■ 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 - [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\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\select.tsx

- [TSX] components\ui\radio-group.tsx - [TSX] components\ui\resizable.tsx - [TSX] components\ui\scroll-area.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}</pre>
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>
```

■ File: app\admin\page.tsx

```
______
 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,
 24:
      DigestiveHealth,
 25:
     DigestiveHealthData,
 26: GenesAndAddiction,
 27: AddictionData,
28: SleepAndRest,
29: 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: // Renamed DietAnalysisAdmin to DynamicDietFieldAdmin
 43: import DynamicDietFieldAdmin from "@/components/admin/dynamic-diet-field-admin";
 44: import GeneResultsAdmin from "@/components/admin/gene-results-admin";
 45: import SummariesAdmin from "@/components/admin/summaries-admin";
 46: import ImportExportAdmin from "@/components/admin/import-export-admin";
 47: import NutritionAdmin from "@/components/admin/nutrition-admin";
 48: import SportsFitnessAdmin from "@/components/admin/sports-fitness-admin";
 49: import LifestyleConditionsAdmin from "@/components/admin/lifestyle-conditions-admin";
 50: import DigestiveHealthAdmin from "@/components/admin/digestive-health-admin";
 51: import GenesAddictionAdmin from "@/components/admin/genes-addiction-admin";
 52: import SleepRestAdmin from "@/components/admin/sleep-rest-admin";
 53: import AllergiesSensitivityAdmin from "@/components/admin/allergies-sensitivity-admin";
 54: import PreventiveHealthAdmin from "@/components/admin/preventive-health-admin";
 55: import FamilyGeneticImpactAdmin from "@/components/admin/family-genetic-impact-admin";
 56: import PDFGenerator from "@/components/admin/pdf-generator";
 57: import MetabolicCoreAdmin from "@/components/admin/metabolic-core-admin";
 59: const getDefaultReportData = (): ComprehensiveReportData => ({
 60: patientInfo: {
 61:
       name: "John Doe",
```

```
62:
         gender: "MALE".
         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 profession
 72:
      },
 73:
      content: {
 74:
         introduction:
 75:
           "Welcome to your personalized nutrigenomics report. This document provides insights into how your gen
 76:
         genomicsExplanation:
 77:
           "Genomics is the study of an organism's complete set of DNA, including all of its genes. It helps us
 78:
         genesHealthImpact:
 79:
           "Your genes play a significant role in determining your health predispositions. This report highlight
 :08
         fundamentalsPRS:
 81:
           "Polygenic Risk Scores (PRS) combine the effects of many genetic variants to estimate an individual's
 82:
        utilityDoctors:
 83:
           "This report is designed to be a valuable tool for doctors and dietitians, providing actionable genet
 84:
         microarrayExplanation:
 85:
           "Microarray technology allows for the simultaneous measurement of the expression levels of thousands
 87:
           "Your microarray data has been analyzed to identify specific genetic variations relevant to your heal
 88:
       },
 89:
       settings: {
 90:
        title: "Comprehensive Health Report",
 91:
         subtitle: "A Detailed Analysis of Your Genetics",
 92:
         companyName: "Health Solutions Inc.",
 93:
         headerColor: "#2C3E50",
         accentColor: "#E74C3C",
 94:
 95:
        fonts: {
 96:
         primary: "Helvetica, Arial, sans-serif",
 97:
           secondary: "Georgia, serif",
 98:
           mono: "Courier New, monospace",
 99:
         },
100:
      },
      // NEW: Default dynamic diet field definitions
101:
102:
       dynamicDietFieldDefinitions: [
103:
104:
           _uuid: uuidv4(),
105:
           id: "carbohydrate_sensitivity",
106:
           label: "Carbohydrate Sensitivity",
107:
           category: "Macronutrients",
108:
           min: 1,
109:
           max: 10,
           highRecommendation: "Reduce carbohydrate intake, focus on complex carbs.",
110:
           normalRecommendation: "Maintain balanced carbohydrate intake.",
111:
           {\tt lowRecommendation:} \ {\tt "Ensure adequate carbohydrate intake."},
112:
113:
         },
114:
        {
           _uuid: uuidv4(),
115:
116:
           id: "fat_sensitivity",
           label: "Fat Sensitivity",
117:
          category: "Macronutrients",
118:
119:
          min: 1,
120:
           max: 10,
121:
           highRecommendation:
122:
             "Reduce saturated and trans fats; focus on healthy fats.",
123:
           normalRecommendation: "Maintain balanced fat intake.",
124:
           lowRecommendation: "Ensure adequate healthy fat intake.",
125:
126:
127:
           _uuid: uuidv4(),
128:
           id: "protein_requirement",
129:
           label: "Protein Requirement",
130:
           category: "Macronutrients",
131:
          min: 1,
132:
           max: 10,
           highRecommendation: "Increased protein intake recommended.",
133:
           normalRecommendation: "Ensure adequate protein intake.",
134:
```

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

