([A-Z])/g, " $1")
                  .replace(/^./, (str) => str.toUpperCase())}
470:
471:
472:
                <div className="space-y-1">
473:
                  >
474:
                    <strong>Score:</strong> {data.score}/10
475:
                  476:
477:
                    <strong>Health Impact:</strong> {data.healthImpact}
478:
479:
                  >
480:
                    <strong>Intake Level:</strong> {data.intakeLevel}
481:
                  482:
                  >
                    <strong>Source:</strong> {data.source}
483:
484:
                  485:
                 </div>
486:
               </DataCard>
487:
            ))}
488:
          </div>
489:
          <SubSectionTitle title="Fatty Acids" icon="?" />
490:
491:
          <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
492:
             {Object.entries(nutritionData.fattyAcids).map(([key, data]) => (
493:
               <DataCard
494:
                key={key}
495:
                title={key
496:
                  .replace(/([A-Z])/g, " $1")
```

```
497:
                   .replace(/^./, (str) => str.toUpperCase())}
498:
499:
                <div className="space-y-1">
500:
                   >
                    <strong>Score:</strong> {data.score}/10
501:
502:
                   503:
504:
                    <strong>Health Impact:</strong> {data.healthImpact}
505:
506:
                   >
507:
                    <strong>Intake Level:</strong> {data.intakeLevel}
508:
                   509:
                   >
                    <strong>Source:</strong> {data.source}
510:
511:
                   < \approx >
512:
                 </div>
513:
              </DataCard>
514:
            ))}
           </div>
515:
516:
           <SubSectionTitle title="Essential Elements" icon="?" />
517:
518:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
519:
             {Object.entries(nutritionData.elements).map(([key, data]) => (
520:
               <DataCard
521:
                key={key}
522:
                title={kev
523:
                  .replace(/([A-Z])/g, " $1")
                   .replace(/^./, (str) => str.toUpperCase())}
524:
525:
526:
                <div className="space-y-1">
527:
528:
                    <strong>Score:</strong> {data.score}/10
529:
                   530:
531:
                    <strong>Health Impact:</strong> {data.healthImpact}
532:
                   533:
                    <strong>Intake Level:</strong> {data.intakeLevel}
534:
535:
                   536:
                   >
537:
                    <strong>Source:</strong> {data.source}
538:
                   </div>
539:
540:
              </DataCard>
541:
            ))}
542:
           </div>
543:
544:
           <SubSectionTitle title="Complex Nutrients" icon="?" />
545:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
546:
             {Object.entries(nutritionData.complexNutrients).map(([key, data]) => (
547:
               <DataCard
548:
                key={key}
549:
                title={key
550:
                  .replace(/([A-Z])/g, " $1")
551:
                   .replace(/^./, (str) => str.toUpperCase())}
552:
553:
                 <div className="space-y-1">
554:
555:
                    <strong>Score:</strong> {data.score}/10
556:
                   557:
                   >
558:
                    <strong>Health Impact:</strong> {data.healthImpact}
559:
                   560:
                   >
                    <strong>Intake Level:</strong> {data.intakeLevel}
561:
562:
                   563:
564:
                    <strong>Source:</strong> {data.source}
565:
                   566:
                </div>
567:
              </DataCard>
568:
            ))}
569:
           </div>
```

```
570:
571:
           <Separator className="my-8 sm:my-12" />
572:
573:
           {/* Sports & Fitness */}
574:
           <SectionTitle title="Sports & Fitness" icon="????" />
575:
576:
           <SubSectionTitle title="Exercise Type Suitability" icon="????" />
577:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
578:
             {Object.entries(sportsAndFitness.exerciseType).map(([key, data]) => (
579:
               <DataCard
580:
                 key={key}
581:
                 title={key
582:
                   .replace(/([A-Z])/g, " $1")
583:
                   .replace(/^./, (str) => str.toUpperCase())}
584:
585:
                 <div className="space-y-1">
586:
                   >
587:
                     <strong>Level:</strong> {data.level}
588:
                   589:
                   >
                     <strong>Description:</strong> {data.description}
590:
591:
                   592:
                 </div>
593:
               </DataCard>
594:
             ))}
595:
           </div>
596:
           <SubSectionTitle title="Performance Factors" icon="?" />
597:
598:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
599:
             {Object.entries(sportsAndFitness.performance).map(([key, data]) => (
600:
               <DataCard
601:
                 key={key}
602:
                 title={key
                   .replace(/([A-Z])/g, " $1")
603:
                   .replace(/^./, (str) => str.toUpperCase())}
604:
605:
606:
                 <div className="space-y-1">
607:
                   >
608:
                     <strong>Level:</strong> {data.level}
609:
                   610:
611:
                     <strong>Description:</strong> {data.description}
612:
                   613:
                 </div>
614:
               </DataCard>
615:
             ))}
616:
           </div>
617:
618:
           <Separator className="my-8 sm:my-12" />
619:
620:
           {/* Lifestyle Conditions */}
           <SectionTitle title="Lifestyle Conditions" icon="?" />
621:
622:
623:
           <SubSectionTitle title="Heart & Vascular Health" icon="??" />
624:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
             {Object.entries(lifestyleConditions.heartVascularHealth).map(
625:
626:
               ([key, data]) => (
627:
                 <DataCard
628:
                   key={key}
629:
                   title={key
630:
                     .replace(/([A-Z])/g, " $1")
631:
                     .replace(/^./, (str) => str.toUpperCase())}
632:
                 >
633:
                   >
                     \verb| <strong>Status: </strong>{ " "}| \\
634:
635:
                     <Badge className={getStatusColor(data.status)}>
636:
                       {data.status}
637:
                     </Badge>
638:
                   639:
                 </DataCard>
640:
               )
641:
             ) }
642:
           </div>
```

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643:
644:
                                 <SubSectionTitle title="Diabesity (Diabetes & Obesity)" icon="?" />
645:
                                 <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
                                        {Object.entries(lifestyleConditions.diabesity).map(([key, data]) => (
646:
647:
                                              <DataCard
648:
                                                   key={key}
649:
                                                    title={key
650:
                                                         .replace(/([A-Z])/g, " $1")
651:
                                                          .replace(/^./, (str) => str.toUpperCase())}
652:
653:
                                                    >
                                                          \verb| <strong>Status: </strong>{" "}| \\
654:
655:
                                                          <Badge className={getStatusColor(data.status)}>
656:
                                                                 {data.status}
657:
                                                          </Badge>
658:
                                                    659:
                                             </DataCard>
660:
                                       ))}
661:
                                 </div>
662:
                                 <SubSectionTitle title="Liver Health" icon="?" />
663:
664:
                                 <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
665:
                                        {Object.entries(lifestyleConditions.liverHealth).map(([key, data]) => (
666:
                                              <DataCard
667:
                                                   key={key}
668:
                                                   title={key
669:
                                                          .replace(/([A-Z])/g, " $1")
                                                           .replace(/^./, (str) => str.toUpperCase())}
670:
671:
672:
                                                   >
673:
                                                          <strong>Status:</strong>{" "}
674:
                                                          <Badge className={getStatusColor(data.status)}>
675:
                                                                {data.status}
676:
                                                          </Badge>
677:
                                                    <q\>
678:
                                              </DataCard>
679:
                                       ))}
680:
                                 </div>
681:
682:
                                 <SubSectionTitle title="Bone Health" icon="?" />
683:
                                 <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
684:
                                        {\tt Object.entries(lifestyleConditions.boneHealth).map(([key, data]) => (lifestyleConditions.boneHealth).map(([key, data]) == (lifestyleConditions.boneHealth).map(([key, data]) == (lifestyleConditions.boneHeal
685:
                                              <DataCard
686:
                                                   key={key}
687:
                                                   title={key
688:
                                                          .replace(/([A-Z])/g, " $1")
689:
                                                          .replace(/^./, (str) => str.toUpperCase())}
690:
691:
                                                   <q>>
692:
                                                          <strong>Status:</strong>{" "}
693:
                                                          <Badge className={getStatusColor(data.status)}>
694:
                                                                {data.status}
695:
                                                          </Badge>
696:
                                                   697:
                                              </DataCard>
                                       ))}
698:
699:
                                 </div>
700:
701:
                                 <SubSectionTitle title="Gut Health" icon="?" />
702:
                                 <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
703:
                                        {Object.entries(lifestyleConditions.gutHealth).map(([key, data]) => (
704:
                                              <DataCard
705:
                                                   key={key}
706:
                                                   title={key
                                                          . \texttt{replace}( / ([A-Z]) / \texttt{g}, \ \texttt{"} \ \$1")
707:
708:
                                                           .replace(/^./, (str) => str.toUpperCase())}
709:
710:
                                                   >
                                                          \adjustant \adjustan
711:
                                                          <Badge className={getStatusColor(data.status)}>
712:
713:
                                                                {data.status}
714:
                                                          </Badge>
715:
```

```
716:
               </DataCard>
717:
             ))}
718:
           </div>
719:
           <SubSectionTitle title="Hormone System" icon="?" />
720:
721:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
722:
             {Object.entries(lifestyleConditions.hormoneSystem).map(
723:
               ([key, data]) => (
724:
                 <DataCard
                   key={key}
725:
726:
                   title={key
                     .replace(/([A-Z])/g, " $1")
727:
728:
                     .replace(/^./, (str) => str.toUpperCase())}
729:
730:
                   <q>>
731:
                     <strong>Status:</strong>{" "}
732:
                     <Badge className={getStatusColor(data.status)}>
733:
                       {data.status}
734:
                     </Badge>
735:
                   736:
                 </DataCard>
737:
738:
             ) }
739:
           </div>
740:
741:
           <Separator className="my-8 sm:my-12" />
742:
           {/* Metabolic Core */}
743:
744:
           <SectionTitle title="Metabolic Core" icon="?" />
745:
           <div className="space-y-6 mb-8">
746:
             {Object.entries(metabolicCore).map(([key, data]) => (
747:
               <Card
748:
                 key={key}
                 className="border-2 border-purple-200 bg-purple-50/50 shadow-sm"
749:
750:
751:
                 <CardHeader className="pb-3">
752:
                   <CardTitle className="text-base sm:text-lg font-semibold text-purple-800 flex flex-col sm:fle
753:
                     <span className="break-words">
754:
                       {key
755:
                         .replace(/([A-Z])/g, " $1")
756:
                         .replace(/^./, (str) => str.toUpperCase())}
757:
758:
                     <Badge className={getImpactColor(data.impact)}>
759:
                       {data.impact}
760:
                     </Badge>
761:
                   </CardTitle>
762:
                 </CardHeader>
763:
                 <CardContent className="text-sm text-gray-700 space-y-2">
764:
765:
                     <strong>Genes:</strong>{ " "}
766:
                     <span className="break-words">{data.genes.join(", ")}</span>
767:
                   768:
769:
                     <strong>Your Genotype:</strong>{" "}
770:
                     <span className="font-mono break-all">{data.genotype}</span>
771:
                   772:
                   >
                     <strong>Advice:</strong>{" "}
773:
                     <span className="break-words">{data.advice}</span>
774:
775:
                   776:
                 </CardContent>
777:
               </Card>
778:
             ))}
779:
           </div>
780:
781:
           <Separator className="my-8 sm:my-12" />
782:
783:
           {/* Digestive Health */}
           <SectionTitle title="Digestive Health" icon="?" />
784:
785:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
786:
             {Object.entries(digestiveHealth).map(([key, data]) => (
787:
               <DataCard
788:
                 key={key}
```

```
789:
                title={key
790:
                   .replace(/([A-Z])/g, " $1")
791:
                   .replace(/^./, (str) => str.toUpperCase())}
792:
                <div className="space-y-1">
793:
794:
                   >
795:
                     <strong>Level:</strong> {data.level}
796:
                   797:
                   >
798:
                    <strong>Description:</strong> {data.description}
799:
                   800:
                </div>
801:
               </DataCard>
802:
            ))}
803:
           </div>
804:
805:
           <Separator className="my-8 sm:my-12" />
806:
          {/* Genes & Addiction */}
807:
808:
          <SectionTitle title="Genes & Addiction" icon="?" />
809:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
810:
             {Object.entries(genesAndAddiction).map(([key, data]) => (
811:
               <DataCard
812:
                key={key}
813:
                title={key
                  .replace(/([A-Z])/g, " $1")
814:
815:
                  .replace(/^./, (str) => str.toUpperCase())}
816:
817:
                <div className="space-y-1">
818:
                   >
819:
                    <strong>Tendency:</strong> {data.tendency}
820:
                   821:
                    <strong>Description:</strong> {data.description}
822:
823:
                  824:
                 </div>
825:
               </DataCard>
            ))}
826:
827:
           </div>
828:
829:
           <Separator className="my-8 sm:my-12" />
830:
831:
          {/* Sleep & Rest */}
           <SectionTitle title="Sleep & Rest" icon="?" />
832:
833:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
834:
             {Object.entries(sleepAndRest).map(([key, data]) => (
835:
              <DataCard
836:
                key={key}
837:
                title={kev
838:
                   .replace(/([A-Z])/g, " $1")
839:
                   .replace(/^./, (str) => str.toUpperCase())}
840:
841:
                <div className="space-y-1">
842:
                   >
843:
                    <strong>Impact:</strong> {data.impact}
844:
                   845:
                   >
                    <strong>Intervention:</strong> {data.intervention}
846:
847:
                  848:
                </div>
849:
              </DataCard>
850:
            ))}
851:
          </div>
852:
853:
           <Separator className="my-8 sm:my-12" />
854:
           {/* Allergies & Sensitivity */}
855:
856:
           <SectionTitle title="Allergies & Sensitivity" icon="?" />
857:
           <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
            {Object.entries(allergiesAndSensitivity)
858:
859:
              .filter(([key]) => key !== "generalAdvice")
860:
              .map(([key, data]) => (
861:
                <DataCard
```

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862:
                key={key}
863:
                title={kev
864:
                  .replace(/([A-Z])/g, " $1")
865:
                  .replace(/^./, (str) => str.toUpperCase())}
866:
867:
                >
868:
                 <strong>Tendency:</strong> {(data as AllergyData).tendency}
869:
                870:
              </DataCard>
            ))}
871:
872:
         </div>
873:
874:
         <DataCard title="General Advice" className="mt-6">
           275:
876:
            {allergiesAndSensitivity.generalAdvice}
877:
           878:
         </DataCard>
879:
880:
         <Separator className="my-8 sm:my-12" />
881:
882:
         {/* Preventive Health */}
883:
         <SectionTitle title="Preventive Health" icon="?" />
224:
         <SubSectionTitle title="Diagnostic Tests" icon="?" />
885:
886:
         <div className="grid grid-cols-1 lg:grid-cols-2 gap-4 sm:gap-6 mb-8">
887:
           <DataCard title="Half-Yearly Tests">
888:
            889:
              {preventiveHealth.diagnosticTests.halfYearly.map((test, index) => (
890:
                891:
                 {test}
892:
                893:
              ))}
894:
            </DataCard>
895:
896:
           <DataCard title="Yearly Tests">
            292:
              {preventiveHealth.diagnosticTests.yearly.map((test, index) => (
899:
                900:
                 {test}
901:
                902:
              ))}
903:
            904:
           </DataCard>
905:
         </div>
906:
907:
         <SubSectionTitle title="Nutritional Supplements" icon="?" />
908:
         <DataCard title="Recommended Supplements">
909:
           910:
            {preventiveHealth.nutritionalSupplements.map((supplement, index) => (
911:
              912:
                \{ \verb"supplement.supplement"\} \{ \verb""" \}
913:
                {supplement.needed ? "(Needed)" : "(Optional)"}
914:
              915:
            ))}
916:
           917:
         </DataCard>
918:
919:
         <Separator className="my-8 sm:my-12" />
920:
         {/* Family Genetic Impact */}
921:
922:
         <SectionTitle title="Family Genetic Impact" icon="???????" />
923:
         <div className="space-y-6 mb-8">
924:
           {familyGeneticImpact.length === 0 && (
925:
            926:
              No family genetic impacts recorded.
927:
            928:
           ) }
929:
           {familyGeneticImpact.map((impact, index) => (
930:
            <Card
931:
              kev={index}
932:
              className="border-2 border-blue-200 bg-blue-50/50 shadow-sm"
933:
934:
              <CardHeader className="pb-3">
```

```
935:
                 <CardTitle className="text-base sm:text-lg font-semibold text-blue-800">
936:
                   Genetic Impact #{index + 1}
937:
                 </CardTitle>
938:
                </CardHeader>
               <CardContent className="text-sm text-gray-700 space-y-2">
939:
940:
                   \label{eq:cong} $$ \operatorname{strong}(" ") $$
941:
942:
                   <span className="break-words">{impact.gene}</span>
943:
944:
                 >
                   <strong>Normal/Common Alleles:</strong>{" "}
945:
                   <span className="break-words">{impact.normalAlleles}</span>
946:
947:
                 948:
949:
                   <strong>Your Result:</strong>{" "}
950:
                   <span className="font-mono break-all">{impact.yourResult}</span>
951:
                 952:
                  <q>>
                   <strong>Health Impact:</strong>{" "}
953:
954:
                   <span className="break-words">{impact.healthImpact}</span>
955:
                 956:
                </CardContent>
957:
             </Card>
958:
           ))}
959:
          </div>
960:
961:
          <Separator className="my-8 sm:my-12" />
962:
         {/* Gene Test Results */}
963:
964:
          <SectionTitle title="Gene Test Results" icon="?" />
965:
          <div className="space-y-6 mb-8">
966:
            {geneTestResults.length === 0 && (
967:
              968:
               No gene test results recorded.
969:
             970:
            ) }
971:
            {geneTestResults.map((result, index) => (
972:
             <Card
973:
               key={index}
974:
               className="border-2 border-indigo-200 bg-indigo-50/50 shadow-sm"
975:
976:
               <CardHeader className="pb-3">
977:
                 <CardTitle className="text-base sm:text-lg font-semibold text-indigo-800 break-words">
978:
                   Gene: {result.geneName}
979:
                 </CardTitle>
980:
               </CardHeader>
981:
               <CardContent className="text-sm text-gray-700 space-y-2">
982:
                   <strong>Variation:</strong>{ " "}
983:
984:
                   <span className="font-mono break-all">{result.variation}</span>
985:
                 986:
                 >
                   <strong>Result:</strong>{" "}
987:
988:
                   <span className="font-mono break-all">{result.result}</span>
989:
                </CardContent>
990:
991:
              </Card>
992:
            ))}
993:
          </div>
994:
995:
          <Separator className="my-8 sm:my-12" />
996:
          {/* Summaries */}
997:
998:
          <SectionTitle title="Summaries for Experts" icon="?" />
          <div className="space-y-6 mb-8">
999:
1000:
             <DataCard title="Nutrigenomics Summary">
1001:
               1002:
                 {summaries.nutrigenomicsSummary}
1003:
               1004:
             </DataCard>
1005:
             <DataCard title="Exercise Genomics Summary">
1006:
               1007:
                 {summaries.exerciseGenomicsSummary}
```

```
1008:
              1009:
             </DataCard>
1010:
           </div>
1011:
           {/* Report Footer */}
1012:
1013:
          <footer className="text-center mt-8 sm:mt-12 py-6 text-gray-600 text-xs sm:text-sm border-t border-g</pre>
1014:
             <div className="space-y-2">
1015:
              <q>>
1016:
                © {new Date().getFullYear()} {settings.companyName}. All rights
1017:
                reserved.
1018:
               1019:
1020:
                Report Authentication: {patientInfo.reportAuth}
1021:
              1022:
             </div>
1023:
           </footer>
1024:
        </div>
     );
1025:
1026: }
```

■ File: components\report-viewer.tsx

```
______
 1: // "use client";
 2:
 3: // import { Card, CardContent, CardHeader, CardTitle } from "@/components/ui/card";
 4: // import { Badge } from "@/components/ui/badge";
 5: // import { Progress } from "@/components/ui/progress";
 6: // import type { ComprehensiveReportData } from "@/types/report-types";
 8: // interface ReportViewerProps {
 9: //
       data: ComprehensiveReportData;
10: // mode: "preview" | "pdf";
11: // }
12:
13: // export function ReportViewer({ data, mode }: ReportViewerProps) {
14: //
       const getScoreColor = (score: number) => {
15: //
         if (score >= data.settings.highThreshold) return data.settings.colors.high;
16: //
         if (score >= 4) return data.settings.colors.medium;
17: //
         return data.settings.colors.low;
18: //
       };
19:
20: //
        const getScoreLevel = (score: number) => {
21: //
        if (score >= data.settings.highThreshold) return "High";
22: //
          if (score >= 4) return "Medium";
23: //
         return "Low";
24: //
        };
25:
26: //
        return (
27: //
         <div className={`space-y-8 ${mode === "pdf" ? "print:space-y-4" : ""}`}>
28: //
           {/* Page 1: Cover Page */}
29: //
            <div className="bg-white p-8 rounded-lg shadow-sm page-break">
30: //
             <div
31: //
               className="text-center py-16 rounded-lg text-white"
               style={{ backgroundColor: data.settings.headerColor }}
32: //
33: //
34: //
               <hl className="text-4xl font-bold mb-4">{data.settings.title}</hl>
35: //
               {data.settings.quote}
36: //
               <div className="bg-white/20 p-6 rounded-lg inline-block">
37: //
                 <h2 className="text-2xl font-semibold mb-2">
                   {data.patientInfo.name}
38: //
39: //
                 </h2>
                 40: //
41: //
                  Sample Code: {data.patientInfo.sampleCode}
42: //
                 43: //
44: //
                  Report Date: {data.patientInfo.reportDate}
45: //
                 46: //
47: //
                   {data.patientInfo.disclaimer}
48: //
                 49: //
               </div>
```

```
50: //
             </div>
 51:
             {/* Page 3: Welcome Letter */}
 52: //
 53: //
             <div className="bg-white p-8 rounded-lg shadow-sm page-break">
 54: //
              <h2
 55: //
                className="text-2xl font-bold mb-6"
 56: //
                style={{ color: data.settings.headerColor }}
 57: //
 58: //
                ? Welcome to Your Genomics Journey
 59: //
              </h2>
 60: //
               <div className="prose max-w-none">
 61: //
                 62: //
                   {data.content.introduction}
 63: //
                 64: //
                 <div className="bg-blue-50 p-6 rounded-lg">
 65: //
                   <h3 className="text-lg font-semibold mb-3">What is Genomics?</h3>
                   66: //
 67: //
                    {data.content.genomicsExplanation}
 68: //
                   69: //
                 </div>
 70: //
               </div>
 71: //
             </div>
 72:
 73: //
             {/* Page 4-8: Diet Analysis */}
 74: //
             <div className="bg-white p-8 rounded-lg shadow-sm page-break">
              <h2
 75: //
 76: //
                className="text-2xl font-bold mb-6"
 77: //
                style={{ color: data.settings.headerColor }}
 78: //
 79: //
                ?? DIET ANALYSIS
 80: //
               </h2>
 81:
 82: //
               {/* Macronutrients Section */}
 83: //
               <div className="mb-8">
                 <h3 className="text-xl font-semibold mb-4">Macronutrients</h3>
 84: //
 85: //
                 <div className="grid md:grid-cols-3 gap-4">
 86: //
                   {Object.entries(data.dietAnalysis.macronutrients).map(
 87: //
                    ([key, item]) => (
 88: //
                       <Card key={key}>
 89: //
                        <CardHeader className="pb-3">
 90: //
                          <CardTitle className="text-sm">
 91: //
 92: //
                              .replace(/([A-Z])/g, " $1")
 93: //
                              .replace(/^./, (str) => str.toUpperCase())}
 94: //
                          </CardTitle>
 95: //
                        </CardHeader>
 96: //
                        <CardContent>
 97: //
                          <div className="flex items-center justify-between mb-2">
                            <span className="text-2xl font-bold">
 98: //
 99: //
                              {item.score}/10
100: //
                            </span>
101: //
                            <Badge
102: //
                              style={{ backgroundColor: getScoreColor(item.score) }}
103: //
                              className="text-white"
104: //
105: //
                              {getScoreLevel(item.score)}
106: //
                            </Badge>
107: //
                          </div>
                          <Progress value={item.score * 10} className="mb-3" />
108: //
109: //
                          110: //
                            {item.recommendation}
111: //
                          112: //
                        </CardContent>
113: //
                       </Card>
114: //
115: //
                   ) }
116: //
                 </div>
117: //
               </div>
118:
119: //
               {/* Food Sensitivities Section */}
120: //
               <div className="mb-8">
                <h3 className="text-xl font-semibold mb-4">Food Sensitivities</h3>
121: //
122: //
                 <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-4">
```

```
123: //
                   {Object.entries(data.dietAnalysis.foodSensitivities).map(
                     ([key, item]) => (
124: //
125: //
                       <Card key={key}>
126: //
                         <CardHeader className="pb-3">
127: //
                           <CardTitle className="text-sm">
128: //
129: //
                               .replace(/([A-Z])/g, " $1")
130: //
                               .replace(/^./, (str) => str.toUpperCase())}
                           </CardTitle>
131: //
132: //
                         </CardHeader>
133: //
                         <CardContent>
134: //
                           <div className="flex items-center justify-between mb-2">
135: //
                             <span className="text-xl font-bold">{item.score}/10</span>
136: //
137: //
                               style={{ backgroundColor: getScoreColor(item.score) }}
138: //
                               className="text-white"
139: //
140: //
                               {item.level || getScoreLevel(item.score)}
141: //
                             </Badge>
142: //
                           <Progress value={item.score * 10} className="mb-3" />
143: //
144: //
                           145: //
                             {item.recommendation}
146: //
                           147: //
                         </CardContent>
148: //
                       </Card>
149: //
                   ) }
150: //
151: //
                 </div>
152: //
               </div>
153: //
             </div>
154:
155: //
             {/* Page 9-15: Nutrition Data */}
156: //
             <div className="bg-white p-8 rounded-lg shadow-sm page-break">
157: //
              <h2
158: //
                 className="text-2xl font-bold mb-6"
159: //
                 style={{ color: data.settings.headerColor }}
160: //
161: //
                 ? NUTRITION ANALYSIS
162: //
               </h2>
163:
164: //
               {/* Vitamins Section */}
165: //
               <div className="mb-8">
166: //
                 <h3 className="text-xl font-semibold mb-4">Vitamins</h3>
167: //
                 <div className="grid md:grid-cols-2 lg:grid-cols-4 gap-4">
168: //
                   {Object.entries(data.nutritionData.vitamins).map(([key, item]) => (
169: //
                     <Card kev={kev}>
170: //
                       <CardHeader className="pb-3">
171: //
                         <CardTitle className="text-sm">
172: //
173: //
                             . \texttt{replace}(/([A-Z])/g, " \$1")
174: //
                             .replace(/^./, (str) => str.toUpperCase())}
175: //
                         </CardTitle>
176: //
                       </CardHeader>
177: //
                       <CardContent>
178: //
                         <div className="flex items-center justify-between mb-2">
179: //
                           <span className="text-lg font-bold">{item.score}/10</span>
180: //
181: //
                             style={{ backgroundColor: getScoreColor(item.score) }}
182: //
                             className="text-white text-xs"
183: //
184: //
                             {item.level || getScoreLevel(item.score)}
185: //
                           </Badge>
186: //
                         <Progress value={item.score * 10} className="mb-2" />
187: //
188: //
                         189: //
                           {item.healthImpact}
190: //
                         191: //
                         {item.recommendation}
192: //
                       </CardContent>
193: //
                     </Card>
194: //
                   ))}
195: //
                 </div>
```

```
196: //
               </div>
197:
198: //
               {/* Elements Section */}
199: //
               <div className="mb-8">
200: //
                <h3 className="text-xl font-semibold mb-4">Essential Elements</h3>
201: //
                 <div className="grid md:grid-cols-2 lg:grid-cols-4 gap-4">
202: //
                   {Object.entries(data.nutritionData.elements).map(([key, item]) => (
203: //
                     <Card key={key}>
                       <CardHeader className="pb-3">
204: //
205: //
                         <CardTitle className="text-sm capitalize">{key}</CardTitle>
206: //
                       </CardHeader>
207: //
                       <CardContent>
208: //
                         <div className="flex items-center justify-between mb-2">
209: //
                           <span className="text-lg font-bold">{item.score}/10</span>
210: //
211: //
                             style={{ backgroundColor: getScoreColor(item.score) }}
212: //
                             className="text-white text-xs"
213: //
214: //
                             {item.level || getScoreLevel(item.score)}
215: //
                           </Badge>
216: //
                         </div>
217: //
                         <Progress value={item.score * 10} className="mb-2" />
218: //
                         219: //
                          {item.healthImpact}
220: //
                         {item.recommendation}
221: //
222: //
                       </CardContent>
223: //
                     </Card>
224: //
                   ))}
225: //
                 </div>
               </div>
226: //
227: //
             </div>
228:
             {/* Page 16-22: Sports & Fitness */}
229: //
             <div className="bg-white p-8 rounded-lg shadow-sm page-break">
230: //
231: //
               <h2
                 className="text-2xl font-bold mb-6"
232: //
233: //
                 style={{ color: data.settings.headerColor }}
234: //
235: //
                 ???? SPORTS & FITNESS
236: //
               </h2>
237:
238: //
               {/* Exercise Type Section */}
239: //
               <div className="mb-8">
240: //
                <h3 className="text-xl font-semibold mb-4">
241: //
                   Exercise Type Suitability
242: //
                 </h3>
243: //
                 <div className="grid md:grid-cols-2 gap-4">
244: //
                   {Object.entries(data.sportsAndFitness.exerciseType).map(
                     ([key, item]) => (
245: //
246: //
                       <Card key={key}>
247: //
                         <CardHeader className="pb-3">
248: //
                           <CardTitle className="text-sm">
249: //
                             {key
250: //
                               .replace(/([A-Z])/g, " $1")
251: //
                               .replace(/^./, (str) => str.toUpperCase())}
252: //
                           </CardTitle>
253: //
                         </CardHeader>
254: //
                         <CardContent>
                           <div className="flex items-center justify-between mb-2">
255: //
256: //
                             <span className="text-xl font-bold">{item.score}/10</span>
257: //
258: //
                               style={{ backgroundColor: getScoreColor(item.score) }}
259: //
                               className="text-white"
260: //
261: //
                               {item.level || getScoreLevel(item.score)}
262: //
                             </Badge>
263: //
                           </div>
                           <Progress value={item.score * 10} className="mb-3" />
264: //
265: //
                           {item.description}
266: //
                         </CardContent>
267: //
                       </Card>
268: //
```

```
269: //
                   ) }
270: //
                  </div>
271: //
               </div>
272:
               {/* Performance Section */}
273: //
274: //
               <div className="mb-8">
275: //
                  <h3 className="text-xl font-semibold mb-4">Performance Factors</h3>
276: //
                  <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-4">
                    {Object.entries(data.sportsAndFitness.performance).map(
277: //
                     ([key, item]) => (
278: //
279: //
                        <Card key={key}>
280: //
                          <CardHeader className="pb-3">
281: //
                            <CardTitle className="text-sm">
282: //
                              {kev
283: //
                                .replace(/([A-Z])/g, " $1")
284: //
                                .replace(/^./, (str) => str.toUpperCase())}
285: //
                            </CardTitle>
286: //
                          </CardHeader>
287: //
                          <CardContent>
288: //
                            <div className="flex items-center justify-between mb-2">
289: //
                             <span className="text-lg font-bold">{item.score}/10</span>
290: //
291: //
                                style={{ backgroundColor: getScoreColor(item.score) }}
292: //
                               className="text-white text-xs"
293: //
294: //
                                {item.level || getScoreLevel(item.score)}
295: //
                              </Badge>
296: //
                            </div>
                            <Progress value={item.score * 10} className="mb-2" />
297: //
298: //
                            {item.description}
299: //
                          </CardContent>
                        </Card>
300: //
301: //
                     )
302: //
                   ) }
303: //
                 </div>
304: //
               </div>
305:
306: //
               {/* Injury Management Section */}
307: //
                <div className="mb-8">
308: //
                  <h3 className="text-xl font-semibold mb-4">Injury Risk Management</h3>
309: //
                  <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-4">
310: //
                    {Object.entries(data.sportsAndFitness.injuryManagement).map(
311: //
                      ([key, item]) => (
312: //
                        <Card key={key}>
313: //
                          <CardHeader className="pb-3">
314: //
                            <CardTitle className="text-sm">
315: //
                              {kev
316: //
                                .replace(/([A-Z])/g, " $1")
317: //
                                .replace(/^./, (str) => str.toUpperCase())}
                            </CardTitle>
318: //
319: //
                          </CardHeader>
320: //
                          <CardContent>
321: //
                            <div className="flex items-center justify-between mb-2">
322: //
                             <span className="text-lg font-bold">{item.score}/10</span>
323: //
                                style={{ backgroundColor: getScoreColor(item.score) }}
324: //
325: //
                               className="text-white text-xs"
326: //
327: //
                                {item.level || getScoreLevel(item.score)}
328: //
                             </Badge>
329: //
                            </div>
330: //
                            <Progress value={item.score * 10} className="mb-2" />
331: //
                            {item.description}
332: //
                          </CardContent>
333: //
                        </Card>
334: //
335: //
                   ) }
336: //
                 </div>
337: //
               </div>
338: //
             </div>
339:
              {/* Continue with remaining sections... */}
340: //
341: //
              {/* This is a comprehensive start - I'll need to continue with all remaining sections to reach 56
```

```
342:
343: //
           <style jsx global>{`
344: //
             @media print {
345: //
               .page-break {
346: //
                  page-break-after: always;
347: //
348: //
               .no-print {
349: //
                  display: none;
350: //
                }
             }
351: //
            `}</style>
352: //
353: //
          </div>
354: // );
355: // }
```

■ File: components\theme-provider.tsx

```
1: "use client"
2: import { ThemeProvider as NextThemesProvider } from "next-themes"
3: import type { ThemeProviderProps } from "next-themes"
4:
5: export function ThemeProvider({ children, ...props }: ThemeProviderProps) {
6: return <NextThemesProvider {...props}>{children}</NextThemesProvider>
7: }
```

■ File: components\ui\accordion.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as AccordionPrimitive from "@radix-ui/react-accordion"
 5: import { ChevronDown } from "lucide-react"
 6:
 7: import { cn } from "@/lib/utils"
 8:
 9: const Accordion = AccordionPrimitive.Root
10:
11: const AccordionItem = React.forwardRef<</pre>
12: React.ElementRef<typeof AccordionPrimitive.Item>,
13: React.ComponentPropsWithoutRef<typeof AccordionPrimitive.Item>
14: >(({ className, ...props }, ref) => (
 15:
     <AccordionPrimitive.Item
16:
      ref={ref}
17:
       className={cn("border-b", className)}
18:
       \{\dotsprops\}
19:
20: ))
 21: AccordionItem.displayName = "AccordionItem"
 23: const AccordionTrigger = React.forwardRef<</pre>
 24: React.ElementRef<typeof AccordionPrimitive.Trigger>,
 25: React.ComponentPropsWithoutRef<typeof AccordionPrimitive.Trigger>
 26: >(({ className, children, ...props }, ref) => (
 27:
     <AccordionPrimitive.Header className="flex">
 28:
       <AccordionPrimitive.Trigger</pre>
 29:
        ref={ref}
 30:
         className={cn(
 31:
            "flex flex-1 items-center justify-between py-4 font-medium transition-all hover:underline [&[data-s
 32:
            className
         ) }
 33:
34:
         {...props}
 35:
36:
          {children}
 37:
          <ChevronDown className="h-4 w-4 shrink-0 transition-transform duration-200" />
38:
        </AccordionPrimitive.Trigger>
39: </AccordionPrimitive.Header>
 40: ))
 41: AccordionTrigger.displayName = AccordionPrimitive.Trigger.displayName
 42:
```

```
43: const AccordionContent = React.forwardRef<
44: React.ElementRef<typeof AccordionPrimitive.Content>,
45: React.ComponentPropsWithoutRef<typeof AccordionPrimitive.Content>
46: >(({ className, children, ...props }, ref) => (
47:
    <AccordionPrimitive.Content
48:
      ref={ref}
49:
      className="overflow-hidden text-sm transition-all data-[state=closed]:animate-accordion-up data-[state=
50:
       \{\dotsprops\}
51:
       <div className={cn("pb-4 pt-0", className)}>{children}</div>
52:
    </AccordionPrimitive.Content>
54: ))
55:
56: AccordionContent.displayName = AccordionPrimitive.Content.displayName
57:
58: export { Accordion, AccordionItem, AccordionTrigger, AccordionContent }
```

■ File: components\ui\alert-dialog.tsx

52:

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as AlertDialogPrimitive from "@radix-ui/react-alert-dialog"
 5:
 6: import { cn } from "@/lib/utils"
 7: import { buttonVariants } from "@/components/ui/button"
 9: const AlertDialog = AlertDialogPrimitive.Root
10:
11: const AlertDialogTrigger = AlertDialogPrimitive.Trigger
12:
13: const AlertDialogPortal = AlertDialogPrimitive.Portal
14:
15: const AlertDialogOverlay = React.forwardRef<</pre>
16: React.ElementRef<typeof AlertDialogPrimitive.Overlay>,
17: React.ComponentPropsWithoutRef<typeof AlertDialogPrimitive.Overlay>
18: >(({ className, ...props }, ref) => (
19:
     <AlertDialogPrimitive.Overlay</pre>
 20:
       className={cn(
         "fixed inset-0 z-50 bg-black/80 data-[state=open]:animate-in data-[state=closed]:animate-out data-[s
21:
          className
 23:
       ) }
 24:
        {...props}
 25:
        ref={ref}
 26:
 27: ))
 28: AlertDialogOverlay.displayName = AlertDialogPrimitive.Overlay.displayName
 29:
 30: const AlertDialogContent = React.forwardRef<</pre>
 31: React.ElementRef<typeof AlertDialogPrimitive.Content>,
 32: React.ComponentPropsWithoutRef<typeof AlertDialogPrimitive.Content>
 33: >(({ className, ...props }, ref) => (
 34:
      <AlertDialogPortal>
35:
       <AlertDialogOverlay />
 36:
       <AlertDialogPrimitive.Content</pre>
37:
        ref={ref}
 38:
         className={cn(
            "fixed left-[50%] top-[50%] z-50 grid w-full max-w-lg translate-x-[-50%] translate-y-[-50%] gap-4 b
39:
 40:
            className
 41:
          ) }
 42:
          {...props}
 43:
 44:
     </AlertDialogPortal>
 45: ))
46: AlertDialogContent.displayName = AlertDialogPrimitive.Content.displayName
 48: const AlertDialogHeader = ({
 49: className,
      ...props
 51: }: React.HTMLAttributes<HTMLDivElement>) => (
```

```
53:
       className={cn(
 54:
           "flex flex-col space-y-2 text-center sm:text-left",
 55:
           className
 56:
        ) }
 57:
         {...props}
 58: />
 59: )
 60: AlertDialogHeader.displayName = "AlertDialogHeader"
 61:
 62: const AlertDialogFooter = ({
 63: className,
 64:
      ...props
 65: }: React.HTMLAttributes<HTMLDivElement>) => (
 66:
      <div
 67:
       className={cn(
 68:
         "flex flex-col-reverse sm:flex-row sm:justify-end sm:space-x-2",
 69:
          className
 70:
        ) }
 71:
        {...props}
 72: />
 73: )
 74: AlertDialogFooter.displayName = "AlertDialogFooter"
 75:
 76: const AlertDialogTitle = React.forwardRef<
 77: React.ElementRef<typeof AlertDialogPrimitive.Title>,
 78: React.ComponentPropsWithoutRef<typeof AlertDialogPrimitive.Title>
 79: >(({ className, ...props }, ref) => (
 :08
     <AlertDialogPrimitive.Title</pre>
       ref={ref}
 82:
       className={cn("text-lg font-semibold", className)}
 83:
        {...props}
 84: />
 85: ))
 86: AlertDialogTitle.displayName = AlertDialogPrimitive.Title.displayName
 88: const AlertDialogDescription = React.forwardRef<
 89: React.ElementRef<typeof AlertDialogPrimitive.Description>,
 90: React.ComponentPropsWithoutRef<typeof AlertDialogPrimitive.Description>
 91: >(({ className, ...props }, ref) => (
 92:
      <AlertDialogPrimitive.Description</pre>
 93:
       ref={ref}
 94:
        className={cn("text-sm text-muted-foreground", className)}
 95:
       {...props}
 96: />
 97: ))
 98: AlertDialogDescription.displayName =
 99: AlertDialogPrimitive.Description.displayName
100:
101: const AlertDialogAction = React.forwardRef<</pre>
102: React.ElementRef<typeof AlertDialogPrimitive.Action>,
103: React.ComponentPropsWithoutRef<typeof AlertDialogPrimitive.Action>
104: >(({ className, ...props }, ref) => (
105: <AlertDialogPrimitive.Action
       ref={ref}
106:
107:
        className={cn(buttonVariants(), className)}
108:
         {...props}
109: />
110: ))
111: AlertDialogAction.displayName = AlertDialogPrimitive.Action.displayName
112:
113: const AlertDialogCancel = React.forwardRef<
114: React.ElementRef<typeof AlertDialogPrimitive.Cancel>,
115:
      React.ComponentPropsWithoutRef<typeof AlertDialogPrimitive.Cancel>
116: >(({ className, ...props }, ref) => (
117:
     <AlertDialogPrimitive.Cancel</pre>
118:
       ref={ref}
119:
       className={cn(
        buttonVariants({ variant: "outline" }),
120:
121:
          "mt-2 sm:mt-0",
122:
         className
        ) }
123:
124:
        {...props}
125:
```

```
126: ))
127: AlertDialogCancel.displayName = AlertDialogPrimitive.Cancel.displayName
128:
129: export {
130: AlertDialog,
131: AlertDialogPortal,
132: AlertDialogOverlay,
133: AlertDialogTrigger,
134:
      AlertDialogContent,
135: AlertDialogHeader,
136: AlertDialogFooter,
137: AlertDialogTitle,
138: AlertDialogDescription,139: AlertDialogAction,
140: AlertDialogCancel,
141: }
```

■ File: components\ui\alert.tsx

```
______
 1: import * as React from "react"
 2: import { cva, type VariantProps } from "class-variance-authority"
 3:
 4: import { cn } from "@/lib/utils"
 5:
 6: const alertVariants = cva(
 7: "relative w-full rounded-lg border p-4 [&>svg~*]:pl-7 [&>svg+div]:translate-y-[-3px] [&>svg]:absolute [&>
 8:
 9:
        variants: {
10:
         variant: {
11:
           default: "bg-background text-foreground",
12:
           destructive:
              "border-destructive/50 text-destructive dark:border-destructive [&>svg]:text-destructive",
         },
14:
15:
        },
16:
       defaultVariants: {
17:
         variant: "default",
18:
19:
     }
20: )
21:
 22: const Alert = React.forwardRef<
23: HTMLDivElement,
     React.HTMLAttributes<HTMLDivElement> & VariantProps<typeof alertVariants>
 25: >(({ className, variant, ...props }, ref) => (
26:
    <div
 27:
      ref={ref}
 28:
       role="alert"
 29:
       className={cn(alertVariants({ variant }), className)}
30:
        {...props}
31: />
32: ))
33: Alert.displayName = "Alert"
 34:
35: const AlertTitle = React.forwardRef<</pre>
 36: HTMLParagraphElement,
37: React.HTMLAttributes<HTMLHeadingElement>
 38: >(({ className, ...props }, ref) => (
39: <h5
 40:
      ref={ref}
 41:
      className={cn("mb-1 font-medium leading-none tracking-tight", className)}
 42:
        {...props}
 43:
 44: ))
 45: AlertTitle.displayName = "AlertTitle"
46:
 47: const AlertDescription = React.forwardRef<
 48: HTMLParagraphElement,
 49: React.HTMLAttributes<HTMLParagraphElement>
 50: >(({ className, ...props }, ref) => (
 51:
     <div
 52:
       ref={ref}
```

```
53: className={cn("text-sm [&_p]:leading-relaxed", className)}
54: {...props}
55: />
56: ))
57: AlertDescription.displayName = "AlertDescription"
58:
59: export { Alert, AlertTitle, AlertDescription }
```

■ File: components\ui\aspect-ratio.tsx

```
1: "use client"
2:
3: import * as AspectRatioPrimitive from "@radix-ui/react-aspect-ratio"
4:
5: const AspectRatio = AspectRatioPrimitive.Root
6:
7: export { AspectRatio }
```

■ File: components\ui\avatar.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as AvatarPrimitive from "@radix-ui/react-avatar"
 6: import { cn } from "@/lib/utils"
 7:
 8: const Avatar = React.forwardRef<
 9: React.ElementRef<typeof AvatarPrimitive.Root>,
 10: React.ComponentPropsWithoutRef<typeof AvatarPrimitive.Root>
11: >(({ className, ...props }, ref) => (
12:
     <AvatarPrimitive.Root
13:
       ref={ref}
14:
      className={cn(
15:
       "relative flex h-10 w-10 shrink-0 overflow-hidden rounded-full",
16:
         className
17:
       ) }
      \{\dots props\}
18:
19: />
20: ))
 21: Avatar.displayName = AvatarPrimitive.Root.displayName
 22:
23: const AvatarImage = React.forwardRef<
 24: React.ElementRef<typeof AvatarPrimitive.Image>,
 25: React.ComponentPropsWithoutRef<typeof AvatarPrimitive.Image>
 26: >(({ className, ...props }, ref) => (
27: <AvatarPrimitive.Image
      ref={ref}
 29:
      className={cn("aspect-square h-full w-full", className)}
 30:
      {...props}
 31: />
32: ))
 33: AvatarImage.displayName = AvatarPrimitive.Image.displayName
 34:
 35: const AvatarFallback = React.forwardRef<
 36: React.ElementRef<typeof AvatarPrimitive.Fallback>,
 37: React.ComponentPropsWithoutRef<typeof AvatarPrimitive.Fallback>
 38: >(({ className, ...props }, ref) => (
 39:
     <AvatarPrimitive.Fallback
 40:
       ref={ref}
 41:
       className={cn(
 42:
        "flex h-full w-full items-center justify-center rounded-full bg-muted",
 43:
         className
 44:
       ) }
        {...props}
45:
46: />
 47: ))
 48: AvatarFallback.displayName = AvatarPrimitive.Fallback.displayName
 49:
```

■ File: components\ui\badge.tsx

```
______
 1: import * as React from "react"
 2: import { cva, type VariantProps } from "class-variance-authority"
 3:
 4: import { cn } from "@/lib/utils"
 5:
 6: const badgeVariants = cva(
 7:
      "inline-flex items-center rounded-full border px-2.5 py-0.5 text-xs font-semibold transition-colors focus
 Q:
 9:
       variants: {
10:
         variant: {
           default:
11:
 12:
             "border-transparent bg-primary text-primary-foreground hover:bg-primary/80",
13:
           secondary:
14:
             "border-transparent bg-secondary text-secondary-foreground hover:bg-secondary/80",
15:
           destructive:
16:
             "border-transparent bg-destructive text-destructive-foreground hover:bg-destructive/80",
17:
           outline: "text-foreground",
18:
        },
 19:
 20:
       defaultVariants: {
 21:
         variant: "default",
22:
 23: }
24: )
 25:
 26: export interface BadgeProps
 27: extends React.HTMLAttributes<HTMLDivElement>,
       VariantProps<typeof badgeVariants> {}
 29:
 30: function Badge({ className, variant, ...props }: BadgeProps) {
 31:
    return (
32:
       <div className={cn(badgeVariants({ variant }), className)} {...props} />
33: )
 34: }
35:
36: export { Badge, badgeVariants }
```

■ File: components\ui\breadcrumb.tsx

```
______
 1: import * as React from "react"
 2: import { Slot } from "@radix-ui/react-slot"
 3: import { ChevronRight, MoreHorizontal } from "lucide-react"
 4:
 5: import { cn } from "@/lib/utils"
 6:
 7: const Breadcrumb = React.forwardRef<
 8:
     HTMLElement,
 9: React.ComponentPropsWithoutRef<"nav"> & {
10:
       separator?: React.ReactNode
11:
12: >(({ ...props }, ref) => <nav ref={ref} aria-label="breadcrumb" {...props} />)
13: Breadcrumb.displayName = "Breadcrumb"
15: const BreadcrumbList = React.forwardRef<</pre>
16: HTMLOListElement,
17:
     React.ComponentPropsWithoutRef<"ol">
18: >(({ className, ...props }, ref) => (
19:
    <ol
20:
      ref={ref}
      className={cn(
21:
22:
         "flex flex-wrap items-center gap-1.5 break-words text-sm text-muted-foreground sm:gap-2.5",
23:
         className
24:
       ) }
25:
       {...props}
26:
```

```
27: ))
28: BreadcrumbList.displayName = "BreadcrumbList"
29:
30: const BreadcrumbItem = React.forwardRef<</pre>
31: HTMLLIElement,
32: React.ComponentPropsWithoutRef<"li">
33: >(({ className, ...props }, ref) => (
34: <li
35:
      ref={ref}
      className={cn("inline-flex items-center gap-1.5", className)}
36:
37:
       {...props}
38:
    />
39: ))
40: BreadcrumbItem.displayName = "BreadcrumbItem"
41:
42: const BreadcrumbLink = React.forwardRef<
43: HTMLAnchorElement,
44:
     React.ComponentPropsWithoutRef<"a">> & {
      asChild?: boolean
45:
47: >(({ asChild, className, ...props }, ref) => {
48:
    const Comp = asChild ? Slot : "a"
49:
50: return (
51:
     <Comp
52:
        ref={ref}
        className={cn("transition-colors hover:text-foreground", className)}
53:
54:
         {...props}
56: )
57: })
58: BreadcrumbLink.displayName = "BreadcrumbLink"
59:
60: const BreadcrumbPage = React.forwardRef<
61: HTMLSpanElement,
     React.ComponentPropsWithoutRef<"span">
63: >(({ className, ...props }, ref) => (
64: <span
65: ref={ref}
      role="link"
66:
67:
       aria-disabled="true"
68:
      aria-current="page"
      className={cn("font-normal text-foreground", className)}
70:
      {...props}
71:
     />
72: ))
73: BreadcrumbPage.displayName = "BreadcrumbPage"
74:
75: const BreadcrumbSeparator = ({
76: children,
77: className,
78: ...props
79: }: React.ComponentProps<"li">) => (
:08
    <li
81:
      role="presentation"
      aria-hidden="true"
82:
      className = \{cn("[\&>svg]:w-3.5 [\&>svg]:h-3.5", className)\}
83:
84:
       {...props}
85:
      {children ?? <ChevronRight />}
86:
87: 
88: )
89: BreadcrumbSeparator.displayName = "BreadcrumbSeparator"
90:
91: const BreadcrumbEllipsis = ({
92: className,
93:
     ...props
94: }: React.ComponentProps<"span">) => (
95:
    <span
96:
      role="presentation"
97:
      aria-hidden="true"
98:
      className={cn("flex h-9 w-9 items-center justify-center", className)}
99:
       {...props}
```

```
100: >
101:
        <MoreHorizontal className="h-4 w-4" />
        <span className="sr-only">More</span>
102:
103:
104: )
105: BreadcrumbEllipsis.displayName = "BreadcrumbElipssis"
106:
107: export {
108: Breadcrumb,
109: BreadcrumbList,
110: BreadcrumbItem,
111: BreadcrumbLink,
112:
      BreadcrumbPage,
113: BreadcrumbSeparator,
114: BreadcrumbEllipsis,
115: }
```

■ File: components\ui\button.tsx

```
______
 1: import * as React from "react"
 2: import { Slot } from "@radix-ui/react-slot"
 3: import { cva, type VariantProps } from "class-variance-authority"
 4:
 5: import { cn } from "@/lib/utils"
 7: const buttonVariants = cva(
 8: "inline-flex items-center justify-center gap-2 whitespace-nowrap rounded-md text-sm font-medium ring-offs
 9:
10:
       variants: {
11:
          variant: {
           default: "bg-primary text-primary-foreground hover:bg-primary/90",
12:
            destructive:
             "bg-destructive text-destructive-foreground hover:bg-destructive/90",
14:
15:
           outline:
             "border border-input bg-background hover:bg-accent hover:text-accent-foreground",
16:
17:
            secondary:
18:
             "bg-secondary text-secondary-foreground hover:bg-secondary/80",
19:
            ghost: "hover:bg-accent hover:text-accent-foreground",
 20:
            link: "text-primary underline-offset-4 hover:underline",
         },
21:
 22:
        size: {
           default: "h-10 px-4 py-2",
23:
 24:
            sm: "h-9 rounded-md px-3",
25:
            lg: "h-11 rounded-md px-8",
26:
            icon: "h-10 w-10",
 27:
         },
 28:
        },
 29:
       defaultVariants: {
        variant: "default",
30:
         size: "default",
32:
        },
 33:
     }
 34: )
35:
 36: export interface ButtonProps
 37: extends React.ButtonHTMLAttributes<HTMLButtonElement>,
 38:
       VariantProps<typeof buttonVariants> {
39:
      asChild?: boolean
40: }
 41:
 42: const Button = React.forwardRef<HTMLButtonElement, ButtonProps>(
 43:
      ({ className, variant, size, asChild = false, ...props }, ref) => {
       const Comp = asChild ? Slot : "button"
44:
 45:
       return (
46:
 47:
            className={cn(buttonVariants({ variant, size, className }))}
48:
            ref={ref}
            {...props}
 49:
 50:
 51:
        )
 52:
      }
```

```
53: )
54: Button.displayName = "Button"
55:
56: export { Button, buttonVariants }
```

■ File: components\ui\calendar.tsx

```
-----
 1: "use client"
 2:
 3: import * as React from "react"
 4: import { ChevronLeft, ChevronRight } from "lucide-react"
 5: import { DayPicker } from "react-day-picker"
 7: import { cn } from "@/lib/utils"
 8: import { buttonVariants } from "@/components/ui/button"
10: export type CalendarProps = React.ComponentProps<typeof DayPicker>
12: function Calendar({
13:
     className,
14:
     classNames,
15: showOutsideDays = true,
      ...props
17: }: CalendarProps) {
18:
     return (
19:
       <DayPicker
         showOutsideDays={showOutsideDays}
21:
          className={cn("p-3", className)}
22:
          classNames={{
23:
            months: "flex flex-col sm:flex-row space-y-4 sm:space-x-4 sm:space-y-0",
            month: "space-y-4",
24:
           caption: "flex justify-center pt-1 relative items-center",
25:
26:
            caption_label: "text-sm font-medium",
27:
            nav: "space-x-1 flex items-center",
28:
            nav_button: cn(
29:
             buttonVariants({ variant: "outline" }),
30:
              "h-7 w-7 bg-transparent p-0 opacity-50 hover:opacity-100"
31:
            ),
32:
            nav_button_previous: "absolute left-1",
33:
            nav_button_next: "absolute right-1",
34:
            table: "w-full border-collapse space-y-1",
35:
            head_row: "flex",
36:
            head_cell:
37:
             "text-muted-foreground rounded-md w-9 font-normal text-[0.8rem]",
38:
            row: "flex w-full mt-2",
39:
            cell: "h-9 w-9 text-center text-sm p-0 relative [&:has([aria-selected].day-range-end)]:rounded-r-md
40:
            dav: cn(
41:
             buttonVariants({ variant: "ghost" }),
              "h-9 w-9 p-0 font-normal aria-selected:opacity-100"
42:
43:
            ),
44:
            day_range_end: "day-range-end",
45:
            day selected:
46:
              "bg-primary text-primary-foreground hover:bg-primary hover:text-primary-foreground focus:bg-prima
            day_today: "bg-accent text-accent-foreground",
47:
48:
49:
              "day-outside text-muted-foreground aria-selected:bg-accent/50 aria-selected:text-muted-foreground
50:
            day_disabled: "text-muted-foreground opacity-50",
51:
            day_range_middle:
52:
              "aria-selected:bq-accent aria-selected:text-accent-foreground",
53:
            day_hidden: "invisible",
54:
            ...classNames,
55:
56:
          components={{
57:
            IconLeft: ({ ...props }) => <ChevronLeft className="h-4 w-4" />,
58:
            IconRight: ({ ...props }) => <ChevronRight className="h-4 w-4" />,
59:
          }}
60:
          {...props}
61:
        />
62:
63: }
64: Calendar.displayName = "Calendar"
```

```
65:
66: export { Calendar }
```

■ File: components\ui\card.tsx

```
______
 1: import * as React from "react"
 3: import { cn } from "@/lib/utils"
 4:
 5: const Card = React.forwardRef<
     HTMLDivElement,
 7: React.HTMLAttributes<HTMLDivElement>
 8: >(({ className, ...props }, ref) => (
 9: <div
10:
       ref={ref}
      className={cn(
 11:
         "rounded-lg border bg-card text-card-foreground shadow-sm",
12:
         className
14:
      ) }
15:
       {...props}
16: />
17: ))
18: Card.displayName = "Card"
19:
 20: const CardHeader = React.forwardRef<
21: HTMLDivElement,
22: React.HTMLAttributes<HTMLDivElement>
23: >(({ className, ...props }, ref) => (
 24:
     <div
 25:
       ref={ref}
       className={cn("flex flex-col space-y-1.5 p-6", className)}
 26:
 27:
        {...props}
     />
 28:
 29: ))
30: CardHeader.displayName = "CardHeader"
32: const CardTitle = React.forwardRef<</pre>
33: HTMLDivElement,
34: React.HTMLAttril
     React.HTMLAttributes<HTMLDivElement>
35: >(({ className, ...props }, ref) => (
 36: <div
37:
      ref={ref}
      className={cn(
 38:
 39:
         "text-2xl font-semibold leading-none tracking-tight",
40:
         className
 41:
      ) }
 42:
        {...props}
43:
44: ))
45: CardTitle.displayName = "CardTitle"
46:
 47: const CardDescription = React.forwardRef<
 48: HTMLDivElement,
 49: React.HTMLAttributes<HTMLDivElement>
 50: >(({ className, ...props }, ref) => (
51:
     <div
 52:
       ref={ref}
        className={cn("text-sm text-muted-foreground", className)}
53:
       {...props}
 55:
 56: ))
57: CardDescription.displayName = "CardDescription"
58:
 59: const CardContent = React.forwardRef<</pre>
 60: HTMLDivElement,
     React.HTMLAttributes<HTMLDivElement>
 62: >(({ className, ...props }, ref) => (
 63: <div ref={ref} className={cn("p-6 pt-0", className)} {...props} />
 64: ))
 65: CardContent.displayName = "CardContent"
 66:
```

```
67: const CardFooter = React.forwardRef<
68: HTMLDivElement,
69: React.HTMLAttributes<HTMLDivElement>
70: >(({ className, ...props }, ref) => (
71: <div
72:
      ref={ref}
      className={cn("flex items-center p-6 pt-0", className)}
73:
74:
      {...props}
75:
76: ))
77: CardFooter.displayName = "CardFooter"
78:
79: export { Card, CardHeader, CardFooter, CardTitle, CardDescription, CardContent }
```

■ File: components\ui\carousel.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import useEmblaCarousel, {
 5: type UseEmblaCarouselType,
 6: } from "embla-carousel-react"
 7: import { ArrowLeft, ArrowRight } from "lucide-react"
 8:
 9: import { cn } from "@/lib/utils"
10: import { Button } from "@/components/ui/button"
12: type CarouselApi = UseEmblaCarouselType[1]
13: type UseCarouselParameters = Parameters<typeof useEmblaCarousel>
 14: type CarouselOptions = UseCarouselParameters[0]
15: type CarouselPlugin = UseCarouselParameters[1]
17: type CarouselProps = {
18: opts?: CarouselOptions
19:
     plugins?: CarouselPlugin
 20: orientation?: "horizontal" | "vertical"
 21: setApi?: (api: CarouselApi) => void
 22: }
23:
 24: type CarouselContextProps = {
 25: carouselRef: ReturnType<typeof useEmblaCarousel>[0]
 26: api: ReturnType<typeof useEmblaCarousel>[1]
27: scrollPrev: () => void
28: scrollNext: () => void
 29: canScrollPrev: boolean
 30: canScrollNext: boolean
 31: } & CarouselProps
32:
33: const CarouselContext = React.createContext<CarouselContextProps | null>(null)
 35: function useCarousel() {
 36: const context = React.useContext(CarouselContext)
 37:
38: if (!context) {
 39:
      throw new Error("useCarousel must be used within a <Carousel />")
 40:
 41:
42:
      return context
43: }
 44:
 45: const Carousel = React.forwardRef<
 46: HTMLDivElement,
 47: React.HTMLAttributes<HTMLDivElement> & CarouselProps
 48: >(
 49:
      {
 50:
         orientation = "horizontal",
51:
 52:
         opts,
 53:
        setApi,
 54:
        plugins,
 55:
          className,
```