```
fieldId: "caffeine_sensitivity",
208:
209:
        score: 2,
          level: "LOW",
210:
211:
          recommendation: "Normal caffeine metabolism; moderate intake is fine.",
212:
213: ],
214: nutritionData: {
215:
      vitamins: {
216:
         vitaminA: {
217:
           score: 3,
218:
          healthImpact: "Skin & Vision",
          intakeLevel: "ENHANCED INTAKE",
219:
           source: "DIET",
220:
         },
221:
222:
        vitaminB12: {
          score: 6,
223:
           healthImpact: "Nervous System & Bones",
224:
          intakeLevel: "ENHANCED INTAKE (METHYLCOBALAMIN)",
225:
226:
           source: "DIET",
227:
         },
228:
        vitaminB2: {
229:
           score: 3,
230:
            healthImpact: "Energy Metabolism",
           intakeLevel: "ENHANCED INTAKE",
231:
232:
           source: "DIET",
         },
233:
         vitaminB6: {
234:
235:
           score: 6,
          healthImpact: "Tissue growth repair",
237:
          intakeLevel: "ENHANCED INTAKE",
238:
           source: "DIET",
239:
240:
        vitaminB9: {
241:
           healthImpact: "RBC development & Heart health",
242:
          intakeLevel: "ENHANCED INTAKE (L METHYLFOLATE)",
243:
244:
           source: "DIET",
245:
         },
246:
        vitaminC: {
247:
           score: 3,
248:
            healthImpact: "Skin & Immunity",
           intakeLevel: "ENHANCED INTAKE",
249:
250:
           source: "DIET",
         },
251:
         vitaminD: {
252:
253:
           score: 6,
254:
          healthImpact: "Bones & Diabetes",
255:
          intakeLevel: "ENHANCED INTAKE & SUN EXPOSURE",
           source: "DIET & SUN EXPOSURE",
256:
257:
         },
        vitaminE: {
258:
         score: 5,
          healthImpact: "Skin & Immune system",
260:
          intakeLevel: "ENHANCED INTAKE",
261:
262:
            source: "DIET",
263:
         },
264:
       },
265:
       fattyAcids: {
266:
        omegaFattyAcids: {
267:
           score: 5,
           healthImpact: "Cardiac health & Triglycerides",
268:
269:
           intakeLevel: "ENHANCED INTAKE (VEG SOURCES)",
270:
            source: "ENHANCED INTAKE (VEG/FISH OIL) & DIET",
271:
         },
        },
272:
273:
       elements: {
274:
        calcium: {
275:
          score: 3,
           healthImpact: "Bone health & Nerve function",
276:
           intakeLevel: "ENHANCED INTAKE",
277:
278:
           source: "DIET",
279:
          }.
280:
          iodine: {
```

```
281:
            score: 3.
282:
            healthImpact: "Detoxification & Thyroid hormones",
            intakeLevel: "ENHANCED INTAKE",
283:
            source: "DIET",
284:
285:
286:
          iron: {
287:
            score: 3,
288:
            healthImpact: "Haemoglobin & Energy",
289:
            intakeLevel: "RESTRICTED INTAKE",
            source: "DIET",
290:
291:
         },
292:
         magnesium: {
293:
            score: 3,
            healthImpact: "Heart health & Immunity",
294:
            intakeLevel: "ENHANCED INTAKE",
295:
296:
            source: "DIET",
297:
          },
298:
         phosphorus: {
299:
            score: 3,
300:
           healthImpact: "Bone health & Kidney function",
           intakeLevel: "ENHANCED INTAKE",
301:
            source: "DIET",
302:
303:
304:
          selenium: {
305:
           score: 3,
            healthImpact: "Cognitive & Muscle function",
306:
307:
            intakeLevel: "ENHANCED INTAKE",
308:
            source: "DIET",
309:
         },
310:
         zinc: {
311:
            score: 3,
312:
            healthImpact: "Fertility & Skin",
            intakeLevel: "ENHANCED INTAKE",
313:
314:
            source: "DIET",
315:
         },
316:
        },
317:
        complexNutrients: {
         antiInflammatory: {
318:
319:
           score: 5,
           healthImpact: "Pain control & Organ health", intakeLevel: "ENHANCED INTAKE",
320:
321:
            source: "DIET",
322:
323:
         },
324:
         antioxidants: {
325:
           score: 6,
326:
            healthImpact: "Skin & Immune system",
           intakeLevel: "ENHANCED INTAKE",
327:
328:
            source: "DIET",
329:
           },
330:
        },
331: },
332: sportsAndFitness: {
333:
       exerciseType: {
334:
         endurancePotential: {
335:
            level: "High Endurance Potential",
336:
            description:
337:
               "Excellent genetic predisposition for endurance activities",
338:
339:
          powerPotential: {
            level: "Average Power Potential",
340:
341:
            description: "Moderate power output capacity",
342:
           strengthProfile: {
343:
344:
            level: "High Strength Profile",
            description: "Good potential for strength training",
345:
346:
347:
           exerciseTime: {
348:
             level: "Evening time is more beneficial than morning",
             description: "MORNING Vs. EVENING",
349:
350:
          },
351:
352:
        performance: {
353:
          enduranceCapacity: {
```