```
56:
          children,
 57:
           ...props
 58:
         },
 59:
        ref
 60:
      ) => {
 61:
         const [carouselRef, api] = useEmblaCarousel(
 62:
 63:
            ...opts,
 64:
            axis: orientation === "horizontal" ? "x" : "y",
 65:
 66:
          plugins
 67:
         )
 68:
         const [canScrollPrev, setCanScrollPrev] = React.useState(false)
 69:
         const [canScrollNext, setCanScrollNext] = React.useState(false)
 70:
 71:
         const onSelect = React.useCallback((api: CarouselApi) => {
 72:
          if (!api) {
 73:
            return
 74:
           }
 75:
 76:
          setCanScrollPrev(api.canScrollPrev())
 77:
          setCanScrollNext(api.canScrollNext())
 78:
         }, [])
 79:
 :08
         const scrollPrev = React.useCallback(() => {
 81:
         api?.scrollPrev()
 82:
         }, [api])
 83:
        const scrollNext = React.useCallback(() => {
 84:
 85:
         api?.scrollNext()
 86:
         }, [api])
 87:
         const handleKeyDown = React.useCallback(
 88:
 89:
           (event: React.KeyboardEvent<HTMLDivElement>) => {
 90:
            if (event.key === "ArrowLeft") {
 91:
              event.preventDefault()
 92:
               scrollPrev()
            } else if (event.key === "ArrowRight") {
 93:
 94:
               event.preventDefault()
 95:
               scrollNext()
 96:
          },
 97:
 98:
          [scrollPrev, scrollNext]
 99:
         )
100:
101:
         React.useEffect(() => {
102:
         if (!api || !setApi) {
103:
            return
104:
105:
106:
          setApi(api)
107:
        }, [api, setApi])
108:
109:
        React.useEffect(() => {
110:
          if (!api) {
111:
            return
112:
113:
114:
          onSelect(api)
          api.on("reInit", onSelect)
115:
          api.on("select", onSelect)
116:
117:
118:
          return () => {
119:
            api?.off("select", onSelect)
120:
121:
        }, [api, onSelect])
122:
123:
        return (
124:
          <CarouselContext.Provider</pre>
125:
            value={{
126:
              carouselRef,
127:
               api: api,
128:
               opts,
```

```
129:
                              orientation:
130:
                                  orientation | | (opts?.axis === "y" ? "vertical" : "horizontal"),
131:
                              scrollPrev,
132:
                              scrollNext,
133:
                              canScrollPrev,
134:
                              canScrollNext,
                        }}
135:
136:
                   >
137:
                          <div
                              ref={ref}
138:
139:
                            onKeyDownCapture={handleKeyDown}
                            className={cn("relative", className)}
140:
                            role="region"
141:
142:
                              aria-roledescription="carousel"
143:
                              \{\dots props\}
144:
145:
                              {children}
146:
                           </div>
                      </CarouselContext.Provider>
147:
148:
               )
149: }
150: )
151: Carousel.displayName = "Carousel"
153: const CarouselContent = React.forwardRef<</pre>
154: HTMLDivElement,
             React.HTMLAttributes<HTMLDivElement>
156: >(({ className, ...props }, ref) => {
157: const { carouselRef, orientation } = useCarousel()
158:
159:
             return (
160:
               <div ref={carouselRef} className="overflow-hidden">
161:
                    <div
                        ref={ref}
163:
                        className={cn(
164:
                              "flex",
                              orientation === "horizontal" ? "-ml-4" : "-mt-4 flex-col",
165:
166:
                              className
167:
                          ) }
168:
                          \{\dots props\}
                     />
169:
170:
                </div>
171: )
172: })
173: CarouselContent.displayName = "CarouselContent"
174:
175: const CarouselItem = React.forwardRef<
176: HTMLDivElement,
177: React.HTMLAttributes<HTMLDivElement>
178: >(({ className, ...props }, ref) => {
179: const { orientation } = useCarousel()
181: return (
182:
              <div
183:
                     ref={ref}
                     role="group"
184:
185:
                   aria-roledescription="slide"
186:
                   className=\{cn(
187:
                          "min-w-0 shrink-0 grow-0 basis-full",
                          orientation === "horizontal" ? "pl-4" : "pt-4",
188:
189:
                         className
190:
                    ) }
191:
                      {...props}
192:
           )
193:
194: })
195: CarouselItem.displayName = "CarouselItem"
196:
197: const CarouselPrevious = React.forwardRef<
198: HTMLButtonElement,
199: React.ComponentProps<typeof Button>
200: >((\{ className, variant = "outline", size = "icon", ...props \}, ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props \}, ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props \}, ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props \}, ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props \}, ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props ], ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props ], ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props ], ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props ], ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props ], ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props ], ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props ], ref) => \{ ((\{ className, variant = "outline", size = "icon", ...props ], ref) => \{ ((\{ className, variant = "outline", size = "icon", size = "icon", ...props ], ref) => \{ ((\{ className, variant = "outline", size = "icon", size 
           const { orientation, scrollPrev, canScrollPrev } = useCarousel()
```

```
202:
203:
     return (
204:
      <Button
205:
         ref={ref}
         variant={variant}
206:
207:
         size={size}
208:
        className={cn(
209:
            "absolute h-8 w-8 rounded-full",
210:
           orientation === "horizontal"
             ? "-left-12 top-1/2 -translate-y-1/2"
211:
212:
              : "-top-12 left-1/2 -translate-x-1/2 rotate-90",
213:
            className
214:
          ) }
        disabled={!canScrollPrev}
215:
         onClick={scrollPrev}
216:
217:
         {...props}
218:
219:
          <ArrowLeft className="h-4 w-4" />
          <span className="sr-only">Previous slide</span>
220:
        </Button>
222:
     )
223: })
224: CarouselPrevious.displayName = "CarouselPrevious"
226: const CarouselNext = React.forwardRef<
227: HTMLButtonElement,
      React.ComponentProps<typeof Button>
229: >(({ className, variant = "outline", size = "icon", ...props }, ref) => {
230: const { orientation, scrollNext, canScrollNext } = useCarousel()
231:
232:
      return (
      <Button
233:
234:
         ref={ref}
         variant={variant}
235:
236:
         size={size}
         className={cn(
237:
238:
            "absolute h-8 w-8 rounded-full",
           orientation === "horizontal"
239:
240:
             ? "-right-12 top-1/2 -translate-y-1/2"
241:
              : "-bottom-12 left-1/2 -translate-x-1/2 rotate-90",
242:
           className
         ) }
243:
244:
        disabled={!canScrollNext}
245:
        onClick={scrollNext}
246:
         {...props}
247:
248:
          <ArrowRight className="h-4 w-4" />
249:
          <span className="sr-only">Next slide</span>
250:
        </Button>
251:
252: })
253: CarouselNext.displayName = "CarouselNext"
254:
255: export {
256: type CarouselApi,
257: Carousel,
258: CarouselContent,
259: CarouselItem,
260:
      CarouselPrevious,
261: CarouselNext,
262: }
```

■ File: components\ui\chart.tsx

```
1: "use client"
2:
3: import * as React from "react"
4: import * as RechartsPrimitive from "recharts"
5:
6: import { cn } from "@/lib/utils"
7:
```

```
8: // Format: { THEME_NAME: CSS_SELECTOR }
9: const THEMES = { light: "", dark: ".dark" } as const
10:
11: export type ChartConfig = {
12: [k in string]: {
13:
      label?: React.ReactNode
14:
      icon?: React.ComponentType
    } & (
15:
16:
     | { color?: string; theme?: never }
17:
        | { color?: never; theme: Record<keyof typeof THEMES, string> }
18:
19: }
20:
21: type ChartContextProps = {
22: config: ChartConfig
23: }
24:
25: const ChartContext = React.createContext<ChartContextProps | null>(null)
26:
27: function useChart() {
28: const context = React.useContext(ChartContext)
29:
30:
    if (!context) {
      throw new Error("useChart must be used within a <ChartContainer />")
31:
32:
33:
34:
     return context
35: }
37: const ChartContainer = React.forwardRef<</pre>
38: HTMLDivElement,
39:
     React.ComponentProps<"div"> & {
40:
     config: ChartConfig
      children: React.ComponentProps<
42:
        typeof RechartsPrimitive.ResponsiveContainer
43:
       >["children"]
44: }
45: >(({ id, className, children, config, ...props }, ref) => {
46: const uniqueId = React.useId()
     const chartId = `chart-${id || uniqueId.replace(/:/g, "")}`
47:
48:
49:
    return (
      <ChartContext.Provider value={{ config }}>
51:
         <div
52:
           data-chart={chartId}
53:
           ref={ref}
54:
           className={cn(
55:
             "flex aspect-video justify-center text-xs [&_.recharts-cartesian-axis-tick_text]:fill-muted-foreg
56:
             className
57:
           ) }
58:
           {...props}
59:
60:
           <ChartStyle id={chartId} config={config} />
61:
           <RechartsPrimitive.ResponsiveContainer>
62:
             {children}
63:
           </RechartsPrimitive.ResponsiveContainer>
64:
          </div>
65:
        </ChartContext.Provider>
66:
67: })
68: ChartContainer.displayName = "Chart"
70: const ChartStyle = ({ id, config }: { id: string; config: ChartConfig }) => {
71:
     const colorConfig = Object.entries(config).filter(
       ([_, config]) => config.theme || config.color
72:
73:
74:
75:
     if (!colorConfig.length) {
76:
      return null
77:
78:
79:
     return (
:08
       <style
```

```
81:
           dangerouslySetInnerHTML={{
 82:
             __html: Object.entries(THEMES)
 83:
               .map(
 84:
                 ([theme, prefix]) => `
 85: ${prefix} [data-chart=${id}] {
 86: ${colorConfig
 87: .map(([key, itemConfig]) \Rightarrow {
 88:
       const color =
 89:
           itemConfig.theme?.[theme as keyof typeof itemConfig.theme] ||
 90:
          itemConfig.color
        return color ? ` --color-${key}: ${color};`: null
 91:
 92:
      })
      .join("\n")}
 93:
 94: }
 95: `
 96:
 97:
               .join("\n"),
 98:
           }}
 99:
        />
100:
101: }
102:
103: const ChartTooltip = RechartsPrimitive.Tooltip
105: const ChartTooltipContent = React.forwardRef<</pre>
106: HTMLDivElement,
      React.ComponentProps<typeof RechartsPrimitive.Tooltip> &
108:
       React.ComponentProps<"div"> & {
         hideLabel?: boolean
110:
         hideIndicator?: boolean
111:
          indicator?: "line" | "dot" | "dashed"
112:
          nameKey?: string
113:
          labelKey?: string
114:
        }
115: >(
116:
      (
117:
118:
          active,
119:
         payload,
         className,
120:
121:
          indicator = "dot",
         hideLabel = false,
122:
123:
         hideIndicator = false,
124:
          label,
125:
           labelFormatter,
126:
           labelClassName,
127:
         formatter,
128:
         color,
         nameKey,
129:
130:
          labelKey,
131:
        },
132:
        ref
133: ) => {
134:
        const { config } = useChart()
135:
         const tooltipLabel = React.useMemo(() => {
136:
137:
         if (hideLabel | !payload?.length) {
138:
            return null
139:
140:
141:
          const [item] = payload
          const key = `${labelKey || item.dataKey || item.name || "value"}`
142:
143:
           const itemConfig = getPayloadConfigFromPayload(config, item, key)
144:
           const value =
            !labelKey && typeof label === "string"
145:
               ? config[label as keyof typeof config]?.label || label
147:
               : itemConfig?.label
148:
149:
           if (labelFormatter) {
150:
            return (
151:
               <div className={cn("font-medium", labelClassName)}>
152:
                {labelFormatter(value, payload)}
153:
               </div>
```

```
154:
             )
155:
156:
157:
           if (!value) {
158:
            return null
159:
160:
161:
           return <div className={cn("font-medium", labelClassName)}>{value}</div>
162:
         },[
163:
           label.
164:
           labelFormatter,
165:
          payload,
166:
           hideLabel,
167:
           labelClassName,
168:
          config.
169:
           labelKey,
170:
         1)
171:
         if (!active || !payload?.length) {
172:
173:
          return null
174:
175:
176:
         const nestLabel = payload.length === 1 && indicator !== "dot"
177:
178:
        return (
179:
           <div
180:
             ref={ref}
181:
             className={cn(
               "grid min-w-[8rem] items-start gap-1.5 rounded-lg border border-border/50 bg-background px-2.5 py
182:
183:
184:
             ) }
185:
             {!nestLabel ? tooltipLabel : null}
186:
             <div className="grid gap-1.5">
188:
               {payload.map((item, index) => {
189:
                 const key = `${nameKey || item.name || item.dataKey || "value"}`
190:
                 const itemConfig = getPayloadConfigFromPayload(config, item, key)
191:
                 const indicatorColor = color || item.payload.fill || item.color
192:
193:
                 return (
194:
                   <div
195:
                     key={item.dataKey}
                     className={cn(
                        "flex w-full flex-wrap items-stretch gap-2 [&>svg]:h-2.5 [&>svg]:w-2.5 [&>svg]:text-muted
197:
198:
                        indicator === "dot" && "items-center"
199:
                     ) }
200:
201:
                      {formatter && item?.value !== undefined && item.name ? (
202:
                       formatter(item.value, item.name, item, index, item.payload)
203:
                      ) : (
204:
                        <>
                          {itemConfig?.icon ? (
205:
206:
                            <itemConfig.icon />
207:
                          ) : (
208:
                            !hideIndicator && (
209:
                              <div
210:
                                className={cn(
211:
                                  "shrink-0 rounded-[2px] border-[--color-border] bg-[--color-bg]",
212:
                                    "h-2.5 w-2.5": indicator === "dot",
213:
214:
                                    "w-1": indicator === "line",
215:
                                    "w-0 border-[1.5px] border-dashed bg-transparent":
216:
                                      indicator === "dashed",
217:
                                    "my-0.5": nestLabel && indicator === "dashed",
                                  }
218:
219:
                                ) }
220:
                                style={
221:
                                  {
                                    "--color-bg": indicatorColor,
222:
223:
                                    "--color-border": indicatorColor,
224:
                                  } as React.CSSProperties
225:
                                }
226:
```

```
227:
                            )
228:
                          ) }
229:
                          <div
230:
                            className={cn(
                              "flex flex-1 justify-between leading-none",
231:
                             nestLabel ? "items-end" : "items-center"
232:
233:
                           ) }
234:
235:
                            <div className="grid gap-1.5">
                              {nestLabel ? tooltipLabel : null}
236:
237:
                             <span className="text-muted-foreground">
238:
                                {itemConfig?.label || item.name}
239:
                              </span>
240:
                            </div>
                            {item.value && (
241:
242:
                              <span className="font-mono font-medium tabular-nums text-foreground">
243:
                                {item.value.toLocaleString()}
244:
                              </span>
                           ) }
245:
246:
                          </div>
247:
                       </>
248:
                     ) }
249:
                   </div>
250:
                 )
251:
               })}
252:
             </div>
253:
           </div>
254:
        )
     }
256: )
257: ChartTooltipContent.displayName = "ChartTooltip"
259: const ChartLegend = RechartsPrimitive.Legend
261: const ChartLegendContent = React.forwardRef<</pre>
262: HTMLDivElement,
263:
      React.ComponentProps<"div"> &
       Pick<RechartsPrimitive.LegendProps, "payload" | "verticalAlign"> & {
265:
          hideIcon?: boolean
          nameKey?: string
266:
267:
268: >(
269:
270:
         { className, hideIcon = false, payload, verticalAlign = "bottom", nameKey },
271:
        ref
272:
      ) => {
273:
        const { config } = useChart()
274:
275:
         if (!payload?.length) {
276:
          return null
277:
         }
278:
279:
        return (
280:
          <div
281:
            ref={ref}
282:
             className={cn(
283:
               "flex items-center justify-center gap-4",
284:
               verticalAlign === "top" ? "pb-3" : "pt-3",
285:
               className
286:
             ) }
287:
288:
             {payload.map((item) => {
289:
               const key = `${nameKey || item.dataKey || "value"}`
290:
               const itemConfig = getPayloadConfigFromPayload(config, item, key)
291:
292:
               return (
293:
                 <div
294:
                   key={item.value}
295:
                   className={cn(
                     "flex items-center gap-1.5 [&>svg]:h-3 [&>svg]:w-3 [&>svg]:text-muted-foreground"
296:
297:
                   ) }
298:
299:
                   {itemConfig?.icon && !hideIcon ? (
```

```
300:
                     <itemConfig.icon />
301:
                   ) : (
302:
                     <div
303:
                       className="h-2 w-2 shrink-0 rounded-[2px]"
304:
                       style={{
305:
                         backgroundColor: item.color,
306:
                       }}
307:
                     />
308:
                   ) }
                   {itemConfig?.label}
309:
310:
                 </div>
311:
             })}
312:
313:
          </div>
314:
        )
315: }
316: )
317: ChartLegendContent.displayName = "ChartLegend"
318:
319: // Helper to extract item config from a payload.
320: function getPayloadConfigFromPayload(
321:
     config: ChartConfig,
322:
       payload: unknown,
323: key: string
324: ) {
325: if (typeof payload !== "object" || payload === null) {
326:
       return undefined
327:
328:
329:
      const payloadPayload =
330:
      "payload" in payload &&
331:
        typeof payload.payload === "object" &&
332:
        payload.payload !== null
333:
         ? payload.payload
334:
          : undefined
335:
336:
      let configLabelKey: string = key
337:
338:
      if (
339:
      key in payload &&
340:
        typeof payload[key as keyof typeof payload] === "string"
341:
342:
        configLabelKey = payload[key as keyof typeof payload] as string
343:
     } else if (
       payloadPayload &&
344:
345:
        key in payloadPayload &&
346:
        typeof payloadPayload[key as keyof typeof payloadPayload] === "string"
347:
      ) {
348:
       configLabelKey = payloadPayload[
349:
          key as keyof typeof payloadPayload
350:
         ] as string
351:
      }
352:
353:
      return configLabelKey in config
354:
        ? config[configLabelKey]
         : config[key as keyof typeof config]
355:
356: }
357:
358: export {
359: ChartContainer,
360: ChartTooltip,
361: ChartTooltipContent,
362:
      ChartLegend,
363:
      ChartLegendContent,
     ChartStyle,
364:
```

■ File: components\ui\checkbox.tsx

```
1: "use client"
```

```
3: import * as React from "react"
 4: import * as CheckboxPrimitive from "@radix-ui/react-checkbox"
5: import { Check } from "lucide-react"
7: import { cn } from "@/lib/utils"
8:
9: const Checkbox = React.forwardRef<
10: React.ElementRef<typeof CheckboxPrimitive.Root>,
     React.ComponentPropsWithoutRef<typeof CheckboxPrimitive.Root>
12: >(({ className, ...props }, ref) => (
    <CheckboxPrimitive.Root</pre>
14:
      ref={ref}
15:
       className={cn(
16:
         "peer h-4 w-4 shrink-0 rounded-sm border border-primary ring-offset-background focus-visible:outline-
17:
         className
      ) }
18:
19:
      {...props}
20:
       <CheckboxPrimitive.Indicator</pre>
21:
         className={cn("flex items-center justify-center text-current")}
23:
24:
         <Check className="h-4 w-4" />
25:
       </CheckboxPrimitive.Indicator>
26: </CheckboxPrimitive.Root>
27: ))
28: Checkbox.displayName = CheckboxPrimitive.Root.displayName
29:
30: export { Checkbox }
```

■ File: components\ui\collapsible.tsx

```
1: "use client"
2:
3: import * as CollapsiblePrimitive from "@radix-ui/react-collapsible"
4:
5: const Collapsible = CollapsiblePrimitive.Root
6:
7: const CollapsibleTrigger = CollapsiblePrimitive.CollapsibleTrigger
8:
9: const CollapsibleContent = CollapsiblePrimitive.CollapsibleContent
10:
11: export { Collapsible, CollapsibleTrigger, CollapsibleContent }
```

■ File: components\ui\command.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import { type DialogProps } from "@radix-ui/react-dialog"
 5: import { Command as CommandPrimitive } from "cmdk"
 6: import { Search } from "lucide-react"
 7:
 8: import { cn } from "@/lib/utils"
 9: import { Dialog, DialogContent } from "@/components/ui/dialog"
 10:
11: const Command = React.forwardRef<</pre>
12: React.ElementRef<typeof CommandPrimitive>,
13: React.ComponentPropsWithoutRef<typeof CommandPrimitive>
14: >(({ className, ...props }, ref) => (
     <CommandPrimitive
 15:
16:
      ref={ref}
17:
      className={cn(
       "flex h-full w-full flex-col overflow-hidden rounded-md bg-popover text-popover-foreground",
18:
19:
         className
 20:
       ) }
 21:
       {...props}
 22:
 23: ))
 24: Command.displayName = CommandPrimitive.displayName
```

```
25:
26: const CommandDialog = ({ children, ...props }: DialogProps) => {
27:
         return (
28:
               <Dialog {...props}>
                   <DialogContent className="overflow-hidden p-0 shadow-lg">
29:
30:
                       $$ $$ $$ command className="[\&_[cmdk-group-heading]]:px-2 [\&_[cmdk-group-heading]]:font-medium [\&_[cmdk-group-heading]]:
31:
                           {children}
32:
                       </Command>
                   </DialogContent>
33:
34:
               </Dialog>
35:
        )
36: }
37:
38: const CommandInput = React.forwardRef<
39: React.ElementRef<typeof CommandPrimitive.Input>,
         React.ComponentPropsWithoutRef<typeof CommandPrimitive.Input>
41: >(({ className, ...props }, ref) => (
          <div className="flex items-center border-b px-3" cmdk-input-wrapper="">
               <Search className="mr-2 h-4 w-4 shrink-0 opacity-50" />
43:
44:
               <CommandPrimitive.Input
45:
                  ref={ref}
46:
                  className={cn(
47:
                       "flex h-11 w-full rounded-md bg-transparent py-3 text-sm outline-none placeholder:text-muted-foregr
48:
                   ) }
49:
50:
                  {...props}
51:
52:
          </div>
53: ))
54:
55: CommandInput.displayName = CommandPrimitive.Input.displayName
56:
57: const CommandList = React.forwardRef<</pre>
58: React.ElementRef<typeof CommandPrimitive.List>,
         React.ComponentPropsWithoutRef<typeof CommandPrimitive.List>
59:
60: >(({ className, ...props }, ref) => (
61:
         <CommandPrimitive.List
62:
             ref={ref}
63:
              className={cn("max-h-[300px] overflow-y-auto overflow-x-hidden", className)}
64:
               {...props}
65:
66: ))
67:
68: CommandList.displayName = CommandPrimitive.List.displayName
69:
70: const CommandEmpty = React.forwardRef<
71: React.ElementRef<typeof CommandPrimitive.Empty>,
72: React.ComponentPropsWithoutRef<typeof CommandPrimitive.Empty>
73: >((props, ref) => (
74:
           <CommandPrimitive.Empty
75:
              ref={ref}
             className="py-6 text-center text-sm"
77:
               {...props}
78:
          />
79: ))
:08
81: CommandEmpty.displayName = CommandPrimitive.Empty.displayName
82:
83: const CommandGroup = React.forwardRef<
84:
         React.ElementRef<typeof CommandPrimitive.Group>,
        React.ComponentPropsWithoutRef<typeof CommandPrimitive.Group>
86: >(({ className, ...props }, ref) => (
87:
         <CommandPrimitive.Group
88:
              ref={ref}
89:
               className={cn(
90:
                   overflow-hidden p-1 text-foreground [&_[cmdk-group-heading]]:px-2 [&_[cmdk-group-heading]]:py-1.5 [&
91:
                   className
92:
               ) }
               {...props}
93:
94:
          />
95: ))
96:
97: CommandGroup.displayName = CommandPrimitive.Group.displayName
```

```
98:
 99: const CommandSeparator = React.forwardRef<
100: React.ElementRef<typeof CommandPrimitive.Separator>,
      React.ComponentPropsWithoutRef<typeof CommandPrimitive.Separator>
102: >(({ className, ...props }, ref) => (
103: <CommandPrimitive.Separator
104:
       ref={ref}
       className={cn("-mx-1 h-px bg-border", className)}
105:
106:
        {...props}
107: />
108: ))
109: CommandSeparator.displayName = CommandPrimitive.Separator.displayName
110:
111: const CommandItem = React.forwardRef<</pre>
112: React.ElementRef<typeof CommandPrimitive.Item>,
113: React.ComponentPropsWithoutRef<typeof CommandPrimitive.Item>
114: >(({ className, ...props }, ref) => (
115:
      <CommandPrimitive.Item
116:
       ref={ref}
117:
       className={cn(
118:
        "relative flex cursor-default gap-2 select-none items-center rounded-sm px-2 py-1.5 text-sm outline-n
119:
          className
120:
       ) }
121: {...props}
122: />
123: ))
124:
125: CommandItem.displayName = CommandPrimitive.Item.displayName
127: const CommandShortcut = ({
128: className,
129:
      ...props
130: }: React.HTMLAttributes<HTMLSpanElement>) => {
131: return (
132:
       <span
133:
         className={cn(
134:
            "ml-auto text-xs tracking-widest text-muted-foreground",
135:
            className
136:
         ) }
137:
          {...props}
138:
        />
139: )
140: }
141: CommandShortcut.displayName = "CommandShortcut"
142:
143: export {
144: Command,
145: CommandDialog,
146: CommandInput,
147:
      CommandList,
148: CommandEmpty,
149: CommandGroup,
150: CommandItem,
151: CommandShortcut,
152:
      CommandSeparator,
153: }
```

■ File: components\ui\context-menu.tsx

```
1: "use client"
2:
3: import * as React from "react"
4: import * as ContextMenuPrimitive from "@radix-ui/react-context-menu"
5: import { Check, ChevronRight, Circle } from "lucide-react"
6:
7: import { cn } from "@/lib/utils"
8:
9: const ContextMenu = ContextMenuPrimitive.Root
10:
11: const ContextMenuTrigger = ContextMenuPrimitive.Trigger
12:
```

```
13: const ContextMenuGroup = ContextMenuPrimitive.Group
15: const ContextMenuPortal = ContextMenuPrimitive.Portal
17: const ContextMenuSub = ContextMenuPrimitive.Sub
18:
19: const ContextMenuRadioGroup = ContextMenuPrimitive.RadioGroup
20:
21: const ContextMenuSubTrigger = React.forwardRef<</pre>
     React.ElementRef<typeof ContextMenuPrimitive.SubTrigger>,
    React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.SubTrigger> & {
24:
       inset?: boolean
25:
26: >(({ className, inset, children, ...props }, ref) => (
27:
    <ContextMenuPrimitive.SubTrigger</pre>
28:
      ref={ref}
29:
      className={cn(
30:
          "flex cursor-default select-none items-center rounded-sm px-2 py-1.5 text-sm outline-none focus:bg-ac
          inset && "pl-8",
31:
         className
33:
       ) }
34:
       {...props}
35:
36:
        {children}
        <ChevronRight className="ml-auto h-4 w-4" />
37:
38:
     </ContextMenuPrimitive.SubTrigger>
39: ))
40: ContextMenuSubTrigger.displayName = ContextMenuPrimitive.SubTrigger.displayName
42: const ContextMenuSubContent = React.forwardRef<
43: React.ElementRef<typeof ContextMenuPrimitive.SubContent>,
     React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.SubContent>
45: >(({ className, ...props }, ref) => (
    <ContextMenuPrimitive.SubContent
47:
       ref={ref}
48:
      className={cn(
49:
         "z-50 min-w-[8rem] overflow-hidden rounded-md border bg-popover p-1 text-popover-foreground shadow-md
50:
         className
51:
       ) }
52:
        {...props}
53:
54: ))
55: ContextMenuSubContent.displayName = ContextMenuPrimitive.SubContent.displayName
57: const ContextMenuContent = React.forwardRef<
     React.ElementRef<typeof ContextMenuPrimitive.Content>,
59: React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.Content>
60: >(({ className, ...props }, ref) => (
61:
     <ContextMenuPrimitive.Portal>
62:
       <ContextMenuPrimitive.Content</pre>
63:
         ref={ref}
64:
         className={cn(
65:
           "z-50 min-w-[8rem] overflow-hidden rounded-md border bg-popover p-1 text-popover-foreground shadow-
66:
           className
67:
         ) }
68:
          {...props}
69:
70:
     </ContextMenuPrimitive.Portal>
71: ))
72: ContextMenuContent.displayName = ContextMenuPrimitive.Content.displayName
74: const ContextMenuItem = React.forwardRef<
75:
     React.ElementRef<typeof ContextMenuPrimitive.Item>,
     React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.Item> & {
76:
77:
       inset?: boolean
78: }
79: >(({ className, inset, ...props }, ref) => (
:08
     <ContextMenuPrimitive.Item
81:
       ref={ref}
82:
       className={cn(
         "relative flex cursor-default select-none items-center rounded-sm px-2 py-1.5 text-sm outline-none fo
83:
84:
          inset && "pl-8",
85:
          className
```

```
86:
        ) }
 87:
         {...props}
      />
 88:
 89: ))
 90: ContextMenuItem.displayName = ContextMenuPrimitive.Item.displayName
 92: const ContextMenuCheckboxItem = React.forwardRef<
 93: React.ElementRef<typeof ContextMenuPrimitive.CheckboxItem>,
       React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.CheckboxItem>
 95: >(({ className, children, checked, ...props }, ref) => (
      <ContextMenuPrimitive.CheckboxItem</pre>
 97:
        ref={ref}
 98:
        className={cn(
 99:
           "relative flex cursor-default select-none items-center rounded-sm py-1.5 pl-8 pr-2 text-sm outline-no
100:
101:
        ) }
102:
        checked={checked}
103:
         {...props}
104:
105:
        <span className="absolute left-2 flex h-3.5 w-3.5 items-center justify-center">
106:
         <ContextMenuPrimitive.ItemIndicator>
107:
             <Check className="h-4 w-4" />
108:
          </ContextMenuPrimitive.ItemIndicator>
109:
        </span>
110:
         {children}
111:
      </ContextMenuPrimitive.CheckboxItem>
112: ))
113: ContextMenuCheckboxItem.displayName =
114: ContextMenuPrimitive.CheckboxItem.displayName
115:
116: const ContextMenuRadioItem = React.forwardRef<
      React.ElementRef<typeof ContextMenuPrimitive.RadioItem>,
117:
     React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.RadioItem>
119: >(({ className, children, ...props }, ref) => (
120: <ContextMenuPrimitive.RadioItem
121:
       ref={ref}
122:
        className={cn(
123:
           "relative flex cursor-default select-none items-center rounded-sm py-1.5 pl-8 pr-2 text-sm outline-no
124:
125:
         ) }
126:
         {...props}
127:
        <span className="absolute left-2 flex h-3.5 w-3.5 items-center justify-center">
129:
          <ContextMenuPrimitive.ItemIndicator>
130:
            <Circle className="h-2 w-2 fill-current" />
131:
           </ContextMenuPrimitive.ItemIndicator>
132:
         </span>
133:
         {children}
      </ContextMenuPrimitive.RadioItem>
134:
135: ))
136: ContextMenuRadioItem.displayName = ContextMenuPrimitive.RadioItem.displayName
138: const ContextMenuLabel = React.forwardRef<</pre>
139: React.ElementRef<typeof ContextMenuPrimitive.Label>,
      React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.Label> & {
140:
        inset?: boolean
141:
142: }
143: >(({ className, inset, ...props }, ref) => (
144:
      <ContextMenuPrimitive.Label
145:
       ref={ref}
146:
        className={cn(
147:
           "px-2 py-1.5 text-sm font-semibold text-foreground",
148:
           inset && "pl-8",
149:
           className
150:
        ) }
151:
         {...props}
152:
      />
153: ))
154: ContextMenuLabel.displayName = ContextMenuPrimitive.Label.displayName
156: const ContextMenuSeparator = React.forwardRef<</pre>
      React.ElementRef<typeof ContextMenuPrimitive.Separator>,
157:
       React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.Separator>
```

```
159: >(({ className, ...props }, ref) => (
160: <ContextMenuPrimitive.Separator
161:
       ref={ref}
162:
        className={cn("-mx-1 my-1 h-px bg-border", className)}
163:
         {...props}
164: />
165: ))
166: ContextMenuSeparator.displayName = ContextMenuPrimitive.Separator.displayName
167:
168: const ContextMenuShortcut = ({
169: className,
170:
      ...props
171: }: React.HTMLAttributes<HTMLSpanElement>) => {
172:
     return (
173:
        <span
174:
         className={cn(
175:
            "ml-auto text-xs tracking-widest text-muted-foreground",
176:
             className
         ) }
177:
178:
          {...props}
179:
       />
180:
      )
181: }
182: ContextMenuShortcut.displayName = "ContextMenuShortcut"
183:
184: export {
185:
      ContextMenu,
186: ContextMenuTrigger,
187: ContextMenuContent,
188: ContextMenuItem,
189: ContextMenuCheckboxItem,
190: ContextMenuRadioItem,
      ContextMenuRadioItem,
191: ContextMenuLabel,
192: ContextMenuSeparator,
193: ContextMenuShortcut,
194:
      ContextMenuGroup,
195:
      ContextMenuPortal
196: ContextMenuSub,
197: ContextMenuSubContent,
198: ContextMenuSubTrigger,
199: ContextMenuRadioGroup,
200: }
```

■ File: components\ui\dialog.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as DialogPrimitive from "@radix-ui/react-dialog"
 5: import { X } from "lucide-react"
 6:
 7: import { cn } from "@/lib/utils"
 8:
 9: const Dialog = DialogPrimitive.Root
10:
11: const DialogTrigger = DialogPrimitive.Trigger
12:
13: const DialogPortal = DialogPrimitive.Portal
15: const DialogClose = DialogPrimitive.Close
16:
17: const DialogOverlay = React.forwardRef<
18: React.ElementRef<typeof DialogPrimitive.Overlay>,
19: React.ComponentPropsWithoutRef<typeof DialogPrimitive.Overlay>
20: >(({ className, ...props }, ref) => (
 21:
     <DialogPrimitive.Overlay</pre>
22:
      ref={ref}
23:
      className={cn(
 24:
         "fixed inset-0 z-50 bg-black/80 data-[state=open]:animate-in data-[state=closed]:animate-out data-[s
 25:
         className
      ) }
 26:
```

```
27:
      \{\dots props\}
28:
29: ))
30: DialogOverlay.displayName = DialogPrimitive.Overlay.displayName
31:
32: const DialogContent = React.forwardRef<</pre>
33: React.ElementRef<typeof DialogPrimitive.Content>,
     React.ComponentPropsWithoutRef<typeof DialogPrimitive.Content>
34:
35: >(({ className, children, ...props }, ref) => (
36:
    <DialogPortal>
37:
       <DialogOverlay />
38:
       <DialogPrimitive.Content</pre>
39:
         ref={ref}
40:
         className={cn(
41:
            "fixed left-[50%] top-[50%] z-50 grid w-full max-w-lg translate-x-[-50%] translate-y-[-50%] gap-4 b
42:
43:
         ) }
44:
         {...props}
45:
46:
         {children}
47:
          <DialogPrimitive.Close className="absolute right-4 top-4 rounded-sm opacity-70 ring-offset-background</pre>
48:
           <X className="h-4 w-4" />
49:
            <span className="sr-only">Close</span>
50:
         </DialogPrimitive.Close>
51:
        </DialogPrimitive.Content>
52:
     </DialogPortal>
53: ))
54: DialogContent.displayName = DialogPrimitive.Content.displayName
56: const DialogHeader = ({
57: className,
58:
      ...props
59: }: React.HTMLAttributes<HTMLDivElement>) => (
61:
      className={cn(
62:
         "flex flex-col space-y-1.5 text-center sm:text-left",
63:
          className
64:
      ) }
65:
        {...props}
66:
     />
67: )
68: DialogHeader.displayName = "DialogHeader"
70: const DialogFooter = ({
71: className,
72:
      ...props
73: }: React.HTMLAttributes<HTMLDivElement>) => (
74: <div
75:
      className={cn(
76:
          "flex flex-col-reverse sm:flex-row sm:justify-end sm:space-x-2",
77:
          className
       ) }
79:
       {...props}
:08
     />
81: )
82: DialogFooter.displayName = "DialogFooter"
84: const DialogTitle = React.forwardRef<
     React.ElementRef<typeof DialogPrimitive.Title>,
86:
     React.ComponentPropsWithoutRef<typeof DialogPrimitive.Title>
87: >(({ className, ...props }, ref) => (
88: <DialogPrimitive.Title
89:
      ref={ref}
90:
       className={cn(
91:
         "text-lg font-semibold leading-none tracking-tight",
92:
          className
93:
       ) }
        \{\dots props\}
94:
95:
96: ))
97: DialogTitle.displayName = DialogPrimitive.Title.displayName
98:
99: const DialogDescription = React.forwardRef<
```

```
100: React.ElementRef<typeof DialogPrimitive.Description>,
101: React.ComponentPropsWithoutRef<typeof DialogPrimitive.Description>
102: >(({ className, ...props }, ref) => (
      <DialogPrimitive.Description</pre>
104:
       ref={ref}
105:
       className={cn("text-sm text-muted-foreground", className)}
106:
       \{\dotsprops\}
107:
     />
108: ))
109: DialogDescription.displayName = DialogPrimitive.Description.displayName
111: export {
112:
      Dialog,
113: DialogPortal,
114: DialogOverlay,
115: DialogClose,
116: DialogTrigger,
117:
      DialogContent,
118: DialogHeader,
119: DialogFooter,
120: DialogTitle,
121:
     DialogDescription,
122: }
```

■ File: components\ui\drawer.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import { Drawer as DrawerPrimitive } from "vaul"
 6: import { cn } from "@/lib/utils"
 7:
 8: const Drawer = ({
 9: shouldScaleBackground = true,
10:
      ...props
11: }: React.ComponentProps<typeof DrawerPrimitive.Root>) => (
12: cont
 13:
       shouldScaleBackground={shouldScaleBackground}
14:
       \{\dotsprops\}
15: />
16: )
17: Drawer.displayName = "Drawer"
18:
19: const DrawerTrigger = DrawerPrimitive.Trigger
 20:
 21: const DrawerPortal = DrawerPrimitive.Portal
 22:
 23: const DrawerClose = DrawerPrimitive.Close
 25: const DrawerOverlay = React.forwardRef<</pre>
 26: React.ElementRef<typeof DrawerPrimitive.Overlay>,
 27:
      React.ComponentPropsWithoutRef<typeof DrawerPrimitive.Overlay>
 28: >(({ className, ...props }, ref) => (
     <DrawerPrimitive.Overlay</pre>
 30:
      ref={ref}
 31:
       className={cn("fixed inset-0 z-50 bg-black/80", className)}
 32:
        {...props}
 33: />
 34: ))
 35: DrawerOverlay.displayName = DrawerPrimitive.Overlay.displayName
 36:
37: const DrawerContent = React.forwardRef<</pre>
 38: React.ElementRef<typeof DrawerPrimitive.Content>,
39: React.ComponentPropsWithoutRef<typeof DrawerPrimitive.Content>
 40: >(({ className, children, ...props }, ref) => (
41: <DrawerPortal>
 42:
       <DrawerOverlav />
      <DrawerPrimitive.Content</pre>
 43:
 44:
        ref={ref}
         className={cn(
 45:
```

```
46:
             "fixed inset-x-0 bottom-0 z-50 mt-24 flex h-auto flex-col rounded-t-[10px] border bg-background",
 47:
             className
 48:
          ) }
 49:
         {...props}
 50:
 51:
          <div className="mx-auto mt-4 h-2 w-[100px] rounded-full bg-muted" />
 52:
          {children}
 53:
        </DrawerPrimitive.Content>
 54:
      </DrawerPortal>
 55: ))
 56: DrawerContent.displayName = "DrawerContent"
 57:
 58: const DrawerHeader = ({
 59: className,
 60:
      ...props
 61: }: React.HTMLAttributes<HTMLDivElement>) => (
 62:
      <div
 63:
        className={cn("grid gap-1.5 p-4 text-center sm:text-left", className)}
 64:
         {...props}
 65: />
 66: )
 67: DrawerHeader.displayName = "DrawerHeader"
 68:
 69: const DrawerFooter = ({
 70: className,
 71:
      ...props
 72: }: React.HTMLAttributes<HTMLDivElement>) => (
 73:
      <div
 74:
       className={cn("mt-auto flex flex-col gap-2 p-4", className)}
 75:
        {...props}
 76:
      />
 77: )
 78: DrawerFooter.displayName = "DrawerFooter"
 79:
 80: const DrawerTitle = React.forwardRef<</pre>
 81: React.ElementRef<typeof DrawerPrimitive.Title>,
 82:
      React.ComponentPropsWithoutRef<typeof DrawerPrimitive.Title>
 83: >(({ className, ...props }, ref) => (
 84: <DrawerPrimitive.Title
      ref={ref}
 85:
       className={cn(
 86:
 87:
         "text-lg font-semibold leading-none tracking-tight",
         className
 89:
       ) }
 90:
        {...props}
 91: />
 92: ))
 93: DrawerTitle.displayName = DrawerPrimitive.Title.displayName
 94:
 95: const DrawerDescription = React.forwardRef<
 96: React.ElementRef<typeof DrawerPrimitive.Description>,
 97: React.ComponentPropsWithoutRef<typeof DrawerPrimitive.Description>
 98: >(({ className, ...props }, ref) => (
 99:
      <DrawerPrimitive.Description</pre>
100:
        ref={ref}
101:
        className={cn("text-sm text-muted-foreground", className)}
102:
         {...props}
103:
      />
104: ))
105: DrawerDescription.displayName = DrawerPrimitive.Description.displayName
107: export {
108: Drawer,
109: DrawerP
      DrawerPortal,
110: DrawerOverlay,
111: DrawerTrigger,
112: DrawerClose,
113: DrawerContent
114: DrawerHeader,
      DrawerContent,
115: DrawerFooter,
116: DrawerTitle,
117:
      DrawerDescription,
```

118: }

■ File: components\ui\dropdown-menu.tsx

```
1: "use client"
2:
3: import * as React from "react"
4: import * as DropdownMenuPrimitive from "@radix-ui/react-dropdown-menu"
5: import { Check, ChevronRight, Circle } from "lucide-react"
7: import { cn } from "@/lib/utils"
8:
9: const DropdownMenu = DropdownMenuPrimitive.Root
10:
11: const DropdownMenuTrigger = DropdownMenuPrimitive.Trigger
12:
13: const DropdownMenuGroup = DropdownMenuPrimitive.Group
14:
15: const DropdownMenuPortal = DropdownMenuPrimitive.Portal
17: const DropdownMenuSub = DropdownMenuPrimitive.Sub
19: const DropdownMenuRadioGroup = DropdownMenuPrimitive.RadioGroup
20:
21: const DropdownMenuSubTrigger = React.forwardRef<</pre>
22: React.ElementRef<typeof DropdownMenuPrimitive.SubTrigger>,
23: React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.SubTrigger> & {
24:
      inset?: boolean
25:
26: >(({ className, inset, children, ...props }, ref) => (
    <DropdownMenuPrimitive.SubTrigger</pre>
28:
      ref={ref}
29:
      className={cn(
30:
         "flex cursor-default gap-2 select-none items-center rounded-sm px-2 py-1.5 text-sm outline-none focus
31:
         inset && "pl-8",
32:
         className
       ) }
33:
34:
       {...props}
35:
36:
       {children}
37:
        <ChevronRight className="ml-auto" />
38:
     </DropdownMenuPrimitive.SubTrigger>
39: ))
40: DropdownMenuSubTrigger.displayName =
41: DropdownMenuPrimitive.SubTrigger.displayName
42:
43: const DropdownMenuSubContent = React.forwardRef<
44:
     React.ElementRef<typeof DropdownMenuPrimitive.SubContent>,
    React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.SubContent>
45:
46: >(({ className, ...props }, ref) => (
47:
    <DropdownMenuPrimitive.SubContent</pre>
48:
      ref={ref}
49:
       className={cn(
50:
        "z-50 min-w-[8rem] overflow-hidden rounded-md border bg-popover p-1 text-popover-foreground shadow-lg
51:
         className
52:
       ) }
53:
        {...props}
54:
     />
55: ))
56: DropdownMenuSubContent.displayName =
     DropdownMenuPrimitive.SubContent.displayName
58:
59: const DropdownMenuContent = React.forwardRef<</pre>
60: React.ElementRef<typeof DropdownMenuPrimitive.Content>,
     React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.Content>
61:
62: >(({ className, sideOffset = 4, ...props }, ref) => (
     <DropdownMenuPrimitive.Portal>
63:
64:
       <DropdownMenuPrimitive.Content</pre>
65:
         ref={ref}
66:
         sideOffset={sideOffset}
67:
         className={cn(
            "z-50 min-w-[8rem] overflow-hidden rounded-md border bg-popover p-1 text-popover-foreground shadow-
68:
69:
70:
          ) }
71:
          {...props}
```

```
72:
        />
      </DropdownMenuPrimitive.Portal>
 73:
 74: ))
 75: DropdownMenuContent.displayName = DropdownMenuPrimitive.Content.displayName
 76:
 77: const DropdownMenuItem = React.forwardRef<
 78: React.ElementRef<typeof DropdownMenuPrimitive.Item>,
 79:
      React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.Item> & {
 :08
        inset?: boolean
 81:
 82: >(({ className, inset, ...props }, ref) => (
 83:
      <DropdownMenuPrimitive.Item</pre>
 84:
        ref={ref}
 85:
        className={cn(
 86:
           "relative flex cursor-default select-none items-center gap-2 rounded-sm px-2 py-1.5 text-sm outline-n
 87:
           inset && "pl-8",
 88:
           className
 89:
         ) }
 90:
         {...props}
 91:
      />
 92: ))
 93: DropdownMenuItem.displayName = DropdownMenuPrimitive.Item.displayName
 94:
 95: const DropdownMenuCheckboxItem = React.forwardRef<
 96: React.ElementRef<typeof DropdownMenuPrimitive.CheckboxItem>,
      React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.CheckboxItem>
 97:
 98: >(({ className, children, checked, ...props }, ref) => (
 99:
      <DropdownMenuPrimitive.CheckboxItem</pre>
100:
        ref={ref}
101:
        className={cn(
102:
           "relative flex cursor-default select-none items-center rounded-sm py-1.5 pl-8 pr-2 text-sm outline-no
103:
104:
        ) }
105:
        checked={checked}
106:
        {...props}
107:
108:
         <span className="absolute left-2 flex h-3.5 w-3.5 items-center justify-center">
109:
          <DropdownMenuPrimitive.ItemIndicator>
110:
             <Check className="h-4 w-4" />
111:
           </DropdownMenuPrimitive.ItemIndicator>
112:
         </span>
113:
         {children}
114:
      </DropdownMenuPrimitive.CheckboxItem>
115: ))
116: DropdownMenuCheckboxItem.displayName =
117:
       DropdownMenuPrimitive.CheckboxItem.displayName
118:
119: const DropdownMenuRadioItem = React.forwardRef<
120: React.ElementRef<typeof DropdownMenuPrimitive.RadioItem>,
      React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.RadioItem>
121:
122: >(({ className, children, ...props }, ref) => (
     <DropdownMenuPrimitive.RadioItem</pre>
124:
        ref={ref}
125:
        className={cn(
126:
           "relative flex cursor-default select-none items-center rounded-sm py-1.5 pl-8 pr-2 text-sm outline-no
127:
           className
128:
       ) }
129:
         {...props}
130:
131:
         <span className="absolute left-2 flex h-3.5 w-3.5 items-center justify-center">
132:
          <DropdownMenuPrimitive.ItemIndicator>
133:
             <Circle className="h-2 w-2 fill-current" />
           </DropdownMenuPrimitive.ItemIndicator>
134:
135:
         </span>
136:
         {children}
137:
       </DropdownMenuPrimitive.RadioItem>
138: ))
139: DropdownMenuRadioItem.displayName = DropdownMenuPrimitive.RadioItem.displayName
140:
141: const DropdownMenuLabel = React.forwardRef<
       React.ElementRef<typeof DropdownMenuPrimitive.Label>,
143:
       React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.Label> & {
144:
         inset?: boolean
```

```
145: }
146: >(({ className, inset, ...props }, ref) => (
ref={ref}
148:
       className={cn(
149:
150:
        "px-2 py-1.5 text-sm font-semibold",
151:
         inset && "pl-8",
152:
          className
153:
        ) }
154:
        {...props}
155: />
156: ))
157: DropdownMenuLabel.displayName = DropdownMenuPrimitive.Label.displayName
158:
159: const DropdownMenuSeparator = React.forwardRef<
160: React.ElementRef<typeof DropdownMenuPrimitive.Separator>,
161: React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.Separator>
162: >(({ className, ...props }, ref) => (
     <DropdownMenuPrimitive.Separator</pre>
163:
       ref={ref}
165:
       className={cn("-mx-1 my-1 h-px bg-muted", className)}
166:
       {...props}
167: />
168: ))
169: DropdownMenuSeparator.displayName = DropdownMenuPrimitive.Separator.displayName
170:
171: const DropdownMenuShortcut = ({
172: className,
      ...props
174: }: React.HTMLAttributes<HTMLSpanElement>) => {
175:
     return (
176:
177:
          className={cn("ml-auto text-xs tracking-widest opacity-60", className)}
178:
          {...props}
179:
        />
180:
      )
181: }
182: DropdownMenuShortcut.displayName = "DropdownMenuShortcut"
183:
184: export {
185: DropdownMenu,
186: DropdownMenuTrigger,
187: DropdownMenuContent,
188: DropdownMenuItem,
189:
190:
      DropdownMenuCheckboxItem,
      DropdownMenuRadioItem,
191: DropdownMenuLabel,
192: DropdownMenuSeparator,
193: DropdownMenuShortcut,194: DropdownMenuGroup,
      DropdownMenuGroup,
195: DropdownMenuPortal,
196: DropdownMenuSub,
197: DropdownMenuSubContent,
198:
      DropdownMenuSubTrigger,
199:
      DropdownMenuRadioGroup,
200: }
```

■ File: components\ui\form.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as LabelPrimitive from "@radix-ui/react-label"
 5: import { Slot } from "@radix-ui/react-slot"
 6: import {
 7:
    Controller,
 8: ControllerProps,
 9: FieldPath,
10: FieldValues,
11:
    FormProvider.
12:
    useFormContext,
```

```
13: } from "react-hook-form"
14:
15: import { cn } from "@/lib/utils"
16: import { Label } from "@/components/ui/label"
17:
18: const Form = FormProvider
19:
20: type FormFieldContextValue<
     TFieldValues extends FieldValues = FieldValues,
21:
22: TName extends FieldPath<TFieldValues> = FieldPath<TFieldValues>
23: > = {
24: name: TName
25: }
26:
27: const FormFieldContext = React.createContext<FormFieldContextValue>(
28: {} as FormFieldContextValue
29: )
30:
31: const FormField = <</pre>
32: TFieldValues extends FieldValues = FieldValues,
33: TName extends FieldPath<TFieldValues> = FieldPath<TFieldValues>
34: >({
35: ...props
36: }: ControllerProps<TFieldValues, TName>) => {
37: return (
      <FormFieldContext.Provider value={{ name: props.name }}>
38:
39:
         <Controller {...props} />
40:
      </FormFieldContext.Provider>
41: )
42: }
43:
44: const useFormField = () => {
45: const fieldContext = React.useContext(FormFieldContext)
46: const itemContext = React.useContext(FormItemContext)
47:
    const { getFieldState, formState } = useFormContext()
48:
49:
     const fieldState = getFieldState(fieldContext.name, formState)
50:
51:
    if (!fieldContext) {
      throw new Error("useFormField should be used within <FormField>")
52:
53:
54:
55:
    const { id } = itemContext
56:
    return {
57:
58:
       id,
59:
      name: fieldContext.name,
60:
      formItemId: `${id}-form-item`,
      formDescriptionId: `${id}-form-item-description`,
61:
62:
       formMessageId: `${id}-form-item-message`,
63:
       ...fieldState,
64: }
65: }
66:
67: type FormItemContextValue = {
68: id: string
69: }
70:
71: const FormItemContext = React.createContext<FormItemContextValue>(
72: {} as FormItemContextValue
73: )
74:
75: const FormItem = React.forwardRef<
76: HTMLDivElement,
77: React.HTMLAttributes<HTMLDivElement>
78: >(({ className, ...props }, ref) => {
79: const id = React.useId()
:08
81:
82:
      <FormItemContext.Provider value={{ id }}>
83:
         <div ref={ref} className={cn("space-y-2", className)} {...props} />
84:
      </FormItemContext.Provider>
85: )
```

```
86: })
 87: FormItem.displayName = "FormItem"
 88:
 89: const FormLabel = React.forwardRef<
 90: React.ElementRef<typeof LabelPrimitive.Root>,
 91: React.ComponentPropsWithoutRef<typeof LabelPrimitive.Root>
 92: >(({ className, ...props }, ref) => {
 93: const { error, formItemId } = useFormField()
 94:
 95:
      return (
 96:
        <Label
 97:
         ref={ref}
 98:
          className={cn(error && "text-destructive", className)}
 99:
          htmlFor={formItemId}
100:
          \{\dots props\}
101:
         />
102:
      )
103: })
104: FormLabel.displayName = "FormLabel"
106: const FormControl = React.forwardRef<
107: React.ElementRef<typeof Slot>,
108: React.ComponentPropsWithoutRef
      React.ComponentPropsWithoutRef<typeof Slot>
109: >(({ ...props }, ref) => {
110: const { error, formItemId, formDescriptionId, formMessageId } = useFormField()
111:
112:
      return (
113:
        <Slot
         ref={ref}
115:
         id={formItemId}
         aria-describedby={
116:
117:
            !error
118:
              ? `${formDescriptionId}`
              : `${formDescriptionId} ${formMessageId}`
119:
120:
121:
          aria-invalid={!!error}
122:
          {...props}
123:
124: )
125: })
126: FormControl.displayName = "FormControl"
128: const FormDescription = React.forwardRef<
129: HTMLParagraphElement,
      React.HTMLAttributes<HTMLParagraphElement>
131: >(({ className, ...props }, ref) => {
     const { formDescriptionId } = useFormField()
133:
134:
      return (
135:
       <p
         ref={ref}
136:
          id={formDescriptionId}
138:
         className={cn("text-sm text-muted-foreground", className)}
139:
          {...props}
140:
141:
142: })
143: FormDescription.displayName = "FormDescription"
145: const FormMessage = React.forwardRef<
146: HTMLParagraphElement,
147: React.HTMLAttributes<HTMLParagraphElement>
148: >(({ className, children, ...props }, ref) => {
149:
      const { error, formMessageId } = useFormField()
      const body = error ? String(error?.message) : children
150:
151:
152:
      if (!body) {
       return null
153:
154:
155:
156:
      return (
157:
158:
          ref={ref}
```

```
159:
         id={formMessageId}
160:
        className={cn("text-sm font-medium text-destructive", className)}
161:
         {...props}
162:
         {body}
163:
164:
       165: )
166: })
167: FormMessage.displayName = "FormMessage"
168:
169: export {
170: useFormField,
171:
      Form,
172: FormItem,
173: FormLabel,
174: FormControl,
175: FormDescription,
176:
      FormMessage,
177: FormField,
178: }
```

■ File: components\ui\hover-card.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as HoverCardPrimitive from "@radix-ui/react-hover-card"
 5:
 6: import { cn } from "@/lib/utils"
 7:
 8: const HoverCard = HoverCardPrimitive.Root
 9:
10: const HoverCardTrigger = HoverCardPrimitive.Trigger
11:
12: const HoverCardContent = React.forwardRef<</pre>
13: React.ElementRef<typeof HoverCardPrimitive.Content>,
14: React.ComponentPropsWithoutRef<typeof HoverCardPrimitive.Content>
15: >(({ className, align = "center", sideOffset = 4, ...props }, ref) => (
     <HoverCardPrimitive.Content</pre>
16:
17:
      ref={ref}
18:
      align={align}
      sideOffset={sideOffset}
19:
      className={cn(
 20:
21:
         "z-50 w-64 rounded-md border bg-popover p-4 text-popover-foreground shadow-md outline-none data-[stat
22:
         className
 23:
      ) }
 24:
        {...props}
25:
26: ))
27: HoverCardContent.displayName = HoverCardPrimitive.Content.displayName
29: export { HoverCard, HoverCardTrigger, HoverCardContent }
```

■ File: components\ui\input-otp.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import { OTPInput, OTPInputContext } from "input-otp"
 5: import { Dot } from "lucide-react"
 6:
 7: import { cn } from "@/lib/utils"
 8:
 9: const InputOTP = React.forwardRef<
10: React.ElementRef<typeof OTPInput>,
11: React.ComponentPropsWithoutRef<typeof OTPInput>
12: >(({ className, containerClassName, ...props }, ref) => (
13: <OTPInput
14:
      ref={ref}
```

```
15:
       containerClassName={cn(
          "flex items-center gap-2 has-[:disabled]:opacity-50",
16:
17:
          containerClassName
18:
       ) }
       className={cn("disabled:cursor-not-allowed", className)}
19:
20:
       {...props}
21: />
22: ))
23: InputOTP.displayName = "InputOTP"
24:
25: const InputOTPGroup = React.forwardRef<
26: React.ElementRef<"div">,
     React.ComponentPropsWithoutRef<"div">
28: >(({ className, ...props }, ref) => (
29: <div ref={ref} className={cn("flex items-center", className)} {...props} />
30: ))
31: InputOTPGroup.displayName = "InputOTPGroup"
32:
33: const InputOTPSlot = React.forwardRef<</pre>
34: React.ElementRef<"div">,
35: React.ComponentPropsWithoutRef<"div"> & { index: number }
36: >(({ index, className, ...props }, ref) => {
37: const inputOTPContext = React.useContext(OTPInputContext)
38: const { char, hasFakeCaret, isActive } = inputOTPContext.slots[index]
39:
     return (
40:
41:
       <div
42:
         ref={ref}
43:
         className={cn(
44:
           "relative flex h-10 w-10 items-center justify-center border-y border-r border-input text-sm transit
           isActive && "z-10 ring-2 ring-ring ring-offset-background",
45:
46:
           className
47:
         ) }
48:
         {...props}
49:
50:
         {char}
51:
         {hasFakeCaret && (
52:
           <div className="pointer-events-none absolute inset-0 flex items-center justify-center">
53:
             <div className="h-4 w-px animate-caret-blink bg-foreground duration-1000" />
54:
           </div>
55:
         ) }
56:
        </div>
57: )
58: })
59: InputOTPSlot.displayName = "InputOTPSlot"
60:
61: const InputOTPSeparator = React.forwardRef<</pre>
62: React.ElementRef<"div">,
63: React.ComponentPropsWithoutRef<"div">
64: >(({ ...props }, ref) => (
65: <div ref={ref} role="separator" {...props}>
      <Dot />
67:
     </div>
68: ))
69: InputOTPSeparator.displayName = "InputOTPSeparator"
71: export { InputOTP, InputOTPGroup, InputOTPSlot, InputOTPSeparator }
```

■ File: components\ui\input.tsx

```
1: import * as React from "react"
2:
3: import { cn } from "@/lib/utils"
4:
5: const Input = React.forwardRef<HTMLInputElement, React.ComponentProps<"input">>(
6:
    ({ className, type, ...props }, ref) => {
7:
      return (
8:
        <input
9:
           type={type}
10:
           className={cn(
              "flex h-10 w-full rounded-md border border-input bg-background px-3 py-2 text-base ring-offset-ba
11:
```