```
354:
             level: "High Endurance Potential",
355:
            description: "Superior aerobic capacity",
356:
           },
357:
           fatigueResistance: {
            level: "Normal fatigue resistance. Average endurance capacity",
358:
359:
            description: "Average endurance capacity",
360:
361:
           bloodFlow: {
362:
             level: "Reduced vascular efficiency, affects endurance sports.",
             description: "Affects endurance sports",
363:
364:
365:
           oxygenEfficiency: {
366:
             level: "Normal VO2 Max. Need practice to excel in endurance sports",
             description: "Need practice to excel",
367:
368:
369:
           waterLoss: {
370:
            level:
371:
               "Increased water and electrolyte loss tendency. Focus on Hydration and electrolyte management dur
             description: "Focus on hydration",
372:
373:
           },
374:
           lactateClearing: {
375:
             level: "High lactate clearance. Beneficial for Endurance sports.",
376:
             description: "Beneficial for endurance",
377:
378:
           recoveryEfficiency: {
379:
            level:
380:
               "High recovery efficiency. Enhanced sports potential & reduced injury risk",
381:
             description: "Enhanced sports potential",
382:
383:
           bodyComposition: {
384:
             level: "Low fat accumulation. Increased muscle tendency.",
385:
             description: "Increased muscle tendency",
386:
387:
           injuryRisk: {
388:
            level:
389:
               "High injury tendency. Thorough injury management steps to be taken.",
390:
             description: "Thorough injury management needed",
391:
392:
           achillesTendonInjury: {
393:
             level: "Low injury tendency. Ensure adequate warmup before exercises",
394:
             description: "Ensure adequate warmup",
395:
396:
           ligamentInjury: {
397:
            level:
398:
               "Low ACL injury tendency. Ensure adequate warmup before exercises",
399:
             description: "Ensure adequate warmup",
400:
           },
401:
           rupture: {
402:
             level: "Low rupture tendency. Ensure adequate warmup before exercises",
403:
             description: "Ensure adequate warmup",
404:
405:
          muscleCramps: {
406:
            level:
407:
               "Low risk of muscle cramps. Ensure adequate warmup before exercises",
408:
             description: "Ensure adequate warmup",
409:
           },
410:
        },
411:
       },
412:
       lifestyleConditions: {
         heartVascularHealth: {
413:
414:
           hypertension: { status: "strength" },
415:
           leftVentricularHypertrophy: { status: "strength" },
           atherosclerosis: { status: "improvement" },
416:
417:
           familialHypercholesterolemia: { status: "strength" },
           cardiomyopathy: { status: "strength" },
418:
419:
           cholesterolImbalance: { status: "improvement" },
           stroke: { status: "improvement" },
420:
421:
         },
422:
         diabesity: {
423:
           obesity: { status: "improvement" },
424:
           diabetesType2: { status: "improvement" },
425:
         liverHealth: {
426:
```

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

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