```
12:
             className
13:
          ) }
14:
          ref={ref}
15:
           {...props}
        />
16:
     )
17:
18: }
19: )
20: Input.displayName = "Input"
21:
22: export { Input }
```

■ File: components\ui\label.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as LabelPrimitive from "@radix-ui/react-label"
 5: import { cva, type VariantProps } from "class-variance-authority"
 7: import { cn } from "@/lib/utils"
 8:
 9: const labelVariants = cva(
10: "text-sm font-medium leading-none peer-disabled:cursor-not-allowed peer-disabled:opacity-70"
11: )
12:
13: const Label = React.forwardRef<</pre>
14: React.ElementRef<typeof LabelPrimitive.Root>,
15: React.ComponentPropsWithoutRef<typeof LabelPrimitive.Root> &
16:
      VariantProps<typeof labelVariants>
17: >(({ className, ...props }, ref) => (
18: <LabelPrimitive.Root</pre>
19:
      ref={ref}
      className={cn(labelVariants(), className)}
 20:
       {...props}
21:
22: />
23: ))
 24: Label.displayName = LabelPrimitive.Root.displayName
25:
26: export { Label }
```

■ File: components\ui\menubar.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as MenubarPrimitive from "@radix-ui/react-menubar"
 5: import { Check, ChevronRight, Circle } from "lucide-react"
 7: import { cn } from "@/lib/utils"
 8:
 9: const MenubarMenu = MenubarPrimitive.Menu
10:
11: const MenubarGroup = MenubarPrimitive.Group
 12:
13: const MenubarPortal = MenubarPrimitive.Portal
15: const MenubarSub = MenubarPrimitive.Sub
16:
17: const MenubarRadioGroup = MenubarPrimitive.RadioGroup
18:
19: const Menubar = React.forwardRef<</pre>
 20: React.ElementRef<typeof MenubarPrimitive.Root>,
 21:
     React.ComponentPropsWithoutRef<typeof MenubarPrimitive.Root>
 22: >(({ className, ...props }, ref) => (
 23: <MenubarPrimitive.Root
 24:
      ref={ref}
      className={cn(
 25:
 26:
         "flex h-10 items-center space-x-1 rounded-md border bg-background p-1",
```

```
27:
         className
28:
       ) }
29:
        {...props}
30:
31: ))
32: Menubar.displayName = MenubarPrimitive.Root.displayName
33:
34: const MenubarTrigger = React.forwardRef<</pre>
     React.ElementRef<typeof MenubarPrimitive.Trigger>,
35:
36:
     React.ComponentPropsWithoutRef<typeof MenubarPrimitive.Trigger>
37: >(({ className, ...props }, ref) => (
38:
     <MenubarPrimitive.Trigger</pre>
39:
       ref={ref}
40:
        className={cn(
41:
          "flex cursor-default select-none items-center rounded-sm px-3 py-1.5 text-sm font-medium outline-none
42:
          className
43:
       ) }
44:
        {...props}
45:
     />
46: ))
47: MenubarTrigger.displayName = MenubarPrimitive.Trigger.displayName
48:
49: const MenubarSubTrigger = React.forwardRef<
50: React.ElementRef<typeof MenubarPrimitive.SubTrigger>,
51:
     React.ComponentPropsWithoutRef<typeof MenubarPrimitive.SubTrigger> & {
52:
       inset?: boolean
53:
54: >(({ className, inset, children, ...props }, ref) => (
     <MenubarPrimitive.SubTrigger</pre>
56:
       ref={ref}
57:
       className={cn(
58:
          "flex cursor-default select-none items-center rounded-sm px-2 py-1.5 text-sm outline-none focus:bg-ac
          inset && "pl-8",
59:
60:
         className
       ) }
61:
62:
        {...props}
63:
64:
        {children}
65:
        <ChevronRight className="ml-auto h-4 w-4" />
66:
     </MenubarPrimitive.SubTrigger>
67: ))
68: MenubarSubTrigger.displayName = MenubarPrimitive.SubTrigger.displayName
70: const MenubarSubContent = React.forwardRef<</pre>
     React.ElementRef<typeof MenubarPrimitive.SubContent>,
71:
72:
     React.ComponentPropsWithoutRef<typeof MenubarPrimitive.SubContent>
73: >(({ className, ...props }, ref) => (
74:
     <MenubarPrimitive.SubContent
75:
       ref={ref}
76:
        className={cn(
77:
          "z-50 min-w-[8rem] overflow-hidden rounded-md border bg-popover p-1 text-popover-foreground data-[sta
          className
79:
       ) }
:08
        {...props}
81:
82: ))
83: MenubarSubContent.displayName = MenubarPrimitive.SubContent.displayName
84:
85: const MenubarContent = React.forwardRef<</pre>
86:
     React.ElementRef<typeof MenubarPrimitive.Content>,
87:
     React.ComponentPropsWithoutRef<typeof MenubarPrimitive.Content>
88: >(
89:
     (
90:
        { className, align = "start", alignOffset = -4, sideOffset = 8, ...props },
91:
       ref
92:
     ) => (
93:
       <MenubarPrimitive.Portal>
94:
         <MenubarPrimitive.Content</pre>
95:
            ref={ref}
96:
           align={align}
97:
           alignOffset={alignOffset}
98:
            sideOffset={sideOffset}
99:
            className={cn(
```

```
100:
               "z-50 min-w-[12rem] overflow-hidden rounded-md border bg-popover p-1 text-popover-foreground shad
101:
102:
             ) }
103:
             {...props}
104:
105:
         </MenubarPrimitive.Portal>
106: )
107: )
108: MenubarContent.displayName = MenubarPrimitive.Content.displayName
109:
110: const MenubarItem = React.forwardRef<</pre>
111: React.ElementRef<typeof MenubarPrimitive.Item>,
112:
      React.ComponentPropsWithoutRef<typeof MenubarPrimitive.Item> & {
112:
       inset?: boolean
114: }
115: >(({ className, inset, ...props }, ref) => (
116: <MenubarPrimitive.Item
117:
        ref={ref}
118:
        className={cn(
119:
           "relative flex cursor-default select-none items-center rounded-sm px-2 py-1.5 text-sm outline-none fo
120:
          inset && "pl-8",
121:
          className
122:
        ) }
123:
        {...props}
124:
125: ))
126: MenubarItem.displayName = MenubarPrimitive.Item.displayName
127:
128: const MenubarCheckboxItem = React.forwardRef<
129: React.ElementRef<typeof MenubarPrimitive.CheckboxItem>,
130:
      React.ComponentPropsWithoutRef<typeof MenubarPrimitive.CheckboxItem>
131: >(({ className, children, checked, ...props }, ref) => (
132:
     <MenubarPrimitive.CheckboxItem</pre>
133:
       ref={ref}
134:
       className={cn(
135:
           "relative flex cursor-default select-none items-center rounded-sm py-1.5 pl-8 pr-2 text-sm outline-no
136:
           className
137:
       ) }
138:
        checked={checked}
139:
        {...props}
140:
       <span className="absolute left-2 flex h-3.5 w-3.5 items-center justify-center">
141:
142:
         <MenubarPrimitive.ItemIndicator>
143:
            <Check className="h-4 w-4" />
          </MenubarPrimitive.ItemIndicator>
144:
145:
         </span>
146:
         {children}
147:
      </MenubarPrimitive.CheckboxItem>
148: ))
149: MenubarCheckboxItem.displayName = MenubarPrimitive.CheckboxItem.displayName
150:
151: const MenubarRadioItem = React.forwardRef<</pre>
152: React.ElementRef<typeof MenubarPrimitive.RadioItem>,
      React.ComponentPropsWithoutRef<typeof MenubarPrimitive.RadioItem>
153:
154: >(({ className, children, ...props }, ref) => (
155:
      <MenubarPrimitive.RadioItem</pre>
156:
        ref={ref}
157:
        className={cn(
158:
           "relative flex cursor-default select-none items-center rounded-sm py-1.5 pl-8 pr-2 text-sm outline-no
159:
           className
160:
        ) }
161:
        {...props}
162:
163:
         <span className="absolute left-2 flex h-3.5 w-3.5 items-center justify-center">
164:
          <MenubarPrimitive.ItemIndicator>
165:
             <Circle className="h-2 w-2 fill-current" />
166:
           </MenubarPrimitive.ItemIndicator>
167:
         </span>
168:
         {children}
169: </MenubarPrimitive.RadioItem>
170: ))
171: MenubarRadioItem.displayName = MenubarPrimitive.RadioItem.displayName
172:
```

```
173: const MenubarLabel = React.forwardRef<
174: React.ElementRef<typeof MenubarPrimitive.Label>,
175:
      React.ComponentPropsWithoutRef<typeof MenubarPrimitive.Label> & {
176:
        inset?: boolean
177: }
178: >(({ className, inset, ...props }, ref) => (
179: <MenubarPrimitive.Label
       ref={ref}
180:
       className={cn(
181:
         "px-2 py-1.5 text-sm font-semibold",
182:
         inset && "pl-8",
183:
184:
         className
185:
        ) }
186:
        {...props}
187: />
188: ))
189: MenubarLabel.displayName = MenubarPrimitive.Label.displayName
190:
191: const MenubarSeparator = React.forwardRef<</pre>
192: React.ElementRef<typeof MenubarPrimitive.Separator>,
193: React.ComponentPropsWithoutRef<typeof MenubarPrimitive.Separator>
194: >(({ className, ...props }, ref) => (
195:
      <MenubarPrimitive.Separator</pre>
196:
       ref={ref}
197:
       className={cn("-mx-1 my-1 h-px bg-muted", className)}
198:
       \{\dotsprops\}
199:
200: ))
201: MenubarSeparator.displayName = MenubarPrimitive.Separator.displayName
202:
203: const MenubarShortcut = ({
204: className,
205:
      ...props
206: }: React.HTMLAttributes<HTMLSpanElement>) => {
207: return (
     <span
208:
209:
         className={cn(
210:
            "ml-auto text-xs tracking-widest text-muted-foreground",
211:
            className
212:
          ) }
213:
          {...props}
214:
        />
215: )
216: }
217: MenubarShortcut.displayname = "MenubarShortcut"
218:
219: export {
220: Menubar,
221: MenubarMenu,222: MenubarTrigg
      MenubarTrigger,
223: MenubarContent,
224: MenubarItem,
225: MenubarSeparator,
226:
227:
      MenubarLabel,
      MenubarCheckboxItem,
228: MenubarRadioGroup,
229: MenubarRadioItem,
230: MenubarPortal,
231:
      MenubarSubContent,
232: MenubarSubTrigger,
233: MenubarGroup,
234: MenubarSub,
235:
      MenubarShortcut,
236: }
```

■ File: components\ui\navigation-menu.tsx

```
1: import * as React from "react"
2: import * as NavigationMenuPrimitive from "@radix-ui/react-navigation-menu"
3: import { cva } from "class-variance-authority"
4: import { ChevronDown } from "lucide-react"
```

```
5:
6: import { cn } from "@/lib/utils"
7:
8: const NavigationMenu = React.forwardRef<
9: React.ElementRef<typeof NavigationMenuPrimitive.Root>,
10: React.ComponentPropsWithoutRef<typeof NavigationMenuPrimitive.Root>
11: >(({ className, children, ...props }, ref) => (
12:
     <NavigationMenuPrimitive.Root</pre>
13:
       ref={ref}
14:
       className={cn(
15:
          "relative z-10 flex max-w-max flex-1 items-center justify-center",
16:
          className
17:
        ) }
        \{\dots props\}
18:
19:
20:
       {children}
21:
        <NavigationMenuViewport />
22:
     </NavigationMenuPrimitive.Root>
23: ))
24: NavigationMenu.displayName = NavigationMenuPrimitive.Root.displayName
25:
26: const NavigationMenuList = React.forwardRef<
27:
     React.ElementRef<typeof NavigationMenuPrimitive.List>,
    React.ComponentPropsWithoutRef<typeof NavigationMenuPrimitive.List>
29: >(({ className, ...props }, ref) => (
30:
     <NavigationMenuPrimitive.List</pre>
31:
       ref={ref}
32:
       className={cn(
33:
          "group flex flex-1 list-none items-center justify-center space-x-1",
34:
35:
        ) }
36:
        {...props}
37:
    />
38: ))
39: NavigationMenuList.displayName = NavigationMenuPrimitive.List.displayName
40:
41: const NavigationMenuItem = NavigationMenuPrimitive.Item
43: const navigationMenuTriggerStyle = cva(
     "group inline-flex h-10 w-max items-center justify-center rounded-md bg-background px-4 py-2 text-sm font
44:
45: )
46:
47: const NavigationMenuTrigger = React.forwardRef<
48: React.ElementRef<typeof NavigationMenuPrimitive.Trigger>,
     React.ComponentPropsWithoutRef<typeof NavigationMenuPrimitive.Trigger>
50: >(({ className, children, ...props }, ref) => (
51:
     <NavigationMenuPrimitive.Trigger</pre>
52:
       ref={ref}
53:
        className={cn(navigationMenuTriggerStyle(), "group", className)}
54:
        {...props}
55:
56:
       {children}{" "}
57:
        <ChevronDown
58:
         className="relative top-[1px] ml-1 h-3 w-3 transition duration-200 group-data-[state=open]:rotate-180
59:
          aria-hidden="true"
60:
        />
     </NavigationMenuPrimitive.Trigger>
61:
62: ))
63: NavigationMenuTrigger.displayName = NavigationMenuPrimitive.Trigger.displayName
64:
65: const NavigationMenuContent = React.forwardRef<
     React.ElementRef<typeof NavigationMenuPrimitive.Content>,
     React.ComponentPropsWithoutRef<typeof NavigationMenuPrimitive.Content>
67:
68: >(({ className, ...props }, ref) => (
69:
     <NavigationMenuPrimitive.Content</pre>
70:
       ref={ref}
71:
        className={cn(
72:
          "left-0 top-0 w-full data-[motion^=from-]:animate-in data-[motion^=to-]:animate-out data-[motion^=fro
73:
          className
74:
       ) }
75:
        {...props}
76:
     />
77: ))
```

```
78: NavigationMenuContent.displayName = NavigationMenuPrimitive.Content.displayName
 79:
 80: const NavigationMenuLink = NavigationMenuPrimitive.Link
 81:
 82: const NavigationMenuViewport = React.forwardRef<
 83: React.ElementRef<typeof NavigationMenuPrimitive.Viewport>,
 84: React.ComponentPropsWithoutRef<typeof NavigationMenuPrimitive.Viewport>
 85: >(({ className, ...props }, ref) => (
      <div className={cn("absolute left-0 top-full flex justify-center")}>
        <NavigationMenuPrimitive.Viewport</pre>
 87:
 88:
          className={cn(
 89:
             "origin-top-center relative mt-1.5 h-[var(--radix-navigation-menu-viewport-height)] w-full overflow
 90:
            className
 91:
          ) }
          ref={ref}
 92:
 93:
          {...props}
        />
 94:
 95:
      </div>
 96: ))
 97: NavigationMenuViewport.displayName =
 98: NavigationMenuPrimitive.Viewport.displayName
 99:
100: const NavigationMenuIndicator = React.forwardRef<
101: React.ElementRef<typeof NavigationMenuPrimitive.Indicator>,
102: React.ComponentPropsWithoutRef<typeof NavigationMenuPrimitive.Indicator>
103: >(({ className, ...props }, ref) => (
104:
      <NavigationMenuPrimitive.Indicator</pre>
105:
        ref={ref}
106:
        className={cn(
107:
          "top-full z-[1] flex h-1.5 items-end justify-center overflow-hidden data-[state=visible]:animate-in d
108:
          className
109:
        ) }
110:
        \{\dotsprops\}
111: >
112:
        <div className="relative top-[60%] h-2 w-2 rotate-45 rounded-tl-sm bg-border shadow-md" />
113:
      </NavigationMenuPrimitive.Indicator>
114: ))
115: NavigationMenuIndicator.displayName =
116: NavigationMenuPrimitive.Indicator.displayName
117:
118: export {
119: navigationMenuTriggerStyle,
120: NavigationMenu,
121: NavigationMenuList,
122:
      NavigationMenuItem,
123:
      NavigationMenuContent,
124: NavigationMenuTrigger,
125: NavigationMenuLink,
126: NavigationMenuIndicator,
127:
      NavigationMenuViewport,
128: }
```

■ File: components\ui\pagination.tsx

```
______
 1: import * as React from "react"
 2: import { ChevronLeft, ChevronRight, MoreHorizontal } from "lucide-react"
 4: import { cn } from "@/lib/utils"
 5: import { ButtonProps, buttonVariants } from "@/components/ui/button"
 6:
 7: const Pagination = ({ className, ...props }: React.ComponentProps<"nav">) => (
 8:
 9:
      role="navigation"
10:
       aria-label="pagination"
       className={cn("mx-auto flex w-full justify-center", className)}
11:
12:
       {...props}
13:
14: )
15: Pagination.displayName = "Pagination"
16:
17: const PaginationContent = React.forwardRef<
```

```
18: HTMLUListElement.
19: React.ComponentProps<"ul">
20: >(({ className, ...props }, ref) => (
21:
22:
      ref={ref}
23:
      className={cn("flex flex-row items-center gap-1", className)}
24:
       {...props}
25:
     />
26: ))
27: PaginationContent.displayName = "PaginationContent"
29: const PaginationItem = React.forwardRef<</pre>
30: HTMLLIElement,
31: React.ComponentProps<"li">
32: >(({ className, ...props }, ref) => (
33: 
34: ))
35: PaginationItem.displayName = "PaginationItem"
36:
37: type PaginationLinkProps = {
38: isActive?: boolean
39: } & Pick<ButtonProps, "size"> &
40: React.ComponentProps<"a">
41:
42: const PaginationLink = ({
43: className,
44:
     isActive,
45: size = "icon",
     ...props
47: }: PaginationLinkProps) => (
48:
49:
      aria-current={isActive ? "page" : undefined}
50:
      className={cn(
51:
       buttonVariants({
          variant: isActive ? "outline" : "ghost",
52:
53:
           size,
        }),
54:
         className
56:
       ) }
57:
       {...props}
58:
59: )
60: PaginationLink.displayName = "PaginationLink"
61:
62: const PaginationPrevious = ({
63: className,
64:
     ...props
65: }: React.ComponentProps<typeof PaginationLink>) => (
66: <PaginationLink
67:
      aria-label="Go to previous page"
68:
      size="default"
69:
      className={cn("gap-1 pl-2.5", className)}
70:
      {...props}
71:
72:
       <ChevronLeft className="h-4 w-4" />
73:
       <span>Previous</span>
74: </PaginationLink>
75: )
76: PaginationPrevious.displayName = "PaginationPrevious"
77:
78: const PaginationNext = ({
79: className,
:08
     ...props
81: }: React.ComponentProps<typeof PaginationLink>) => (
82:
    <PaginationLink
83:
      aria-label="Go to next page"
84:
       size="default"
85:
      className={cn("gap-1 pr-2.5", className)}
86:
       {...props}
87:
88:
      <span>Next</span>
       <ChevronRight className="h-4 w-4" />
89:
90:
     </PaginationLink>
```

```
91: )
 92: PaginationNext.displayName = "PaginationNext"
 93:
 94: const PaginationEllipsis = ({
 95: className,
 96:
      ...props
 97: }: React.ComponentProps<"span">) => (
     <span
 98:
 99:
        aria-hidden
100:
        className={cn("flex h-9 w-9 items-center justify-center", className)}
        {...props}
101:
102:
103:
        <MoreHorizontal className="h-4 w-4" />
104:
        <span className="sr-only">More pages</span>
105:
106: )
107: PaginationEllipsis.displayName = "PaginationEllipsis"
108:
109: export {
110: Pagination,
111: PaginationContent,
112: PaginationEllip
113: PaginationItem,
      PaginationEllipsis,
114: PaginationLink,
115: PaginationNext,
116:
     PaginationPrevious,
117: }
```

■ File: components\ui\popover.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as PopoverPrimitive from "@radix-ui/react-popover"
 6: import { cn } from "@/lib/utils"
 7:
 8: const Popover = PopoverPrimitive.Root
 9:
10: const PopoverTrigger = PopoverPrimitive.Trigger
12: const PopoverContent = React.forwardRef<</pre>
13: React.ElementRef<typeof PopoverPrimitive.Content>,
     React.ComponentPropsWithoutRef<typeof PopoverPrimitive.Content>
15: >(({ className, align = "center", sideOffset = 4, ...props }, ref) => (
     <PopoverPrimitive.Portal>
      <PopoverPrimitive.Content</pre>
17:
18:
         ref={ref}
19:
         align={align}
20:
        sideOffset={sideOffset}
21:
        className={cn(
 22:
           "z-50 w-72 rounded-md border bg-popover p-4 text-popover-foreground shadow-md outline-none data-[st
 23:
           className
 24:
         ) }
 25:
          {...props}
 26:
        />
 27:
     </PopoverPrimitive.Portal>
28: ))
29: PopoverContent.displayName = PopoverPrimitive.Content.displayName
31: export { Popover, PopoverTrigger, PopoverContent }
```

■ File: components\ui\progress.tsx

```
1: "use client"
2:
3: import * as React from "react"
4: import * as ProgressPrimitive from "@radix-ui/react-progress"
5:
```

```
6: import { cn } from "@/lib/utils"
7:
8: const Progress = React.forwardRef<
9:
     React.ElementRef<typeof ProgressPrimitive.Root>,
10: React.ComponentPropsWithoutRef<typeof ProgressPrimitive.Root>
11: >(({ className, value, ...props }, ref) => (
12: <ProgressPrimitive.Root</pre>
13:
       ref={ref}
14:
       className={cn(
         "relative h-4 w-full overflow-hidden rounded-full bg-secondary",
15:
16:
          className
17:
      ) }
       {...props}
18:
19:
20:
       <ProgressPrimitive.Indicator</pre>
21:
         className="h-full w-full flex-1 bg-primary transition-all"
         style={{ transform: `translateX(-${100 - (value || 0)}%)` }}
22:
23:
24:
    </ProgressPrimitive.Root>
25: ))
26: Progress.displayName = ProgressPrimitive.Root.displayName
27:
28: export { Progress }
```

■ File: components\ui\radio-group.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as RadioGroupPrimitive from "@radix-ui/react-radio-group"
 5: import { Circle } from "lucide-react"
 7: import { cn } from "@/lib/utils"
 8:
 9: const RadioGroup = React.forwardRef<
10: React.ElementRef<typeof RadioGroupPrimitive.Root>,
11: React.ComponentPropsWithoutRef<typeof RadioGroupPrimitive.Root>
12: >(({ className, ...props }, ref) => {
13:
     return (
14:
       <RadioGroupPrimitive.Root
        className={cn("grid gap-2", className)}
16:
         {...props}
17:
         ref={ref}
18:
19:
    )
 20: })
 21: RadioGroup.displayName = RadioGroupPrimitive.Root.displayName
 22:
 23: const RadioGroupItem = React.forwardRef<</pre>
 24: React.ElementRef<typeof RadioGroupPrimitive.Item>,
 25: React.ComponentPropsWithoutRef<typeof RadioGroupPrimitive.Item>
 26: >(({ className, ...props }, ref) => {
 27:
     return (
       <RadioGroupPrimitive.Item
 28:
 29:
         ref={ref}
 30:
         className={cn(
 31:
            "aspect-square h-4 w-4 rounded-full border border-primary text-primary ring-offset-background focus
 32:
            className
 33:
         ) }
 34:
         {...props}
 35:
 36:
          <RadioGroupPrimitive.Indicator className="flex items-center justify-center">
 37:
           <Circle className="h-2.5 w-2.5 fill-current text-current" />
 38:
          </RadioGroupPrimitive.Indicator>
39:
        </RadioGroupPrimitive.Item>
 40:
      )
41: })
42: RadioGroupItem.displayName = RadioGroupPrimitive.Item.displayName
 44: export { RadioGroup, RadioGroupItem }
```

■ File: components\ui\resizable.tsx

```
-----
 1: "use client"
 2:
 3: import { GripVertical } from "lucide-react"
 4: import * as ResizablePrimitive from "react-resizable-panels"
 5:
 6: import { cn } from "@/lib/utils"
 7:
 8: const ResizablePanelGroup = ({
 9: className,
10:
     ...props
11: }: React.ComponentProps<typeof ResizablePrimitive.PanelGroup>) => (
12:
    <ResizablePrimitive.PanelGroup</pre>
13:
      className={cn(
14:
        "flex h-full w-full data-[panel-group-direction=vertical]:flex-col",
15:
         className
      )}
{...props}
16:
17:
18: />
19: )
20:
21: const ResizablePanel = ResizablePrimitive.Panel
22:
23: const ResizableHandle = ({
24: withHandle,
    className,
25:
26:
       ..props
27: }: React.ComponentProps<typeof ResizablePrimitive.PanelResizeHandle> & {
    withHandle?: boolean
29: }) => (
     <ResizablePrimitive.PanelResizeHandle</pre>
30:
31:
      className={cn(
        "relative flex w-px items-center justify-center bg-border after:absolute after:inset-y-0 after:left-1
32:
33:
         className
34:
       ) }
35:
       {...props}
36: >
37:
      {withHandle && (
         <div className="z-10 flex h-4 w-3 items-center justify-center rounded-sm border bq-border">
38:
39:
           <GripVertical className="h-2.5 w-2.5" />
40:
          </div>
41:
       ) }
42:
     </ResizablePrimitive.PanelResizeHandle>
43: )
44:
45: export { ResizablePanelGroup, ResizablePanel, ResizableHandle }
```

■ File: components\ui\scroll-area.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as ScrollAreaPrimitive from "@radix-ui/react-scroll-area"
 6: import { cn } from "@/lib/utils"
 8: const ScrollArea = React.forwardRef<
 9: React.ElementRef<typeof ScrollAreaPrimitive.Root>,
10: React.ComponentPropsWithoutRef<typeof ScrollAreaPrimitive.Root>
11: >(({ className, children, ...props }, ref) => (
12:
     <ScrollAreaPrimitive.Root
13:
      ref={ref}
14:
      className={cn("relative overflow-hidden", className)}
15:
       {...props}
16:
      <ScrollAreaPrimitive.Viewport className="h-full w-full rounded-[inherit]">
17:
18:
        {children}
19:
      </ScrollAreaPrimitive.Viewport>
20:
       <ScrollBar />
21:
       <ScrollAreaPrimitive.Corner />
```

```
22: </ScrollAreaPrimitive.Root>
23: ))
24: ScrollArea.displayName = ScrollAreaPrimitive.Root.displayName
26: const ScrollBar = React.forwardRef<
27: React.ElementRef<typeof ScrollAreaPrimitive.ScrollAreaScrollbar>,
28: React.ComponentPropsWithoutRef<typeof ScrollAreaPrimitive.ScrollAreaScrollbar>
29: >(({ className, orientation = "vertical", ...props }, ref) => (
     <ScrollAreaPrimitive.ScrollAreaScrollbar</pre>
30:
31:
      ref={ref}
       orientation={orientation}
32:
33:
      className={cn(
34:
         "flex touch-none select-none transition-colors",
         orientation === "vertical" &&
35:
36:
           "h-full w-2.5 border-l border-l-transparent p-[1px]",
37:
        orientation === "horizontal" &&
38:
           "h-2.5 flex-col border-t border-t-transparent p-[1px]",
39:
         className
      ) }
40:
41:
       \{\dots props\}
42: >
43:
        <ScrollAreaPrimitive.ScrollAreaThumb className="relative flex-1 rounded-full bg-border" />
44:
     </ScrollAreaPrimitive.ScrollAreaScrollbar>
45: ))
46: ScrollBar.displayName = ScrollAreaPrimitive.ScrollAreaScrollbar.displayName
47:
48: export { ScrollArea, ScrollBar }
```

■ File: components\ui\select.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as SelectPrimitive from "@radix-ui/react-select"
 5: import { Check, ChevronDown, ChevronUp } from "lucide-react"
 7: import { cn } from "@/lib/utils"
 8:
 9: const Select = SelectPrimitive.Root
10:
11: const SelectGroup = SelectPrimitive.Group
12:
13: const SelectValue = SelectPrimitive.Value
14:
15: const SelectTrigger = React.forwardRef<</pre>
16: React.ElementRef<typeof SelectPrimitive.Trigger>,
     React.ComponentPropsWithoutRef<typeof SelectPrimitive.Trigger>
17:
 18: >(({ className, children, ...props }, ref) => (
19: <SelectPrimitive.Trigger</pre>
 20:
      ref={ref}
 21:
      className={cn(
 22:
          "flex h-10 w-full items-center justify-between rounded-md border border-input bg-background px-3 py-2
 23:
 24:
        ) }
       {...props}
 25:
 26:
 27:
        {children}
 28:
        <SelectPrimitive.Icon asChild>
         <ChevronDown className="h-4 w-4 opacity-50" />
 30:
        </SelectPrimitive.Icon>
 31:
     </SelectPrimitive.Trigger>
 32: ))
33: SelectTrigger.displayName = SelectPrimitive.Trigger.displayName
 35: const SelectScrollUpButton = React.forwardRef<</pre>
     React.ElementRef<typeof SelectPrimitive.ScrollUpButton>,
 37:
     React.ComponentPropsWithoutRef<typeof SelectPrimitive.ScrollUpButton>
 38: >(({ className, ...props }, ref) => (
 39: <SelectPrimitive.ScrollUpButton</pre>
 40:
      ref={ref}
 41:
        className={cn(
```

```
42:
           "flex cursor-default items-center justify-center py-1",
 43:
        ) }
 44:
 45:
         {...props}
 46:
 47:
         <ChevronUp className="h-4 w-4" />
 48:
      </SelectPrimitive.ScrollUpButton>
 49: ))
 50: SelectScrollUpButton.displayName = SelectPrimitive.ScrollUpButton.displayName
 51:
 52: const SelectScrollDownButton = React.forwardRef<
 53: React.ElementRef<typeof SelectPrimitive.ScrollDownButton>,
      React.ComponentPropsWithoutRef<typeof SelectPrimitive.ScrollDownButton>
 55: >(({ className, ...props }, ref) => (
 56: <SelectPrimitive.ScrollDownButton
 57:
       ref={ref}
 58:
       className={cn(
 59:
           "flex cursor-default items-center justify-center py-1",
 60:
           className
 61:
        ) }
        {...props}
 62:
 63:
 64:
         <ChevronDown className="h-4 w-4" />
 65:
     </SelectPrimitive.ScrollDownButton>
 66: ))
 67: SelectScrollDownButton.displayName =
 68:
      SelectPrimitive.ScrollDownButton.displayName
 69:
 70: const SelectContent = React.forwardRef<</pre>
 71: React.ElementRef<typeof SelectPrimitive.Content>,
      React.ComponentPropsWithoutRef<typeof SelectPrimitive.Content>
 72:
 73: >(({ className, children, position = "popper", ...props }, ref) => (
 74:
     <SelectPrimitive.Portal>
 75:
        <SelectPrimitive.Content</pre>
 76:
          ref={ref}
 77:
          className={cn(
 78:
             "relative z-50 max-h-96 min-w-[8rem] overflow-hidden rounded-md border bg-popover text-popover-fore
 79:
            position === "popper" &&
 :08
               "data-[side=bottom]:translate-y-1 data-[side=left]:-translate-x-1 data-[side=right]:translate-x-1
 81:
            className
 82:
          ) }
           position={position}
 83:
 84:
          \{\dots props\}
 85:
 86:
           <SelectScrollUpButton />
 87:
           <SelectPrimitive.Viewport
 88:
            className={cn(
 89:
               "p-1",
               position === "popper" &&
 90:
 91:
                 "h-[var(--radix-select-trigger-height)] w-full min-w-[var(--radix-select-trigger-width)]"
 92:
            ) }
 93:
 94:
             {children}
 95:
           </SelectPrimitive.Viewport>
 96:
           <SelectScrollDownButton />
         </SelectPrimitive.Content>
 97:
 98:
      </SelectPrimitive.Portal>
 99: ))
100: SelectContent.displayName = SelectPrimitive.Content.displayName
101:
102: const SelectLabel = React.forwardRef<</pre>
103: React.ElementRef<typeof SelectPrimitive.Label>,
      React.ComponentPropsWithoutRef<typeof SelectPrimitive.Label>
104:
105: >(({ className, ...props }, ref) => (
106:
      <SelectPrimitive.Label
107:
        ref={ref}
        className={cn("py-1.5 pl-8 pr-2 text-sm font-semibold", className)}
108:
109:
        {...props}
110:
111: ))
112: SelectLabel.displayName = SelectPrimitive.Label.displayName
113:
114: const SelectItem = React.forwardRef<</pre>
```

```
React.ElementRef<typeof SelectPrimitive.Item>,
115:
116: React.ComponentPropsWithoutRef<typeof SelectPrimitive.Item>
117: >(({ className, children, ...props }, ref) => (
      <SelectPrimitive.Item
119:
       ref={ref}
120:
       className={cn(
121:
          "relative flex w-full cursor-default select-none items-center rounded-sm py-1.5 pl-8 pr-2 text-sm out
122:
          className
123:
        ) }
124:
        {...props}
125: >
126:
       <span className="absolute left-2 flex h-3.5 w-3.5 items-center justify-center">
127:
         <SelectPrimitive.ItemIndicator>
128:
            <Check className="h-4 w-4" />
129:
          </SelectPrimitive.ItemIndicator>
130:
       </span>
131:
132:
        <SelectPrimitive.ItemText>{children}</SelectPrimitive.ItemText>
133:
     </SelectPrimitive.Item>
134: ))
135: SelectItem.displayName = SelectPrimitive.Item.displayName
136:
137: const SelectSeparator = React.forwardRef<
138: React.ElementRef<typeof SelectPrimitive.Separator>,
139: React.ComponentPropsWithoutRef<typeof SelectPrimitive.Separator>
140: >(({ className, ...props }, ref) => (
      <SelectPrimitive.Separator</pre>
142:
       ref={ref}
        className={cn("-mx-1 my-1 h-px bg-muted", className)}
144:
        {...props}
145:
      />
146: ))
147: SelectSeparator.displayName = SelectPrimitive.Separator.displayName
149: export {
150: Select,
151: SelectGroup,
152: SelectValue,
153: SelectTrigger,
154: SelectContent,
155: SelectLabel,
      SelectLabel,
156: SelectItem,
157: SelectSeparator,
158: SelectScrollUpButton,
159:
      SelectScrollDownButton,
160: }
______
```

■ File: components\ui\separator.tsx

```
1: "use client"
 2:
 3: import * as React from "react"
 4: import * as SeparatorPrimitive from "@radix-ui/react-separator"
 5:
 6: import { cn } from "@/lib/utils"
 7:
 8: const Separator = React.forwardRef<
 9: React.ElementRef<typeof SeparatorPrimitive.Root>,
 10: React.ComponentPropsWithoutRef<typeof SeparatorPrimitive.Root>
11: >(
12:
13:
        { className, orientation = "horizontal", decorative = true, ...props },
14:
       ref
15:
     ) => (
       <SeparatorPrimitive.Root</pre>
16:
17:
         ref={ref}
18:
         decorative={decorative}
19:
        orientation={orientation}
 20:
        className={cn(
 21:
           "shrink-0 bg-border",
 22:
           orientation === "horizontal" ? "h-[1px] w-full" : "h-full w-[1px]",
```

```
23:     className
24:     )}
25:     {...props}
26:     />
27:     )
28: )
29: Separator.displayName = SeparatorPrimitive.Root.displayName
30:
31: export { Separator }
```

■ File: components\ui\sheet.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as SheetPrimitive from "@radix-ui/react-dialog"
 5: import { cva, type VariantProps } from "class-variance-authority"
 6: import { X } from "lucide-react"
 7:
 8: import { cn } from "@/lib/utils"
 9:
10: const Sheet = SheetPrimitive.Root
11:
12: const SheetTrigger = SheetPrimitive.Trigger
13:
14: const SheetClose = SheetPrimitive.Close
16: const SheetPortal = SheetPrimitive.Portal
17:
 18: const SheetOverlay = React.forwardRef<</pre>
19: React.ElementRef<typeof SheetPrimitive.Overlay>,
 20: React.ComponentPropsWithoutRef<typeof SheetPrimitive.Overlay>
 21: >(({ className, ...props }, ref) => (
 22:
     <SheetPrimitive.Overlay</pre>
 23:
       className={cn(
24:
          "fixed inset-0 z-50 bg-black/80 data-[state=open]:animate-in data-[state=closed]:animate-out data-[s
25:
 26:
        ) }
 27:
        {...props}
28:
       ref={ref}
 29: />
30: ))
 31: SheetOverlay.displayName = SheetPrimitive.Overlay.displayName
 32:
33: const sheetVariants = cva(
 34:
      "fixed z-50 gap-4 bg-background p-6 shadow-lg transition ease-in-out data-[state=open]:animate-in data-[s
 35:
      {
 36:
        variants: {
37:
          side: {
            top: "inset-x-0 top-0 border-b data-[state=closed]:slide-out-to-top data-[state=open]:slide-in-from
 38:
39:
 40:
              "inset-x-0 bottom-0 border-t data-[state=closed]:slide-out-to-bottom data-[state=open]:slide-in-f
 41:
            left: "inset-y-0 left-0 h-full w-3/4 border-r data-[state=closed]:slide-out-to-left data-[state=ope
 42:
            right:
              "inset-y-0 right-0 h-full w-3/4 border-1 data-[state=closed]:slide-out-to-right data-[state=open
 43:
 44:
          },
 45:
        },
 46:
        defaultVariants: {
 47:
         side: "right",
 48:
        },
 49:
     }
 50: )
51:
 52: interface SheetContentProps
     extends React.ComponentPropsWithoutRef<typeof SheetPrimitive.Content>,
53:
 54:
        VariantProps<typeof sheetVariants> {}
 55:
 56: const SheetContent = React.forwardRef<
 57: React.ElementRef<typeof SheetPrimitive.Content>,
 58: SheetContentProps
 59: >(({ side = "right", className, children, ...props }, ref) => (
```

```
60:
     <SheetPortal>
 61:
        <SheetOverlay />
 62:
        <SheetPrimitive.Content</pre>
 63:
          ref={ref}
          className={cn(sheetVariants({ side }), className)}
 64:
 65:
          \{\dotsprops\}
 66:
 67:
           {children}
 68:
           <SheetPrimitive.Close className="absolute right-4 top-4 rounded-sm opacity-70 ring-offset-background</pre>
            <X className="h-4 w-4" />
 69:
            <span className="sr-only">Close</span>
 70:
 71:
          </SheetPrimitive.Close>
 72:
         </SheetPrimitive.Content>
 73: </SheetPortal>
 74: ))
 75: SheetContent.displayName = SheetPrimitive.Content.displayName
 76:
 77: const SheetHeader = ({
 78: className,
 79:
       ...props
 80: }: React.HTMLAttributes<HTMLDivElement>) => (
 81:
 82:
        className={cn(
 83:
          "flex flex-col space-y-2 text-center sm:text-left",
 84:
           className
 85:
        ) }
 86:
        {...props}
 87: />
 88: )
 89: SheetHeader.displayName = "SheetHeader"
 90:
 91: const SheetFooter = ({
 92: className,
      ...props
 94: }: React.HTMLAttributes<HTMLDivElement>) => (
 95:
      <div
 96:
        className={cn(
 97:
         "flex flex-col-reverse sm:flex-row sm:justify-end sm:space-x-2",
 98:
          className
 99:
        ) }
100:
        {...props}
101: />
102: )
103: SheetFooter.displayName = "SheetFooter"
104:
105: const SheetTitle = React.forwardRef<</pre>
106: React.ElementRef<typeof SheetPrimitive.Title>,
107: React.ComponentPropsWithoutRef<typeof SheetPrimitive.Title>
108: >(({ className, ...props }, ref) => (
109:
      <SheetPrimitive.Title
110:
       ref={ref}
       className={cn("text-lg font-semibold text-foreground", className)}
112:
       {...props}
113:
      />
114: ))
115: SheetTitle.displayName = SheetPrimitive.Title.displayName
117: const SheetDescription = React.forwardRef<</pre>
118:
      React.ElementRef<typeof SheetPrimitive.Description>,
119: React.ComponentPropsWithoutRef<typeof SheetPrimitive.Description>
120: >(({ className, ...props }, ref) => (
121: <SheetPrimitive.Description
122:
       ref={ref}
123:
        className={cn("text-sm text-muted-foreground", className)}
124:
         {...props}
125: />
126: ))
127: SheetDescription.displayName = SheetPrimitive.Description.displayName
128:
129: export {
130: Sheet,
131:
      SheetPortal,
132:
      SheetOverlay,
```

```
133: SheetTrigger,
134: SheetClose,
135: SheetContent,
136: SheetHeader,
137: SheetFooter,
138: SheetTitle,
139: SheetDescription,
140: }
```

■ File: components\ui\sidebar.tsx

```
______
 1: "use client"
 3: import * as React from "react"
 4: import { Slot } from "@radix-ui/react-slot"
 5: import { VariantProps, cva } from "class-variance-authority"
 6: import { PanelLeft } from "lucide-react"
 8: import { useIsMobile } from "@/hooks/use-mobile"
 9: import { cn } from "@/lib/utils"
10: import { Button } from "@/components/ui/button"
11: import { Input } from "@/components/ui/input"
 12: import { Separator } from "@/components/ui/separator"
13: import { Sheet, SheetContent } from "@/components/ui/sheet"
14: import { Skeleton } from "@/components/ui/skeleton"
15: import {
16: Tooltip,
17: TooltipContent,
18: TooltipProvider,
19: TooltipTrigger,
20: } from "@/components/ui/tooltip"
 21:
 22: const SIDEBAR_COOKIE_NAME = "sidebar:state"
 23: const SIDEBAR_COOKIE_MAX_AGE = 60 * 60 * 24 * 7
 24: const SIDEBAR_WIDTH = "16rem"
 25: const SIDEBAR_WIDTH_MOBILE = "18rem"
 26: const SIDEBAR_WIDTH_ICON = "3rem"
 27: const SIDEBAR_KEYBOARD_SHORTCUT = "b"
 28:
 29: type SidebarContext = {
 30: state: "expanded" | "collapsed"
 31: open: boolean
32:
33:
     setOpen: (open: boolean) => void
      openMobile: boolean
34: setOpenMobile: (open: boolean) => void
 35: isMobile: boolean
     toggleSidebar: () => void
 36:
 37: }
38:
39: const SidebarContext = React.createContext<SidebarContext | null>(null)
 41: function useSidebar() {
 42:
     const context = React.useContext(SidebarContext)
     if (!context) {
 43:
 44:
       throw new Error("useSidebar must be used within a SidebarProvider.")
 45:
 46:
 47:
      return context
 48: }
 49:
 50: const SidebarProvider = React.forwardRef<</pre>
 51: HTMLDivElement,
52: React.ComponentProps<"div"> & {
 53:
      defaultOpen?: boolean
54:
       open?: boolean
 55:
       onOpenChange?: (open: boolean) => void
56: }
 57: >(
 58:
 59:
 60:
          defaultOpen = true,
```

```
61:
           open: openProp,
 62:
           onOpenChange: setOpenProp,
 63:
           className,
 64:
           style,
 65:
          children,
 66:
           ...props
        },
 67:
 68:
        ref
 69:
       ) => {
         const isMobile = useIsMobile()
 70:
         const [openMobile, setOpenMobile] = React.useState(false)
 71:
 72:
 73:
         // This is the internal state of the sidebar.
         // We use openProp and setOpenProp for control from outside the component.
 74:
 75:
         const [_open, _setOpen] = React.useState(defaultOpen)
 76:
         const open = openProp ?? _open
 77:
         const setOpen = React.useCallback(
 78:
          (value: boolean | ((value: boolean) => boolean)) => {
             const openState = typeof value === "function" ? value(open) : value
 79:
 :08
             if (setOpenProp) {
 81:
              setOpenProp(openState)
 82:
             } else {
 83:
               _setOpen(openState)
 84:
 85:
             \ensuremath{//} This sets the cookie to keep the sidebar state.
 86:
 87:
             document.cookie = `${SIDEBAR_COOKIE_NAME}=${openState}; path=/; max-age=${SIDEBAR_COOKIE_MAX_AGE}`
 88:
 89:
           [setOpenProp, open]
 90:
         )
 91:
 92:
         // Helper to toggle the sidebar.
 93:
         const toggleSidebar = React.useCallback(() => {
 94:
         return isMobile
             ? setOpenMobile((open) => !open)
 95:
 96:
             : setOpen((open) => !open)
 97:
         }, [isMobile, setOpen, setOpenMobile])
 98:
 99:
         // Adds a keyboard shortcut to toggle the sidebar.
        React.useEffect(() => {
100:
101:
          const handleKeyDown = (event: KeyboardEvent) => {
102:
             if (
103:
               event.key === SIDEBAR_KEYBOARD_SHORTCUT &&
104:
               (event.metaKey || event.ctrlKey)
105:
             ) {
106:
               event.preventDefault()
107:
               toggleSidebar()
108:
             }
109:
           }
110:
          window.addEventListener("keydown", handleKeyDown)
111:
112:
          return () => window.removeEventListener("keydown", handleKeyDown)
113:
         }, [toggleSidebar])
114:
115:
         // We add a state so that we can do data-state="expanded" or "collapsed".
         // This makes it easier to style the sidebar with Tailwind classes.
116:
        const state = open ? "expanded" : "collapsed"
117:
118:
119:
        const contextValue = React.useMemo<SidebarContext>(
120:
          () => ({
121:
            state,
122:
            open,
123:
            setOpen,
124:
            isMobile,
125:
            openMobile,
126:
            setOpenMobile,
127:
            toggleSidebar,
128:
           }),
129:
           [state, open, setOpen, isMobile, openMobile, setOpenMobile, toggleSidebar]
130:
         )
131:
132:
        return (
133:
           <SidebarContext.Provider value={contextValue}>
```

```
134:
             <TooltipProvider delayDuration={0}>
135:
               <div
136:
                 style={
137:
                  {
                     "--sidebar-width": SIDEBAR_WIDTH,
138:
139:
                     "--sidebar-width-icon": SIDEBAR_WIDTH_ICON,
140:
                     ...style,
141:
                  } as React.CSSProperties
142:
143:
                 className={cn(
                   "group/sidebar-wrapper flex min-h-svh w-full has-[[data-variant=inset]]:bg-sidebar",
144:
145:
146:
                 ) }
147:
                 ref={ref}
148:
                \{\dotsprops\}
149:
                 {children}
150:
               </div>
151:
152:
            </TooltipProvider>
153:
           </SidebarContext.Provider>
154:
        )
155:
     }
156: )
157: SidebarProvider.displayName = "SidebarProvider"
159: const Sidebar = React.forwardRef<
160: HTMLDivElement,
161: React.ComponentProps<"div"> & {
       side?: "left" | "right"
163:
       variant?: "sidebar" | "floating" | "inset"
164:
        collapsible?: "offcanvas" | "icon" | "none"
165:
166: >(
167:
     (
168:
169:
          side = "left",
170:
          variant = "sidebar",
171:
          collapsible = "offcanvas",
172:
         className,
         children,
173:
174:
          ...props
       },
175:
176:
        ref
177:
     ) => {
178:
        const { isMobile, state, openMobile, setOpenMobile } = useSidebar()
179:
180:
       if (collapsible === "none") {
181:
         return (
182:
            <div
183:
184:
                "flex h-full w-[--sidebar-width] flex-col bg-sidebar text-sidebar-foreground",
185:
                className
186:
              ) }
187:
              ref={ref}
188:
              {...props}
189:
190:
               {children}
            </div>
191:
192:
          )
        }
193:
194:
195:
       if (isMobile) {
196:
          return (
197:
            <Sheet open={openMobile} onOpenChange={setOpenMobile} {...props}>
198:
              <SheetContent
199:
                data-sidebar="sidebar"
200:
                 data-mobile="true"
201:
                 className="w-[--sidebar-width] bg-sidebar p-0 text-sidebar-foreground [&>button]:hidden"
202:
                 style={
203:
                  {
                    "--sidebar-width": SIDEBAR_WIDTH_MOBILE,
204:
205:
                   } as React.CSSProperties
206:
```

```
207:
                 side={side}
208:
209:
                 <div className="flex h-full w-full flex-col">{children}</div>
210:
               </SheetContent>
211:
             </Sheet>
212:
          )
         }
213:
214:
215:
        return (
216:
          <div
217:
            ref={ref}
218:
             className="group peer hidden md:block text-sidebar-foreground"
219:
             data-state={state}
             data-collapsible={state === "collapsed" ? collapsible : ""}
220:
221:
             data-variant={variant}
222:
             data-side={side}
223:
224:
             {/*} This is what handles the sidebar gap on desktop */
             <div
225:
226:
               className={cn(
227:
                 "duration-200 relative h-svh w-[--sidebar-width] bg-transparent transition-[width] ease-linear"
228:
                 "group-data-[collapsible=offcanvas]:w-0",
229:
                 "group-data-[side=right]:rotate-180",
                 variant === "floating" || variant === "inset"
230:
                   ? "group-data-[collapsible=icon]:w-[calc(var(--sidebar-width-icon)_+_theme(spacing.4))]"
231:
                   : "group-data-[collapsible=icon]:w-[--sidebar-width-icon]"
232:
233:
               ) }
             />
234:
235:
             <div
236:
               className={cn(
                 "duration-200 fixed inset-y-0 z-10 hidden h-svh w-[--sidebar-width] transition-[left,right,widt
237:
238:
                 side === "left"
                   ? "left-0 group-data-[collapsible=offcanvas]:left-[calc(var(--sidebar-width)*-1)]"
239:
240:
                   : "right-0 group-data-[collapsible=offcanvas]:right-[calc(var(--sidebar-width)*-1)]",
241:
                 // Adjust the padding for floating and inset variants.
242:
                 variant === "floating" || variant === "inset"
243:
                   ? "p-2 group-data-[collapsible=icon]:w-[calc(var(--sidebar-width-icon)_+_theme(spacing.4)_+2p
                   : "group-data-[collapsible=icon]:w-[--sidebar-width-icon] group-data-[side=left]:border-r gro
244:
245:
                 className
246:
               ) }
247:
               {...props}
248:
249:
               <div
250:
                 data-sidebar="sidebar"
251:
                 className="flex h-full w-full flex-col bg-sidebar group-data-[variant=floating]:rounded-lg grou
252:
253:
                 {children}
254:
               </div>
255:
             </div>
256:
           </div>
257:
         )
258: }
259: )
260: Sidebar.displayName = "Sidebar"
261:
262: const SidebarTrigger = React.forwardRef<
263: React.ElementRef<typeof Button>,
264:
      React.ComponentProps<typeof Button>
265: >(({ className, onClick, ...props }, ref) => {
      const { toggleSidebar } = useSidebar()
266:
267:
268:
      return (
269:
       <Button
270:
          ref={ref}
           data-sidebar="trigger"
271:
272:
          variant="ghost"
273:
           size="icon"
274:
          className={cn("h-7 w-7", className)}
275:
           onClick={(event) => {
276:
            onClick?.(event)
            toggleSidebar()
277:
278:
           }}
279:
           {...props}
```

```
280:
281:
          <PanelLeft />
282:
          <span className="sr-only">Toggle Sidebar</span>
283:
         </Button>
     )
284:
285: })
286: SidebarTrigger.displayName = "SidebarTrigger"
287:
288: const SidebarRail = React.forwardRef<
289: HTMLButtonElement,
290: React.ComponentProps<"button">
291: >(({ className, ...props }, ref) => {
292:
      const { toggleSidebar } = useSidebar()
293:
294:
      return (
295:
       <button
296:
          ref={ref}
297:
          data-sidebar="rail"
          aria-label="Toggle Sidebar"
298:
          tabIndex={-1}
300:
          onClick={toggleSidebar}
301:
          title="Toggle Sidebar"
302:
          className={cn(
             "absolute inset-y-0 z-20 hidden w-4 -translate-x-1/2 transition-all ease-linear after:absolute afte
303:
             "[[data-side=left]_&]:cursor-w-resize [[data-side=right]_&]:cursor-e-resize",
304:
             "[[data-side=left][data-state=collapsed]_&]:cursor-e-resize [[data-side=right][data-state=collapsed
305:
             "group-data-[collapsible=offcanvas]:translate-x-0 group-data-[collapsible=offcanvas]:after:left-ful
307:
             "[[data-side=left][data-collapsible=offcanvas]_&]:-right-2",
308:
             "[[data-side=right][data-collapsible=offcanvas]_&]:-left-2",
309:
             className
310:
           ) }
311:
           {...props}
312:
         />
313: )
314: })
315: SidebarRail.displayName = "SidebarRail"
316:
317: const SidebarInset = React.forwardRef<</pre>
318: HTMLDivElement,
319: React.ComponentProps<"main">
320: >(({ className, ...props }, ref) => {
321: return (
322:
       <main
323:
         ref={ref}
324:
          className={cn(
325:
             "relative flex min-h-svh flex-1 flex-col bg-background",
             "peer-data-[variant=inset]:min-h-[calc(100svh-theme(spacing.4))] md:peer-data-[variant=inset]:m-2 m
326:
327:
             className
328:
           ) }
329:
           {...props}
330:
331:
332: })
333: SidebarInset.displayName = "SidebarInset"
335: const SidebarInput = React.forwardRef<</pre>
336: React.ElementRef<typeof Input>,
337:
     React.ComponentProps<typeof Input>
338: >(({ className, ...props }, ref) => {
339: return (
340:
       <Input
341:
          ref={ref}
342:
          data-sidebar="input"
343:
          className={cn(
             "h-8 w-full bg-background shadow-none focus-visible:ring-2 focus-visible:ring-sidebar-ring",
344:
345:
346:
          ) }
347:
           {...props}
348:
349:
350: })
351: SidebarInput.displayName = "SidebarInput"
352:
```

```
353: const SidebarHeader = React.forwardRef<
354: HTMLDivElement,
355: React.ComponentProps<"div">
356: >(({ className, ...props }, ref) => {
357: return (
358:
       <div
359:
         ref={ref}
         data-sidebar="header"
360:
          className={cn("flex flex-col gap-2 p-2", className)}
361:
362:
          {...props}
364:
     )
365: })
366: SidebarHeader.displayName = "SidebarHeader"
368: const SidebarFooter = React.forwardRef<
369: HTMLDivElement,
      React.ComponentProps<"div">
371: >(({ className, ...props }, ref) => {
372: return (
373:
        <div
374:
          ref={ref}
375:
          data-sidebar="footer"
376:
          className={cn("flex flex-col gap-2 p-2", className)}
377:
         {...props}
378:
        />
379:
      )
380: })
381: SidebarFooter.displayName = "SidebarFooter"
382:
383: const SidebarSeparator = React.forwardRef<
384: React.ElementRef<typeof Separator>,
385: React.ComponentProps<typeof Separator>
386: >(({ className, ...props }, ref) => {
387: return (
      <Separator
388:
389:
         ref={ref}
         data-sidebar="separator"
391:
         className={cn("mx-2 w-auto bg-sidebar-border", className)}
392:
          \{\dotsprops\}
393:
        />
394: )
395: })
396: SidebarSeparator.displayName = "SidebarSeparator"
397:
398: const SidebarContent = React.forwardRef<
399: HTMLDivElement,
400: React.ComponentProps<"div">
401: >(({ className, ...props }, ref) => {
402:
     return (
403:
       <div
         ref={ref}
404:
405:
        data-sidebar="content"
406:
          className={cn(
407:
            "flex min-h-0 flex-1 flex-col gap-2 overflow-auto group-data-[collapsible=icon]:overflow-hidden",
408:
            className
409:
         ) }
410:
          {...props}
411:
        />
412: )
413: })
414: SidebarContent.displayName = "SidebarContent"
415:
416: const SidebarGroup = React.forwardRef<
417: HTMLDivElement,
418: React.ComponentProps<"div">
419: >(({ className, ...props }, ref) => {
420:
     return (
421:
        <div
422:
         ref={ref}
423:
         data-sidebar="group"
424:
          className={cn("relative flex w-full min-w-0 flex-col p-2", className)}
425:
          {...props}
```

```
426:
427: )
428: })
429: SidebarGroup.displayName = "SidebarGroup"
430:
431: const SidebarGroupLabel = React.forwardRef<
432: HTMLDivElement,
433: React.ComponentProps<"div"> & { asChild?: boolean }
434: >(({ className, asChild = false, ...props }, ref) => {
     const Comp = asChild ? Slot : "div"
435:
437:
      return (
438:
        <Comp
439:
          ref={ref}
          data-sidebar="group-label"
440:
441:
          className={cn(
442:
            "duration-200 flex h-8 shrink-0 items-center rounded-md px-2 text-xs font-medium text-sidebar-foreg
443:
             "group-data-[collapsible=icon]:-mt-8 group-data-[collapsible=icon]:opacity-0",
444:
            className
445:
          ) }
          {...props}
446:
447:
        />
448:
449: })
450: SidebarGroupLabel.displayName = "SidebarGroupLabel"
451:
452: const SidebarGroupAction = React.forwardRef<
453: HTMLButtonElement,
454: React.ComponentProps<"button"> & { asChild?: boolean }
455: >(({ className, asChild = false, ...props }, ref) => {}
      const Comp = asChild ? Slot : "button"
456:
457:
458:
      return (
459:
       <Comp
460:
          ref={ref}
461:
          data-sidebar="group-action"
462:
          className={cn(
463:
            "absolute right-3 top-3.5 flex aspect-square w-5 items-center justify-center rounded-md p-0 text-si
464:
            // Increases the hit area of the button on mobile.
465:
            "after:absolute after:-inset-2 after:md:hidden",
466:
             "group-data-[collapsible=icon]:hidden",
467:
            className
          ) }
469:
          {...props}
470:
         />
471:
      )
472: })
473: SidebarGroupAction.displayName = "SidebarGroupAction"
474:
475: const SidebarGroupContent = React.forwardRef<
476: HTMLDivElement,
477: React.ComponentProps<"div">
478: >(({ className, ...props }, ref) => (
479:
      <div
480:
        ref={ref}
        data-sidebar="group-content"
481:
        className={cn("w-full text-sm", className)}
483:
         {...props}
484:
      />
485: ))
486: SidebarGroupContent.displayName = "SidebarGroupContent"
488: const SidebarMenu = React.forwardRef<
     HTMLUListElement,
489:
490: React.ComponentProps<"ul">
491: >(({ className, ...props }, ref) => (
492:
      <ul
493:
        ref={ref}
494:
        data-sidebar="menu"
        className={cn("flex w-full min-w-0 flex-col gap-1", className)}
495:
496:
        {...props}
497:
      />
498: ))
```

```
499: SidebarMenu.displayName = "SidebarMenu"
501: const SidebarMenuItem = React.forwardRef<</pre>
502:
      HTMLLIElement,
503: React.ComponentProps<"li">
504: >(({ className, ...props }, ref) => (
505: <li
506:
       ref={ref}
507:
        data-sidebar="menu-item"
508:
        className={cn("group/menu-item relative", className)}
509:
         {...props}
510:
      />
511: ))
512: SidebarMenuItem.displayName = "SidebarMenuItem"
513:
514: const sidebarMenuButtonVariants = cva(
515:
      "peer/menu-button flex w-full items-center gap-2 overflow-hidden rounded-md p-2 text-left text-sm outline
516:
      {
517:
         variants: {
518:
          variant: {
519:
            default: "hover:bg-sidebar-accent hover:text-sidebar-accent-foreground",
520:
            outline:
521:
               "bg-background shadow-[0_0_0_1px_hsl(var(--sidebar-border))] hover:bg-sidebar-accent hover:text-s
522:
         }.
523:
         size: {
            default: "h-8 text-sm",
524:
525:
            sm: "h-7 text-xs",
            lg: "h-12 text-sm group-data-[collapsible=icon]:!p-0",
526:
527:
          },
528:
       },
529:
       defaultVariants: {
530:
          variant: "default",
          size: "default",
531:
532:
        },
533: }
534: )
535:
536: const SidebarMenuButton = React.forwardRef<
537: HTMLButtonElement,
538:
      React.ComponentProps<"button"> & {
539:
       asChild?: boolean
540:
        isActive?: boolean
       tooltip?: string | React.ComponentProps<typeof TooltipContent>
542: } & VariantProps<typeof sidebarMenuButtonVariants>
543: >(
544:
545:
546:
          asChild = false,
547:
          isActive = false,
548:
          variant = "default",
          size = "default",
549:
550:
          tooltip,
551:
         className,
552:
          ...props
553:
        },
554:
        ref
555:
      ) => {
556:
       const Comp = asChild ? Slot : "button"
557:
        const { isMobile, state } = useSidebar()
558:
559:
       const button = (
560:
          <Comp
561:
            ref={ref}
562:
            data-sidebar="menu-button"
563:
            data-size={size}
564:
            data-active={isActive}
565:
            className={cn(sidebarMenuButtonVariants({ variant, size }), className)}
            {...props}
566:
567:
          />
        )
568:
569:
570:
       if (!tooltip) {
571:
          return button
```

```
572:
                  }
573:
574:
                 if (typeof tooltip === "string") {
575:
                      tooltip = {
576:
                         children: tooltip,
577:
                     }
                  }
578:
579:
580:
                 return (
581:
                     <Tooltip>
                         <TooltipTrigger asChild>{button}</TooltipTrigger>
582:
583:
                         <TooltipContent
584:
                             side="right"
585:
                             align="center"
586:
                             hidden={state !== "collapsed" || isMobile}
587:
                             {...tooltip}
                         />
588:
589:
                      </Tooltip>
590:
                 )
591:
             }
592: )
593: SidebarMenuButton.displayName = "SidebarMenuButton"
594:
595: const SidebarMenuAction = React.forwardRef<</pre>
596: HTMLButtonElement,
            React.ComponentProps<"button"> & {
597:
598:
                 asChild?: boolean
599:
                  showOnHover?: boolean
600:
601: >((\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, ...props \}, ref) => \{ (\{ className, asChild = false, showOnHover = false, showOnHover = false, ...props \}, ref) == \{ (\{ className, asChild = false, showOnHover = false, showO
            const Comp = asChild ? Slot : "button"
602:
603:
604:
             return (
605:
                <Comp
606:
                    ref={ref}
607:
                     data-sidebar="menu-action"
608:
                     className={cn(
609:
                          "absolute right-1 top-1.5 flex aspect-square w-5 items-center justify-center rounded-md p-0 text-si
610:
                          // Increases the hit area of the button on mobile.
                          "after:absolute after:-inset-2 after:md:hidden",
611:
612:
                          "peer-data-[size=sm]/menu-button:top-1",
                          "peer-data-[size=default]/menu-button:top-1.5",
613:
614:
                         "peer-data-[size=lg]/menu-button:top-2.5",
615:
                         "group-data-[collapsible=icon]:hidden",
616:
                         showOnHover &&
617:
                             "group-focus-within/menu-item:opacity-100 group-hover/menu-item:opacity-100 data-[state=open]:opa
618:
                         className
619:
                      ) }
620:
                      {...props}
621:
622:
            )
623: })
624: SidebarMenuAction.displayName = "SidebarMenuAction"
625:
626: const SidebarMenuBadge = React.forwardRef<
627: HTMLDivElement,
628: React.ComponentProps<"div">
629: >(({ className, ...props }, ref) => (
630:
             <div
631:
                ref={ref}
632:
                 data-sidebar="menu-badge"
633:
                 className={cn(
634:
                      "absolute right-1 flex h-5 min-w-5 items-center justify-center rounded-md px-1 text-xs font-medium ta
635:
                      "peer-hover/menu-button:text-sidebar-accent-foreground peer-data-[active=true]/menu-button:text-sideb
                      "peer-data-[size=sm]/menu-button:top-1",
636:
637:
                      "peer-data-[size=default]/menu-button:top-1.5",
638:
                      "peer-data-[size=lg]/menu-button:top-2.5",
639:
                      "group-data-[collapsible=icon]:hidden",
640:
                      className
641:
                 ) }
642:
                  {...props}
643:
             />
644: ))
```

```
645: SidebarMenuBadge.displayName = "SidebarMenuBadge"
647: const SidebarMenuSkeleton = React.forwardRef<
648:
      HTMLDivElement,
      React.ComponentProps<"div"> & {
649:
650:
       showIcon?: boolean
651: }
652: >((\{ className, showIcon = false, ...props \}, ref) => {
      // Random width between 50 to 90%.
      const width = React.useMemo(() => {
        return `${Math.floor(Math.random() * 40) + 50}%`
656:
      },[])
657:
658:
      return (
659:
        <div
660:
          ref={ref}
661:
          data-sidebar="menu-skeleton"
662:
          className={cn("rounded-md h-8 flex gap-2 px-2 items-center", className)}
663:
          {...props}
664:
665:
          {showIcon && (
666:
            <Skeleton
667:
              className="size-4 rounded-md"
668:
              data-sidebar="menu-skeleton-icon"
669:
            />
         ) }
670:
671:
          <Skeleton
            className="h-4 flex-1 max-w-[--skeleton-width]"
672:
673:
           data-sidebar="menu-skeleton-text"
674:
           style={
675:
676:
                "--skeleton-width": width,
677:
              } as React.CSSProperties
678:
            }
679:
          />
680:
        </div>
     )
681:
682: })
683: SidebarMenuSkeleton.displayName = "SidebarMenuSkeleton"
684:
685: const SidebarMenuSub = React.forwardRef<
686: HTMLUListElement,
687: React.ComponentProps<"ul">
688: >(({ className, ...props }, ref) => (
689:
     ul
690:
        ref={ref}
       data-sidebar="menu-sub"
691:
692:
       className={cn(
693:
          "mx-3.5 flex min-w-0 translate-x-px flex-col gap-1 border-1 border-sidebar-border px-2.5 py-0.5",
694:
          "group-data-[collapsible=icon]:hidden",
695:
          className
       ) }
697:
        {...props}
698:
      />
699: ))
700: SidebarMenuSub.displayName = "SidebarMenuSub"
702: const SidebarMenuSubItem = React.forwardRef<
703:
      HTMLLIElement,
      React.ComponentProps<"li">
705: >(({ ...props }, ref) => )
706: SidebarMenuSubItem.displayName = "SidebarMenuSubItem"
707:
708: const SidebarMenuSubButton = React.forwardRef<
709: HTMLAnchorElement,
710: React.ComponentProps<"a"> & {
711:
      asChild?: boolean
712:
        size?: "sm" | "md"
713:
        isActive?: boolean
714: }
715: >(({ asChild = false, size = "md", isActive, className, ...props }, ref) => {
716:
      const Comp = asChild ? Slot : "a"
717:
```

```
718: return (
719:
       <Comp
720:
        ref={ref}
         data-sidebar="menu-sub-button"
721:
         data-size={size}
722:
        data-active={isActive}
723:
724:
        className={cn(
725:
           "flex h-7 min-w-0 -translate-x-px items-center gap-2 overflow-hidden rounded-md px-2 text-sidebar-f
726:
           "data-[active=true]:bg-sidebar-accent data-[active=true]:text-sidebar-accent-foreground",
           size === "sm" && "text-xs",
727:
728:
           size === "md" && "text-sm",
           "group-data-[collapsible=icon]:hidden",
729:
730:
            className
         ) }
731:
732:
         {...props}
733:
        />
734:
     )
735: })
736: SidebarMenuSubButton.displayName = "SidebarMenuSubButton"
738: export {
739: Sidebar,740: SidebarContent,
741: SidebarFooter,
742: SidebarGroup,
743: SidebarGroupAction,
744:
      SidebarGroupContent,
745: SidebarGroupLabel,
746: SidebarHeader,
747: SidebarInput,
748: SidebarInset,
749: SidebarMenu,
750: SidebarMenuAction,
751: SidebarMenuBadge,
752: SidebarMenuButton,
753:
      SidebarMenuItem,
754: SidebarMenuSkeleton,
755: SidebarMenuSub,
756: SidebarMenuSubButton,
757: SidebarMenuSubItem,758: SidebarProvider,
759: SidebarRail,
760: SidebarSeparator,
761: SidebarTrigger,
762:
     useSidebar,
763: }
______
```

■ File: components\ui\skeleton.tsx

```
______
 1: import { cn } from "@/lib/utils"
 2:
 3: function Skeleton({
 4:
    className,
     ...props
 6: }: React.HTMLAttributes<HTMLDivElement>) {
 7: return (
 8:
        className={cn("animate-pulse rounded-md bg-muted", className)}
 9:
 10:
        \{\dotsprops\}
11:
12:
     )
13: }
14:
15: export { Skeleton }
```

■ File: components\ui\slider.tsx

```
1: "use client"
```

```
3: import * as React from "react"
4: import * as SliderPrimitive from "@radix-ui/react-slider"
5:
6: import { cn } from "@/lib/utils"
7:
8: const Slider = React.forwardRef<
9: React.ElementRef<typeof SliderPrimitive.Root>,
     React.ComponentPropsWithoutRef<typeof SliderPrimitive.Root>
10:
11: >(({ className, ...props }, ref) => (
     <SliderPrimitive.Root
12:
       ref={ref}
14:
      className={cn(
15:
          "relative flex w-full touch-none select-none items-center",
16:
         className
17:
       ) }
18:
       {...props}
19:
     >
20:
       <SliderPrimitive.Track className="relative h-2 w-full grow overflow-hidden rounded-full bg-secondary">
         <SliderPrimitive.Range className="absolute h-full bg-primary" />
21:
       </SliderPrimitive.Track>
23:
       <SliderPrimitive.Thumb className="block h-5 w-5 rounded-full border-2 border-primary bg-background ring
24:
     </SliderPrimitive.Root>
25: ))
26: Slider.displayName = SliderPrimitive.Root.displayName
27:
28: export { Slider }
```

■ File: components\ui\sonner.tsx

```
______
 1: "use client"
 2:
 3: import { useTheme } from "next-themes"
 4: import { Toaster as Sonner } from "sonner"
 6: type ToasterProps = React.ComponentProps<typeof Sonner>
 7:
 8: const Toaster = ({ ...props }: ToasterProps) => {
 9:
     const { theme = "system" } = useTheme()
10:
11:
     return (
12:
      <Sonner
         theme={theme as ToasterProps["theme"]}
13:
14:
         className="toaster group"
15:
         toastOptions={{
16:
           classNames: {
17:
               "group toast group-[.toaster]:bg-background group-[.toaster]:text-foreground group-[.toaster]:b
18:
19:
             description: "group-[.toast]:text-muted-foreground",
20:
             actionButton:
21:
               "group-[.toast]:bg-primary group-[.toast]:text-primary-foreground",
22:
             cancelButton:
 23:
                "group-[.toast]:bg-muted group-[.toast]:text-muted-foreground",
 24:
            },
          }}
 25:
 26:
          {...props}
 27:
 28:
      )
29: }
30:
31: export { Toaster }
```

■ File: components\ui\switch.tsx

```
1: "use client"
2:
3: import * as React from "react"
4: import * as SwitchPrimitives from "@radix-ui/react-switch"
5:
6: import { cn } from "@/lib/utils"
```

```
7:
8: const Switch = React.forwardRef<
9: React.ElementRef<typeof SwitchPrimitives.Root>,
10:
     React.ComponentPropsWithoutRef<typeof SwitchPrimitives.Root>
11: >(({ className, ...props }, ref) => (
12: <SwitchPrimitives.Root
13:
      className={cn(
14:
         "peer inline-flex h-6 w-11 shrink-0 cursor-pointer items-center rounded-full border-2 border-transpar
15:
          className
       ) }
16:
17:
       {...props}
18:
       ref={ref}
19:
20:
       <SwitchPrimitives.Thumb
21:
         className={cn(
22:
            "pointer-events-none block h-5 w-5 rounded-full bg-background shadow-lg ring-0 transition-transform
23:
         ) }
24:
25:
    </SwitchPrimitives.Root>
26: ))
27: Switch.displayName = SwitchPrimitives.Root.displayName
28:
29: export { Switch }
```

■ File: components\ui\table.tsx

```
______
 1: import * as React from "react"
 2:
 3: import { cn } from "@/lib/utils"
 4:
 5: const Table = React.forwardRef<
 6: HTMLTableElement,
 7: React.HTMLAttributes<HTMLTableElement>
 8: >(({ className, ...props }, ref) => (
 9:
     <div className="relative w-full overflow-auto">
10:
       <table
11:
         ref={ref}
12:
         className={cn("w-full caption-bottom text-sm", className)}
13:
         {...props}
14:
       />
15: </div>
16: ))
17: Table.displayName = "Table"
18:
19: const TableHeader = React.forwardRef<</pre>
 20: HTMLTableSectionElement,
 21:
     React.HTMLAttributes<HTMLTableSectionElement>
 22: >(({ className, ...props }, ref) => (
23: <thead ref={ref} className={cn("[&_tr]:border-b", className)} {...props} />
 24: ))
 25: TableHeader.displayName = "TableHeader"
 26:
 27: const TableBody = React.forwardRef<
 28: HTMLTableSectionElement,
 29: React.HTMLAttributes<HTMLTableSectionElement>
 30: >(({ className, ...props }, ref) => (
 31:
     <tbody
 32:
       ref={ref}
 33:
       className={cn("[&_tr:last-child]:border-0", className)}
 34:
        {...props}
 35:
     />
 36: ))
37: TableBody.displayName = "TableBody"
 39: const TableFooter = React.forwardRef<</pre>
 40: HTMLTableSectionElement,
 41:
     React.HTMLAttributes<HTMLTableSectionElement>
42: >(({ className, ...props }, ref) => (
 43: <tfoot
 44:
       ref={ref}
 45:
        className={cn(
```

```
"border-t bg-muted/50 font-medium [&>tr]:last:border-b-0",
 46:
 47:
 48:
        ) }
 49:
        {...props}
 50: />
 51: ))
 52: TableFooter.displayName = "TableFooter"
 53:
 54: const TableRow = React.forwardRef<
 55: HTMLTableRowElement,
 56: React.HTMLAttributes<HTMLTableRowElement>
 57: >(({ className, ...props }, ref) => (
 59:
       ref={ref}
 60:
       className={cn(
 61:
          "border-b transition-colors hover:bg-muted/50 data-[state=selected]:bg-muted",
 62:
          className
 63:
        ) }
 64:
        {...props}
 65: />
 66: ))
 67: TableRow.displayName = "TableRow"
 68:
 69: const TableHead = React.forwardRef<
 70: HTMLTableCellElement,
 71: React.ThHTMLAttributes<HTMLTableCellElement>
 72: >(({ className, ...props }, ref) => (
 73:
     <th
 74:
       ref={ref}
 75:
       className={cn(
 76:
         "h-12 px-4 text-left align-middle font-medium text-muted-foreground [&:has([role=checkbox])]:pr-0",
 77:
 78:
        ) }
 79:
         {...props}
      />
 80:
 81: ))
 82: TableHead.displayName = "TableHead"
 84: const TableCell = React.forwardRef<
 85: HTMLTableCellElement,86: React.TdHTMLAttributes
      React.TdHTMLAttributes<HTMLTableCellElement>
 87: >(({ className, ...props }, ref) => (
 88: <td
 89:
       ref={ref}
       className={cn("p-4 align-middle [&:has([role=checkbox])]:pr-0", className)}
 90:
 91:
         {...props}
 92: />
 93: ))
 94: TableCell.displayName = "TableCell"
 95:
 96: const TableCaption = React.forwardRef<
 97: HTMLTableCaptionElement,
 98: React.HTMLAttributes<HTMLTableCaptionElement>
 99: >(({ className, ...props }, ref) => (
100:
      <caption
       ref={ref}
101:
102:
        className={cn("mt-4 text-sm text-muted-foreground", className)}
103:
       \{\dotsprops\}
104:
105: ))
106: TableCaption.displayName = "TableCaption"
107:
108: export {
109:
      Table,
110: TableHeader,
111: TableBody,
112: TableFooter,
113:
      TableHead,
114: TableRow,
115: TableCell,
116: TableCaption,
117: }
```

■ File: components\ui\tabs.tsx

```
1: "use client"
2:
3: import * as React from "react"
4: import * as TabsPrimitive from "@radix-ui/react-tabs"
5:
6: import { cn } from "@/lib/utils"
7:
8: const Tabs = TabsPrimitive.Root
9:
10: const TabsList = React.forwardRef<</pre>
11:
    React.ElementRef<typeof TabsPrimitive.List>,
12:
     React.ComponentPropsWithoutRef<typeof TabsPrimitive.List>
13: >(({ className, ...props }, ref) => (
14: <TabsPrimitive.List
      ref={ref}
15:
      className={cn(
16:
17:
         "inline-flex h-10 items-center justify-center rounded-md bg-muted p-1 text-muted-foreground",
         className
19:
      ) }
20:
      \{\dotsprops\}
21: />
22: ))
23: TabsList.displayName = TabsPrimitive.List.displayName
24:
25: const TabsTrigger = React.forwardRef<
26: React.ElementRef<typeof TabsPrimitive.Trigger>,
27: React.ComponentPropsWithoutRef<typeof TabsPrimitive.Trigger>
28: >(({ className, ...props }, ref) => (
29:
    <TabsPrimitive.Trigger
30:
      ref={ref}
31:
       className={cn(
        "inline-flex items-center justify-center whitespace-nowrap rounded-sm px-3 py-1.5 text-sm font-medium
32:
33:
         className
34:
       ) }
35:
       {...props}
36:
37: ))
38: TabsTrigger.displayName = TabsPrimitive.Trigger.displayName
39:
40: const TabsContent = React.forwardRef<
41: React.ElementRef<typeof TabsPrimitive.Content>,
42: React.ComponentPropsWithoutRef<typeof TabsPrimitive.Content>
43: >(({ className, ...props }, ref) => (
44:
     <TabsPrimitive.Content
45:
      ref={ref}
46:
      className={cn(
47:
       "mt-2 ring-offset-background focus-visible:outline-none focus-visible:ring-2 focus-visible:ring-ring
48:
49:
       ) }
50:
       {...props}
51:
    />
52: ))
53: TabsContent.displayName = TabsPrimitive.Content.displayName
54:
55: export { Tabs, TabsList, TabsTrigger, TabsContent }
```

■ File: components\ui\textarea.tsx

```
1: import * as React from "react";
2:
3: import { cn } from "@/lib/utils";
4:
5: const Textarea = React.forwardRef<
6: HTMLTextAreaElement,
7: React.ComponentProps<"textarea">
8: >(({ className, ...props }, ref) => {
9: return (
10: <textarea
11: className={cn(
```

```
"flex min-h-[80px] w-full rounded-md border border-input bg-white text-black px-3 py-2 text-base ri
className

14:      )}
15:      ref={ref}
16:      {...props}
17:      />
18:      );
19: });
20:
21: Textarea.displayName = "Textarea";
22:
23: export { Textarea };
```

■ Eilas aamnanantaluiltaaat tay

■ File: components\ui\toast.tsx

```
______
 1: "use client";
 2:
 3: import * as React from "react";
 4: import * as ToastPrimitives from "@radix-ui/react-toast";
 5: import { cva, type VariantProps } from "class-variance-authority";
 6: import { CheckCircle, X, AlertTriangle, Loader2 } from "lucide-react";
 7: import { cn } from "@/lib/utils";
 8:
 9: const ToastProvider = ToastPrimitives.Provider;
10:
11: const ToastViewport = React.forwardRef<</pre>
12: React.ElementRef<typeof ToastPrimitives.Viewport>,
13: React.ComponentPropsWithoutRef<typeof ToastPrimitives.Viewport>
14: >(({ className, ...props }, ref) => (
15:
     <ToastPrimitives.Viewport
16:
      ref={ref}
17:
       className={cn(
         "fixed top-4 right-4 z-[100] flex w-full max-w-sm flex-col space-y-2",
18:
19:
         className
20:
       ) }
21:
        {...props}
22:
     />
 23: ));
 24: ToastViewport.displayName = ToastPrimitives.Viewport.displayName;
25:
 26: const toastVariants = cva(
27: "group pointer-events-auto relative flex w-full items-start justify-between space-x-4 overflow-hidden rou
 28:
      {
 29:
        variants: {
30:
         variant: {
 31:
           default: "bg-white text-black border-gray-200",
 32:
            success: "bg-green-500 text-white border-green-500",
 33:
            warning: "bg-yellow-400 text-black border-yellow-500",
            destructive: "bg-red-500 text-white border-red-500",
34:
35:
           loading: "bg-gray-100 text-gray-800 border border-gray-300",
36:
         },
 37:
        },
 38:
        defaultVariants: {
         variant: "default",
39:
 40:
41:
     }
 42: );
43:
 44: const variantIcons = {
 45: success: <CheckCircle className="h-5 w-5 text-white shrink-0 mt-1" />,
     warning: <AlertTriangle className="h-5 w-5 text-black shrink-0 mt-1" />,
 46:
 47:
      destructive: <X className="h-5 w-5 text-white shrink-0 mt-1" />,
     loading: (
 48:
 49:
        <Loader2 className="h-5 w-5 animate-spin text-gray-600 shrink-0 mt-1" />
50:
     ),
51: };
52:
53: const Toast = React.forwardRef<
 54: React.ElementRef<typeof ToastPrimitives.Root>,
 55:
     React.ComponentPropsWithoutRef<typeof ToastPrimitives.Root> &
 56:
        VariantProps<typeof toastVariants>
```

```
57: >(({ className, variant, ...props }, ref) => {
     return (
 59:
        <ToastPrimitives.Root
 60:
          ref={ref}
          className={cn(toastVariants({ variant }), className)}
 61:
 62:
          duration={3000} // default auto-dismiss
 63:
           {...props}
 64:
        />
 65:
      );
 66: });
 67: Toast.displayName = ToastPrimitives.Root.displayName;
 68:
 69: const ToastAction = React.forwardRef<
 70: React.ElementRef<typeof ToastPrimitives.Action>,
 71: React.ComponentPropsWithoutRef<typeof ToastPrimitives.Action>
 72: >(({ className, ...props }, ref) => (
 73:
      <ToastPrimitives.Action
 74:
        ref={ref}
 75:
        className={cn(
 76:
           "inline-flex h-8 shrink-0 items-center justify-center rounded-md border bg-transparent px-3 text-sm f
 77:
 78:
         ) }
 79:
         {...props}
 80: />
 81: ));
 82: ToastAction.displayName = ToastPrimitives.Action.displayName;
 83:
 84: const ToastClose = React.forwardRef<
 85: React.ElementRef<typeof ToastPrimitives.Close>,
 86: React.ComponentPropsWithoutRef<typeof ToastPrimitives.Close>
 87: >(({ className, ...props }, ref) => (
 88:
      <ToastPrimitives.Close
 89:
       ref={ref}
 90:
       className={cn(
 91:
          "absolute right-2 bottom-2 rounded-md p-1 text-foreground/50 transition-opacity hover:text-foreground
 92:
        ) }
 93:
         toast-close=""
 94:
         {...props}
 95: >
 96:
        <X className="h-4 w-4" />
 97:
      </ToastPrimitives.Close>
 98: ));
 99: ToastClose.displayName = ToastPrimitives.Close.displayName;
100:
101: const ToastTitle = React.forwardRef<</pre>
102: React.ElementRef<typeof ToastPrimitives.Title>,
103: React.ComponentPropsWithoutRef<typeof ToastPrimitives.Title>
104: >(({ className, ...props }, ref) => (
105:
      <ToastPrimitives.Title
106:
        ref={ref}
107:
        className={cn("text-sm font-semibold", className)}
       {...props}
109: />
110: ));
111: ToastTitle.displayName = ToastPrimitives.Title.displayName;
112:
113: const ToastDescription = React.forwardRef<</pre>
{\tt 114:} \quad {\tt React.ElementRef<typeof\ ToastPrimitives.Description>,}
115:
      React.ComponentPropsWithoutRef<typeof ToastPrimitives.Description>
116: >(({ className, ...props }, ref) => (
117:
     <ToastPrimitives.Description
118:
       ref={ref}
119:
        className={cn("text-sm opacity-90", className)}
120:
         {...props}
     />
121:
122: ));
123: ToastDescription.displayName = ToastPrimitives.Description.displayName;
124:
125: type ToastProps = React.ComponentPropsWithoutRef<typeof Toast>;
126: type ToastActionElement = React.ReactElement<typeof ToastAction>;
128: export {
129: ToastProvider,
```

```
130: ToastViewport,
131: Toast,
132: ToastTitle,
133: ToastDescription,
134: ToastClose,
135: ToastAction,
136: type ToastProps,
137: type ToastActionElement,
138: variantIcons,
139: };
```

■ File: components\ui\toaster.tsx

```
______
 1: "use client";
 2:
 3: import {
 4: Toast,
 5: ToastClose,
 6: ToastDescription,
 7:
     ToastProvider,
 8: ToastTitle,
 9: ToastViewport,
10: variantIcons,
11: } from "@/components/ui/toast";
12: import { useToast } from "@/components/ui/use-toast";
13:
14: export function Toaster() {
15: const { toasts } = useToast();
16:
17:
     return (
       <ToastProvider swipeDirection="up">
18:
 19:
         {toasts.map(
            (\{ id, title, description, action, variant = "default", ...props \}) => (
20:
 21:
              <Toast key={id} variant={variant} {...props}>
               <div className="flex items-start gap-3">
22:
                 {variant !== "default" && variantIcons[variant]}
23:
24:
                 <div className="grid gap-1">
 25:
                   {title && <ToastTitle>{title}</ToastTitle>}
26:
                   {description && (
27:
                     <ToastDescription>{description}</ToastDescription>
                   ) }
29:
                 </div>
 30:
               </div>
31:
                {action}
32:
               <ToastClose />
33:
              </Toast>
34:
           )
35:
          ) }
36:
         <ToastViewport />
37:
        </ToastProvider>
38: );
39: }
```

■ File: components\ui\toggle-group.tsx

```
1: "use client"
2:
3: import * as React from "react"
4: import * as ToggleGroupPrimitive from "@radix-ui/react-toggle-group"
5: import { type VariantProps } from "class-variance-authority"
6:
7: import { cn } from "@/lib/utils"
8: import { toggleVariants } from "@/components/ui/toggle"
9:
10: const ToggleGroupContext = React.createContext<
11: VariantProps<typeof toggleVariants>
12: >({
13: size: "default",
14: variant: "default",
```

```
15: })
17: const ToggleGroup = React.forwardRef<</pre>
     React.ElementRef<typeof ToggleGroupPrimitive.Root>,
19:
     React.ComponentPropsWithoutRef<typeof ToggleGroupPrimitive.Root> &
20:
        VariantProps<typeof toggleVariants>
21: >(({ className, variant, size, children, ...props }, ref) => (
22:
     <ToggleGroupPrimitive.Root
23:
       ref={ref}
24:
       className={cn("flex items-center justify-center gap-1", className)}
25:
       {...props}
26:
27:
       <ToggleGroupContext.Provider value={{ variant, size }}>
          {children}
28:
29:
        </ToggleGroupContext.Provider>
30:
     </ToggleGroupPrimitive.Root>
31: ))
32:
33: ToggleGroup.displayName = ToggleGroupPrimitive.Root.displayName
35: const ToggleGroupItem = React.forwardRef<</pre>
36:
    React.ElementRef<typeof ToggleGroupPrimitive.Item>,
37:
     React.ComponentPropsWithoutRef<typeof ToggleGroupPrimitive.Item> &
       VariantProps<typeof toggleVariants>
38:
39: >(({ className, children, variant, size, ...props }, ref) => {
40: const context = React.useContext(ToggleGroupContext)
41:
     return (
42:
43:
      <ToggleGroupPrimitive.Item
44:
        ref={ref}
45:
         className={cn(
46:
           toggleVariants({
47:
             variant: context.variant | | variant,
48:
             size: context.size | size,
49:
            }),
50:
            className
51:
          ) }
52:
         \{\dotsprops\}
53:
54:
          {children}
55:
        </ToggleGroupPrimitive.Item>
56: )
57: })
58:
59: ToggleGroupItem.displayName = ToggleGroupPrimitive.Item.displayName
60:
61: export { ToggleGroup, ToggleGroupItem }
_____
```

■ File: components\ui\toggle.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as TogglePrimitive from "@radix-ui/react-toggle"
 5: import { cva, type VariantProps } from "class-variance-authority"
 6:
 7: import { cn } from "@/lib/utils"
 8:
 9: const toggleVariants = cva(
10:
     "inline-flex items-center justify-center rounded-md text-sm font-medium ring-offset-background transition
11:
      {
12:
       variants: {
13:
         variant: {
14:
           default: "bg-transparent",
15:
           outline:
16:
             "border border-input bg-transparent hover:bg-accent hover:text-accent-foreground",
17:
18:
         size: {
19:
           default: "h-10 px-3 min-w-10",
20:
           sm: "h-9 px-2.5 min-w-9",
21:
           lg: "h-11 px-5 min-w-11",
```

```
22:
        },
23:
24:
      defaultVariants: {
25:
       variant: "default",
         size: "default",
26:
27:
       },
28: }
29: )
30:
31: const Toggle = React.forwardRef<</pre>
32: React.ElementRef<typeof TogglePrimitive.Root>,
33: React.ComponentPropsWithoutRef<typeof TogglePrimitive.Root> &
       VariantProps<typeof toggleVariants>
35: >(({ className, variant, size, ...props }, ref) => (
36: <TogglePrimitive.Root
37:
      ref={ref}
      className={cn(toggleVariants({ variant, size, className }))}
38:
39:
       {...props}
40: />
41: ))
42:
43: Toggle.displayName = TogglePrimitive.Root.displayName
44:
45: export { Toggle, toggleVariants }
```

■ File: components\ui\tooltip.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as TooltipPrimitive from "@radix-ui/react-tooltip"
 5:
 6: import { cn } from "@/lib/utils"
 8: const TooltipProvider = TooltipPrimitive.Provider
10: const Tooltip = TooltipPrimitive.Root
11:
12: const TooltipTrigger = TooltipPrimitive.Trigger
13:
14: const TooltipContent = React.forwardRef<</pre>
15: React.ElementRef<typeof TooltipPrimitive.Content>,
     React.ComponentPropsWithoutRef<typeof TooltipPrimitive.Content>
17: >(({ className, sideOffset = 4, ...props }, ref) => (
18:
     <TooltipPrimitive.Content
19:
      ref={ref}
      sideOffset={sideOffset}
 20:
21:
       className={cn(
22:
        "z-50 overflow-hidden rounded-md border bg-popover px-3 py-1.5 text-sm text-popover-foreground shadow
        className
       ) }
 24:
 25:
       {...props}
 26:
     />
 27: ))
 28: TooltipContent.displayName = TooltipPrimitive.Content.displayName
29:
30: export { Tooltip, TooltipTrigger, TooltipContent, TooltipProvider }
```

■ File: components\ui\use-mobile.tsx

```
1: import * as React from "react"
2:
3: const MOBILE_BREAKPOINT = 768
4:
5: export function useIsMobile() {
6: const [isMobile, setIsMobile] = React.useState<boolean | undefined>(undefined)
7:
8: React.useEffect(() => {
9: const mql = window.matchMedia(`(max-width: ${MOBILE_BREAKPOINT - 1}px)`)
```

```
10:
       const onChange = () => {
11:
         setIsMobile(window.innerWidth < MOBILE_BREAKPOINT)</pre>
12:
13:
       mql.addEventListener("change", onChange)
       setIsMobile(window.innerWidth < MOBILE_BREAKPOINT)</pre>
14:
15:
       return () => mql.removeEventListener("change", onChange)
16:
     },[])
17:
18:
     return !!isMobile
19: }
```

■ File: components\ui\use-toast.ts

```
______
 1: "use client"
 2:
 3: import { useEffect } from "react"
 5: import type React from "react"
 6:
 7: import { create } from "zustand"
 8: import type { ToastProps } from "./toast"
 9:
10: type Toast = ToastProps & {
11: id: string
12:
      title?: React.ReactNode
13: description?: React.ReactNode
14: action?: React.ReactNode
15: }
16:
17: const TOAST_LIMIT = 1
18: const TOAST_REMOVE_DELAY = 1000000 // Keep toasts on screen for a long time for demo purposes
20: type State = {
 21:
     toasts: Toast[]
22: }
24: type Actions = {
25: addToast: (toast: Toast) => void
26: updateToast: (id: string, toast:
      updateToast: (id: string, toast: Partial<Toast>) => void
27: dismissToast: (id?: string) => void
 28: removeToast: (id?: string) => void
 29: }
 30:
31: const toastStore = create<State & Actions>((set, get) => ({
32: toasts: [],
33: addToast: (toast) => {
 34:
      set((state) => ({
 35:
         toasts: [toast, ...state.toasts].slice(0, TOAST_LIMIT),
36:
        }))
37: },
38: updateToast: (id, toast) => {
      set((state) => ({
 39:
 40:
         toasts: state.toasts.map((t) => (t.id === id ? \{ \dots t, \dots toast \} : t)),
41:
        }))
 42: },
43: dismissToast: (id) => {
      set((state) => ({
         toasts: state.toasts.map((t) => (t.id === id | | id === undefined ? { ...t, open: false } : t)),
45:
46:
        }))
 47: },
 48:
     removeToast: (id) => {
       set((state) => ({
 49:
         toasts: state.toasts.filter((t) => t.id !== id),
50:
 51:
      }))
52:
     },
53: }))
54:
55: let count = 0
57: function genId() {
 58: count = (count + 1) % Number.MAX_SAFE_INTEGER
```

```
59:
     return count.toString()
 60: }
 61:
 62: type ToastOptions = Omit<Toast, "id">
 63:
 64: function toast(opts: ToastOptions) {
 65:
      const id = genId()
 66:
 67:
      const update = (newOpts: Partial<Toast>) => toastStore.getState().updateToast(id, newOpts)
 68:
      const dismiss = () => toastStore.getState().dismissToast(id)
 69:
 70:
      toastStore.getState().addToast({
 71:
 72:
        open: true,
 73:
        ...opts,
     })
 74:
 75:
 76:
      if (opts.duration !== Number.POSITIVE_INFINITY) {
 77:
        setTimeout(() => dismiss(), opts.duration || TOAST_REMOVE_DELAY)
 78:
 79:
 :08
      return {
 81:
        id.
 82:
        update,
 83:
        dismiss,
 84:
     }
 85: }
 86:
 87: export function useToast() {
 88: const { toasts, addToast, updateToast, dismissToast, removeToast } = toastStore()
 89:
 90:
      useEffect(() => {
       const unsub = toastStore.subscribe((state) => {
 91:
         state.toasts.forEach((t) => {
 93:
           if (t.open === false) {
 94:
              // We use a timeout to allow the toast to animate out before being removed
 95:
              setTimeout(() => removeToast(t.id), 400)
 96:
            }
 97:
         })
 98:
        })
 99:
        return () => unsub()
     }, [removeToast])
100:
101:
102: return {
103:
       toasts,
        toast, // Expose the toast function directly
104:
105:
        dismiss: dismissToast,
106: }
107: }
```

■ File: hooks\use-mobile.tsx

```
______
 1: import * as React from "react"
 2:
 3: const MOBILE_BREAKPOINT = 768
 4:
 5: export function useIsMobile() {
     const [isMobile, setIsMobile] = React.useState<boolean | undefined>(undefined)
 6:
 7:
 8: React.useEffect(() => {
     const mql = window.matchMedia(`(max-width: ${MOBILE_BREAKPOINT - 1}px)`)
 9:
10:
       const onChange = () => {
11:
        setIsMobile(window.innerWidth < MOBILE_BREAKPOINT)</pre>
12:
13:
      mql.addEventListener("change", onChange)
14:
       setIsMobile(window.innerWidth < MOBILE_BREAKPOINT)</pre>
15:
       return () => mql.removeEventListener("change", onChange)
16:
    }, [])
17:
18:
     return !!isMobile
19: }
```

■ File: hooks\use-toast.ts

```
______
 1: "use client"
 3: // Inspired by react-hot-toast library
 4: import * as React from "react"
 5:
 6: import type {
 7:
     ToastActionElement,
 8: ToastProps,
 9: } from "@/components/ui/toast"
10:
11: const TOAST_LIMIT = 1
12: const TOAST_REMOVE_DELAY = 1000000
13:
14: type ToasterToast = ToastProps & {
15: id: string
16:
     title?: React.ReactNode
17: description?: React.ReactNode
18: action?: ToastActionElement
19: }
20:
21: const actionTypes = {
22: ADD_TOAST: "ADD_TOAST",
23: UPDATE_TOAST: "UPDATE_TOAST",
24: DISMISS_TOAST: "DISMISS_TOAST",
25:
     REMOVE_TOAST: "REMOVE_TOAST",
26: } as const
27:
28: let count = 0
29:
30: function genId() {
31: count = (count + 1) % Number.MAX_SAFE_INTEGER
32: return count.toString()
33: }
34:
35: type ActionType = typeof actionTypes
37: type Action =
38: | {
39:
         type: ActionType["ADD_TOAST"]
40:
          toast: ToasterToast
41:
42: | {
43:
         type: ActionType["UPDATE_TOAST"]
44:
         toast: Partial<ToasterToast>
45:
46:
     | {
47:
         type: ActionType["DISMISS_TOAST"]
48:
         toastId?: ToasterToast["id"]
49:
50: | {
        type: ActionType["REMOVE_TOAST"]
51:
52:
         toastId?: ToasterToast["id"]
53:
54:
55: interface State {
56:
     toasts: ToasterToast[]
57: }
58:
59: const toastTimeouts = new Map<string, ReturnType<typeof setTimeout>>()
61: const addToRemoveQueue = (toastId: string) => {
62:
    if (toastTimeouts.has(toastId)) {
63:
       return
64: }
65:
66:
     const timeout = setTimeout(() => {
67:
       toastTimeouts.delete(toastId)
      dispatch({
68:
69:
       type: "REMOVE_TOAST",
70:
         toastId: toastId,
71:
       })
```

```
72:
     }, TOAST_REMOVE_DELAY)
 73:
 74:
      toastTimeouts.set(toastId, timeout)
 75: }
 76:
 77: export const reducer = (state: State, action: Action): State => {
 78: switch (action.type) {
 79:
       case "ADD_TOAST":
 :08
          return {
 81:
            ...state,
 82:
            toasts: [action.toast, ...state.toasts].slice(0, TOAST_LIMIT),
 83:
 84:
        case "UPDATE_TOAST":
 85:
 86:
          return {
 87:
            ...state,
 88:
            toasts: state.toasts.map((t) =>
 89:
              t.id === action.toast.id ? { ...t, ...action.toast } : t
 90:
 91:
          }
 92:
 93:
        case "DISMISS_TOAST": {
 94:
          const { toastId } = action
 95:
 96:
          // ! Side effects ! - This could be extracted into a dismissToast() action,
 97:
           // but I'll keep it here for simplicity
 98:
          if (toastId) {
 99:
            addToRemoveQueue(toastId)
100:
           } else {
101:
           state.toasts.forEach((toast) => {
102:
              addToRemoveQueue(toast.id)
103:
104:
          }
105:
          return {
106:
107:
            ...state,
108:
            toasts: state.toasts.map((t) =>
              t.id === toastId || toastId === undefined
109:
110:
                ? {
111:
                     ...t,
                     open: false,
112:
113:
                  }
114:
                : t
115:
            ),
116:
          }
        }
117:
118:
        case "REMOVE_TOAST":
119:
         if (action.toastId === undefined) {
120:
           return {
              ...state,
121:
122:
              toasts: [],
           }
123:
         }
124:
125:
          return {
126:
            ...state,
            toasts: state.toasts.filter((t) => t.id !== action.toastId),
127:
128:
129:
     }
130: }
131:
132: const listeners: Array<(state: State) => void> = []
133:
134: let memoryState: State = { toasts: [] }
135:
136: function dispatch(action: Action) {
137: memoryState = reducer(memoryState, action)
138:
     listeners.forEach((listener) => {
139:
       listener(memoryState)
     })
140:
141: }
142:
143: type Toast = Omit<ToasterToast, "id">
144:
```

```
145: function toast({ ...props }: Toast) {
146: const id = genId()
147:
148:
     const update = (props: ToasterToast) =>
149:
      dispatch({
150:
       type: "UPDATE_TOAST",
151:
        toast: { ...props, id },
152:
      })
153:
     const dismiss = () => dispatch({ type: "DISMISS_TOAST", toastId: id })
154:
155: dispatch({
     type: "ADD_TOAST",
156:
       toast: {
157:
       ...props,
158:
159:
        open: true,
160:
161:
        onOpenChange: (open) => {
162:
          if (!open) dismiss()
       },
163:
164:
      },
     })
165:
166:
167:
     return {
      id: id,
168:
169:
      dismiss,
170:
       update,
171:
     }
172: }
173:
174: function useToast() {
175: const [state, setState] = React.useState<State>(memoryState)
176:
177: React.useEffect(() => {
178: listeners.push(setState)
179:
      return () => {
180:
       const index = listeners.indexOf(setState)
        if (index > -1) {
181:
182:
          listeners.splice(index, 1)
       }
183:
184:
       }
     }, [state])
185:
186:
187: return {
188:
      ...state,
189:
       toast,
190:
       dismiss: (toastId?: string) => dispatch({ type: "DISMISS_TOAST", toastId }),
191: }
192: }
193:
194: export { useToast, toast }
_____
■ File: lib\utils.ts
______
 1: import { type ClassValue, clsx } from "clsx"
 2: import { twMerge } from "tailwind-merge"
 3:
 4: export function cn(...inputs: ClassValue[]) {
 5: return twMerge(clsx(inputs))
 6: }
```

■ File: next-env.d.ts

```
1: /// <reference types="next" />
2: /// <reference types="next/image-types/global" />
3:
4: // NOTE: This file should not be edited
5: // see https://nextjs.org/docs/app/api-reference/config/typescript for more information.
```

■ File: package.json

```
-----
 1: {
 2:
      "name": "my-v0-project",
     "version": "0.1.0",
 3:
 4: "private": true,
     "scripts": {
 5:
 6:
       "build": "next build",
 7:
        "dev": "next dev",
      "lint": "next lint"
 8:
 9:
       "start": "next start"
10:
     },
      "dependencies": {
11:
       "@hello-pangea/dnd": "latest",
12:
        "@hookform/resolvers": "^3.9.1",
13:
14:
        "@radix-ui/react-accordion": "1.2.2",
        "@radix-ui/react-alert-dialog": "1.1.4",
15:
16:
        "@radix-ui/react-aspect-ratio": "1.1.1",
17:
        "@radix-ui/react-avatar": "1.1.2",
18:
        "@radix-ui/react-checkbox": "1.1.3",
        "@radix-ui/react-collapsible": "1.1.2",
19:
        "@radix-ui/react-context-menu": "2.2.4",
20:
        "@radix-ui/react-dialog": "1.1.4"
21:
22:
        "@radix-ui/react-dropdown-menu": "2.1.4",
23:
        "@radix-ui/react-hover-card": "1.1.4",
        "@radix-ui/react-label": "2.1.1",
24:
25:
        "@radix-ui/react-menubar": "1.1.4",
        "@radix-ui/react-navigation-menu": "1.2.3",
26:
        "@radix-ui/react-popover": "1.1.4",
27:
28:
        "@radix-ui/react-progress": "1.1.1",
29:
        "@radix-ui/react-radio-group": "1.2.2",
        "@radix-ui/react-scroll-area": "1.2.2",
30:
        "@radix-ui/react-select": "2.1.4",
31:
        "@radix-ui/react-separator": "1.1.1",
32:
        "@radix-ui/react-slider": "1.2.2",
33:
34:
        "@radix-ui/react-slot": "1.1.1",
        "@radix-ui/react-switch": "1.1.2",
35:
        "@radix-ui/react-tabs": "1.1.2",
37:
        "@radix-ui/react-toast": "latest",
38:
        "@radix-ui/react-toggle": "1.1.1",
39:
        "@radix-ui/react-toggle-group": "1.1.1",
        "@radix-ui/react-tooltip": "1.1.6",
40:
41:
        "autoprefixer": "^10.4.20",
        "class-variance-authority": "^0.7.1",
42:
43:
        "clsx": "^2.1.1",
        "cmdk": "1.0.4",
44:
45:
        "date-fns": "4.1.0",
46:
        "embla-carousel-react": "8.5.1",
        "fs": "latest",
47:
48:
        "immer": "latest",
        "input-otp": "1.4.1",
49:
        "lucide-react": "^0.454.0",
        "next": "15.2.4",
51:
52:
        "next-themes": "latest",
53:
        "path": "latest",
        "react": "^19",
54:
        "react-day-picker": "8.10.1",
55:
        "react-dom": "^19",
56:
        "react-hook-form": "^7.54.1",
57:
        "react-resizable-panels": "^2.1.7",
58:
        "recharts": "2.15.0",
59:
        "sonner": "^1.7.1",
60:
        "tailwind-merge": "^2.5.5",
61:
62:
        "tailwindcss-animate": "^1.0.7",
        "use-sync-external-store": "latest",
63:
64:
        "uuid": "latest",
        "vaul": "^0.9.6",
65:
        "zod": "^3.24.1",
66:
        "zustand": "latest"
67:
68:
     },
69:
     "devDependencies": {
70:
       "@types/node": "^22",
        "@types/react": "^19",
71:
```

```
72: "@types/react-dom": "^19",
73: "postcss": "^8.5",
74: "tailwindcss": "^3.4.17",
75: "typescript": "^5"
76: }
77: }
```

■ File: tailwind.config.ts

```
______
 1: import type { Config } from "tailwindcss";
 3: // all in fixtures is set to tailwind v3 as interims solutions
 4:
 5: const config: Config = {
    darkMode: ["class"],
 6:
     content: [
 7:
      "./pages/**/*.{js,ts,jsx,tsx,mdx}",
 8:
 9:
      "./components/**/*.{js,ts,jsx,tsx,mdx}",
      "./app/**/*.{js,ts,jsx,tsx,mdx}",
10:
11:
      "*.{js,ts,jsx,tsx,mdx}"
    ],
12:
13: theme: {
14: ■extend: {
15:
    ■■colors: {
16:
     ■■■background: 'hsl(var(--background))',
17: TIMforeground: 'hsl(var(--foreground))',
18: ■■card: {
20:
21:
    foreground: 'hsl(var(--card-foreground))'
    ■■■},
22: ■■■popover: {
23: DEFAULT: 'hsl(var(--popover))',
24:
    ■■■foreground: 'hsl(var(--popover-foreground))'
     ■■■},
25:
26:
    ■■■primary: {
27: DEFAULT: 'hsl(var(--primary))',
29:
30:
    ■■■},
    ■■■secondary: {
31: DEFAULT: 'hsl(var(--secondary))',
■■■},
33:
     muted: {
35:
    ■■■■DEFAULT: 'hsl(var(--muted))',
36: ■■■foreground: 'hsl(var(--muted-foreground))'
37: ■■■},
38:
    ■■■accent: {
     DEFAULT: 'hsl(var(--accent))',
39:
40: THEforeground: 'hsl(var(--accent-foreground))'
41: ■■■},
42:
    ■■■destructive: {
43:
     ■■■DEFAULT: 'hsl(var(--destructive))',
44:
    ■■■foreground: 'hsl(var(--destructive-foreground))'
    | | | | | |
45:
46:  border: 'hsl(var(--border))',
47:
    ■■■input: 'hsl(var(--input))',
    ■■■ring: 'hsl(var(--ring))',
49: ■■Chart: {
50: IIII'1': 'hsl(var(--chart-1))',
52:
     ■■■'3': 'hsl(var(--chart-3))',
    ■■■'4': 'hsl(var(--chart-4))',
53:
55: ■■■},
    ■■sidebar: {
56:
     ■■■■DEFAULT: 'hsl(var(--sidebar-background))',
58:
    foreground: 'hsl(var(--sidebar-foreground))',
59: ■■■primary: 'hsl(var(--sidebar-primary))',
60:
    primary-foreground': 'hsl(var(--sidebar-primary-foreground))',
61:
     ■■■accent: 'hsl(var(--sidebar-accent))',
62:
     ■■■ 'accent-foreground': 'hsl(var(--sidebar-accent-foreground))',
```

```
64: ■■■ring: 'hsl(var(--sidebar-ring))'
65:
    66:
    ■■},
67: ■■borderRadius: {
68: ■■lg: 'var(--radius)',
69: Tale(var(--radius) - 2px)',
70:
    ■■■sm: 'calc(var(--radius) - 4px)'
71:
    ■■},
72: ■■keyframes: {
73: ■■■'accordion-down': {
74:
   Ifrom: {
75:
    ■■■■■height: '0'
76: ■■■■},
77: ■■■■to: {
78: Theight: 'var(--radix-accordion-content-height)'
79:
    ■■■■ }
:08
    ■■■},
81: ■■■'accordion-up': {
82: ■■■from: {
■■■■},
84:
85: IIIIto: {
86: ■■■■height: '0'
87: ■■■■}
88:
    | | | | |
89:
    ■■},
90: ■■animation: {
91:  accordion-down': 'accordion-down 0.2s ease-out',
92: Tel 'accordion-up': 'accordion-up 0.2s ease-out'
93:
94:
    ■■}
    ■}
95: },
96: plugins: [require("tailwindcss-animate")],
97: };
98: export default config;
```

■ File: tsconfig.json

```
______
 1: {
 2:
     "compilerOptions": {
       "lib": ["dom", "dom.iterable", "esnext"],
 3:
 4:
       "allowJs": true,
       "target": "ES6",
 5:
       "skipLibCheck": true,
 6:
 7:
       "strict": true,
 8:
       "noEmit": true,
 9:
       "esModuleInterop": true,
       "module": "esnext",
10:
       "moduleResolution": "bundler",
11:
12:
       "resolveJsonModule": true,
13:
       "isolatedModules": true,
14:
       "jsx": "preserve",
       "incremental": true,
15:
16:
      "plugins": [
17:
18:
           "name": "next"
        }
19:
20:
      ],
21:
       "paths": {
         "@/*": ["./*"]
22:
23:
24:
25:
     "include": ["next-env.d.ts", "**/*.ts", "**/*.tsx", ".next/types/**/*.ts"],
     "exclude": ["node_modules"]
26:
27: }
```

■ File: types\report-types.ts

```
______
 1: // export interface GeneticParameter {
 2: // id: string;
3: // title: string;
 4: // gene: string;
 5: // snp: string;
 6: // result: string;
 7: // impact: string;
8: // imageUrl?: string;
 9: // }
10:
11: // export interface GeneticCategory {
12: // id: string;
13: // category: string;
14: // parameters: string[];
15: // imageUrl?: string;
16: // description?: string;
17: // }
18:
19: export interface GeneticCategory {
20: id: string;
21: category: string;
22: imageUrl: string;
 23: description: string;
24: parameters: string[];
 25:
      isActive: boolean;
26: order: number;
 27: }
28:
 29:
 30: // export interface ReportData {
31: // categories: CategoryData[];
 32: // geneticParameters: GeneticParameter[];
 33: // metadata?: {
        lastUpdated: string;
version: string;
 34: //
 35: //
         totalCategories: number;
totalParameters: number;
 36: //
 37: //
 38: // };
39: // }
40:
 41: // export interface ApiResponse {
 42: // success: boolean;
43: // data?: ReportData;
44: // message?: string;
45: // error?: string;
 46: // }
 47:
 48: export interface PatientInfo {
49: name: string;
 50: gender: string;
 51: birthDate: string;
52: sampleCode: string;
53: sampleDate: string;
      sampleDate: string;
54: reportDate: string;
 55: reportAuth: string;
56: genomicAnalytics: string;
      checkedBy: string;
 57:
58: scientificContent: string;
 59: disclaimer: string;
 60: signature1: string | null;
 61:
      signature2: string | null;
 62: }
 63:
 64: export interface ReportContent {
 65: introduction: string;
66: genomicsExplanation: string;
67: genesHealthImpact: string;
68: fundamentalsPRS: string;
 69: utilityDoctors: string;
70:
71:
      microarrayExplanation: string;
      microarrayData: string;
```

```
72: }
 73:
 74: export interface ReportSettings {
 75:
      title: string;
 76: subtitle: string;
 77: companyName: string;
 78: headerColor: string;
 79:
      accentColor: string;
 :08
      fonts: {
       primary: string;
 81:
 82:
        secondary: string;
 83:
        mono: string;
 84:
      };
 85: }
 86:
 87: export interface GeneticParameter {
 88: title: string;
 89:
      gene: string;
 90: snp: string;
 91: result: string;
 92: impact: string;
 93: }
 94:
 95: // NEW: Interface for dynamically defined diet analysis fields
 96: export interface DynamicDietFieldDefinition {
      _uuid: string; // For DND library internal use
       id: string; // Unique identifier for the field (e.g., "carbohydrate_sensitivity")
 99: label: string; // Display name (e.g., "Carbohydrate Sensitivity")
100: category: string; // Category (e.g., "Macronutrients", "Food Sensitivities")
101: min: number; // Min score for the field
102:
103:
      max: number; // Max score for the field
      highRecommendation: string; // Recommendation for high score
104:
      normalRecommendation: string; // Recommendation for normal score
105: lowRecommendation: string; // Recommendation for low score
106: }
107:
108: // NEW: Interface for a patient's specific result for a dynamic diet field
109: export interface PatientDietAnalysisResult {
110: fieldId: string; // References DynamicDietFieldDefinition.id
111:
      score: number;
112:
       level: string; // e.g., "HIGH", "NORMAL", "LOW", "SUITABLE"
113:
      recommendation: string; // Patient-specific recommendation
114: }
115:
116: // OLD DietAnalysis interface is removed.
117: // The data it contained will now be managed via DynamicDietFieldDefinition and PatientDietAnalysisResult.
119: export interface NutrientData {
120: score: number;
121: healthImpact:
      healthImpact: string;
122: intakeLevel: string;
123: source: string;
124: }
125:
126: export interface NutritionData {
127: vitamins: {
        vitaminA: NutrientData;
129:
        vitaminB12: NutrientData;
130:
        vitaminB2: NutrientData;
        vitaminB6: NutrientData;
131:
132:
        vitaminB9: NutrientData;
133:
        vitaminC: NutrientData;
134:
        vitaminD: NutrientData;
135:
        vitaminE: NutrientData;
      };
136:
137:
      fattyAcids: {
        omegaFattyAcids: NutrientData;
138:
139:
       };
140:
       elements: {
141:
       calcium: NutrientData;
142:
        iodine: NutrientData;
143:
        iron: NutrientData;
144:
        magnesium: NutrientData;
```

```
phosphorus: NutrientData;
145:
        selenium: NutrientData;
146:
147:
        zinc: NutrientData;
148:
149:
      complexNutrients: {
150:
       antiInflammatory: NutrientData;
151:
       antioxidants: NutrientData;
      };
152:
153: }
154:
155: export interface ExerciseData {
156: level: string;
157:
      description: string;
158: }
159:
160: export interface SportsAndFitness {
161: exerciseType: {
162:
       endurancePotential: ExerciseData;
        powerPotential: ExerciseData;
163:
164:
       strengthProfile: ExerciseData;
165:
        exerciseTime: ExerciseData;
     };
166:
      performance: {
167:
168:
       enduranceCapacity: ExerciseData;
        fatigueResistance: ExerciseData;
169:
170:
       bloodFlow: ExerciseData;
171:
        oxygenEfficiency: ExerciseData;
        waterLoss: ExerciseData;
172:
173:
       lactateClearing: ExerciseData;
174:
       recoveryEfficiency: ExerciseData;
       bodyComposition: ExerciseData;
175:
176:
        injuryRisk: ExerciseData;
177:
        achillesTendonInjury: ExerciseData;
178:
       ligamentInjury: ExerciseData;
179:
        rupture: ExerciseData;
180:
        muscleCramps: ExerciseData;
181:
      };
182: }
183:
184: export interface HealthConditionStatus {
185: status: "strength" | "improvement";
186: }
187:
188: export interface LifestyleConditions {
189: heartVascularHealth: {
190:
        hypertension: HealthConditionStatus;
       leftVentricularHypertrophy: HealthConditionStatus;
191:
192:
       atherosclerosis: HealthConditionStatus;
       familialHypercholesterolemia: HealthConditionStatus;
193:
194:
        cardiomyopathy: HealthConditionStatus;
195:
        cholesterolImbalance: HealthConditionStatus;
196:
        stroke: HealthConditionStatus;
197: };
198:
      diabesity: {
199:
        obesity: HealthConditionStatus;
        diabetesType2: HealthConditionStatus;
200:
201: };
202:
      liverHealth: {
      nafld: HealthConditionStatus;
203:
204:
        liverCirrhosis: HealthConditionStatus;
205:
     };
206:
      boneHealth: {
207:
      osteoporosis: HealthConditionStatus;
208:
        osteoarthritis: HealthConditionStatus;
     };
209:
210:
      gutHealth: {
      irritableBowelSyndrome: HealthConditionStatus;
211:
212:
        celiacDisease: HealthConditionStatus;
213:
214:
      hormoneSystem: {
215:
       hypothyroidism: HealthConditionStatus;
216:
217: }
```

```
218:
219: export interface MetabolicGeneData {
220: genes: string[];
221:
      genotype: string;
     impact: string;
222:
223: advice: string;
224: }
225:
226: export interface MetabolicCore {
227: methylation: MetabolicGeneData;
228: inflammation: MetabolicGeneData;
229:
     oxidativeStress: MetabolicGeneData;
      detoxification: MetabolicGeneData;
231:
      vitaminDMetabolism: MetabolicGeneData;
232: lipidMetabolism: MetabolicGeneData;
233: insulinResistance: MetabolicGeneData;
234:
      circadianRhythm: MetabolicGeneData;
235:
      exerciseResponsiveness: MetabolicGeneData;
236: snackingTendency: MetabolicGeneData;
237: oestrogenElimination: MetabolicGeneData;
238: powerVsEndurance: MetabolicGeneData;
239:
      injuryRecovery: MetabolicGeneData;
240:
      fluidLossTendency: MetabolicGeneData;
241:
      vo2Max: MetabolicGeneData;
242: }
243:
244: export interface DigestiveHealthData {
245: level: string;
246: description: string;
247: }
248:
249: export interface DigestiveHealth {
250: qutHealth: DigestiveHealthData;
251: glutenIntolerance: DigestiveHealthData;
252: celiacDiseaseTendency: DigestiveHealthData;
      impactOnBonesJoints: DigestiveHealthData;
254: lactoseIntolerance: DigestiveHealthData;
255: probioticsRequirement: DigestiveHealthData;
256: }
257:
258: export interface AddictionData {
259: tendency: string;
260: description: string;
261: }
262:
263: export interface GenesAndAddiction {
264: alcoholAddiction: AddictionData;
265: smokingAddiction: AddictionData;
266: snackingHabits: AddictionData;
267:
      altruism: AddictionData;
268: }
269:
270: export interface SleepData {
271: impact: string;
272:
      intervention: string;
273: }
274:
275: export interface SleepAndRest {
276: sleepCycle: SleepData;
277: sleepApnea: SleepData;
278: sleepDepth: SleepData;
279:
      stressSensitivity: SleepData;
280: }
281:
282: export interface AllergyData {
283: tendency: string;
284: }
285:
286: export interface AllergiesAndSensitivity {
287: dustAllergy: AllergyData;
288: pesticideSensitivity: AllergyData;
289:
      smokeSensitivity: AllergyData;
290:
      automobileSmokeSensitivity: AllergyData;
```

```
291:
     generalAdvice: string;
292: }
293:
294: export interface GeneTestResult {
295: geneName: string;
296: variation: string;
297: result: string;
298: }
299:
300: export interface MetabolicSummary {
301: strengths: string[];
302: weaknesses: string[];
303: }
304:
305: export interface PreventiveHealth {
306: diagnosticTests: {
307:
      halfYearly: string[];
308:
        yearly: string[];
309: };
310: nutritionalSupplements: Array<{
311: supplement: string;
312:
        needed: boolean;
313: }>;
314: }
315:
316: export interface FamilyGeneticImpact {
317: gene: string;
318: normalAlleles: string;
319: yourResult: string;
320: healthImpact: string;
321: }
322:
323: export interface ReportSummaries {
324: nutrigenomicsSummary: string;
325: exerciseGenomicsSummary: string;
326: }
327:
328: export interface ComprehensiveReportData {
329: patientInfo: PatientInfo;
330: content: ReportContent;
331: settings: ReportSetting
      settings: ReportSettings;
332: dynamicDietFieldDefinitions: DynamicDietFieldDefinition[];
333: patientDietAnalysisResults: PatientDietAnalysisResult[];
334: nutritionData: NutritionData;
335:
      sportsAndFitness: SportsAndFitness;
      lifestyleConditions: LifestyleConditions;
336:
337: metabolicCore: MetabolicCore;
338: digestiveHealth: DigestiveHealth;
339: genesAndAddiction: GenesAndAddiction;
340: sleepAndRest: SleepAndRest;
      sleepAndRest: SleepAndRest;
341: allergiesAndSensitivity: AllergiesAndSensitivity;
342: geneTestResults: GeneTestResult[];
343: geneticParameters: GeneticParameter[];
344:
345:
      geneticCategories?: GeneticCategory[];
      metabolicSummary: MetabolicSummary;
346:
      preventiveHealth: PreventiveHealth;
347: familyGeneticImpact: FamilyGeneticImpact[];
348:
     summaries: ReportSummaries;
349: }
```