```
573:
        }.
574:
        altruism: {
          tendency: "HIGH",
575:
576:
          description: "Strong genetic predisposition toward helping others",
577:
578:
     },
579: sleepAndRest: {
580:
       sleepCycle: {
581:
          impact: "DELAYED SLEEP CYCLE",
          intervention: "EXERCISE IN THE EVENING AVOID CARBS DURING BREAKFAST",
582:
583:
584:
       sleepApnea: {
           impact: "INCREASED CHANCES OF SLEEP APNEA",
585:
586:
          intervention: "EXERCISE REGULARLY SEEK MEDICAL ADVICE IF ISSUE PERSISTS",
587:
588:
       sleepDepth: {
589:
         impact: "LOW SLEEP DEPTH",
590:
          intervention: "CONSUME CURD RICE IN DINNER FOR BETTER SLEEP",
591:
        },
        stressSensitivity: {
593:
         impact: "LOW STRESS SENSITIVITY",
594:
          intervention: "EXERCISE REGULARLY FOR A BETTER SLEEP CYCLE",
595:
596: },
597:
     allergiesAndSensitivity: {
598:
       dustAllergy: { tendency: "NORMAL" },
599:
        pesticideSensitivity: { tendency: "HIGH" },
        smokeSensitivity: { tendency: "HIGH" },
600:
       automobileSmokeSensitivity: { tendency: "HIGH" },
602:
       generalAdvice:
603:
           "THE BEST WAY TO REDUCE ALLERGIES IS TO STAY AWAY FROM THE SOURCE, NO ROCKET SCIENCE HOWEVER THE FOLL
604:
      },
605:
      geneTestResults: [
      {
          geneName: "ALDH2 Aldehyde dehydrogenase 2",
607:
608:
          variation: "G>A",
          result: "GG",
609:
610:
611:
       {
          geneName: "MTHFR Methylenetetrahydrofolate reductase",
612:
613:
          variation: "C>T",
614:
          result: "CT",
615:
        },
616: ],
617:
     metabolicSummary: {
618:
        strengths: ["Efficient detoxification", "Normal lipid metabolism"],
619:
        weaknesses: [
620:
          "Increased oxidative stress",
621:
           "Higher risk of insulin resistance",
622:
        ],
623: },
624: preventiveHealth: {
      diagnosticTests: {
625:
626:
         halfYearly: ["PLASMA SUGAR (FASTING & PP)", "VITAMIN D"],
627:
          yearly: [
            "HbA1c",
628:
629:
            "LIPID PROFILE",
630:
            "SERUM HOMOCYSTEINE",
631:
             "VITAMIN B12",
             "LIVER PROFILE",
632:
633:
         ],
634:
       },
635:
        nutritionalSupplements: [
636:
          { supplement: "VITAMIN D", needed: true },
           { supplement: "METHYL FOLATE + METHYL COBALAMINE + B6", needed: true },
637:
638:
          { supplement: "OMEGA FATTY ACIDS (FISH OIL)", needed: true },
          { supplement: "FOLIC ACID + COBALAMINE + B6", needed: true },
639:
          \{ \text{ supplement: "OMEGA FATTY ACIDS (VEG)", needed: true } \},
640:
          { supplement: "VITAMIN E", needed: true },
641:
           { supplement: "PROBIOTICS", needed: true },
642:
643:
644:
      },
645:
      familyGeneticImpact: [
```

```
646:
       {
          gene: "MnSOD",
647:
         normalAlleles: "AA",
648:
649:
          yourResult: "AG",
650:
          healthImpact:
651:
            "INCREASED TENDENCY OF OXIDATIVE STRESS NEED OF ANTI-OXIDANT SUPPLEMENTS",
652:
       },
653:
       {
654:
          gene: "FTO",
          normalAlleles: "TT",
655:
656:
          yourResult: "AT",
657:
         healthImpact:
             "INCREASED TENDENCY OF INSULIN RESISTANCE WEIGHT AND CALORIE MANAGEMENT IMPORTANT TO MANAGE AND RED
658:
659:
660: ],
661: summaries: {
      nutrigenomicsSummary:
662:
663:
          "Based on the overall nutrigenomics analysis, provide expert summary for personalized diet and lifest
664:
        exerciseGenomicsSummary:
           "Based on the overall genomics analysis, provide expert summary for personalized exercise plan...",
666: },
667: });
668:
669: const AdminPage = () => {
670: const [reportData, setReportData] =
671:
       useState<ComprehensiveReportData>(getDefaultReportData);
672:
      const { toast } = useToast();
673:
674:
     // Load data from API on component mount
675:
     useEffect(() => {
676:
       const fetchData = async () => {
677:
          try {
            const response = await fetch("/api/report-data");
678:
679:
            if (response.ok) {
680:
              const data = await response.json();
681:
              setReportData(data);
682:
              toast({
683:
                title: "Data loaded from server!",
684:
                description: "Report data has been loaded from the backend.",
685:
              });
            } else {
686:
687:
              toast({
               title: "Failed to load data",
689:
               description:
690:
                  "Could not load report data from the server. Using default data.",
691:
                variant: "destructive",
692:
              });
693:
            }
694:
          } catch (error) {
695:
            console.error("Error fetching report data:", error);
696:
            toast({
697:
             title: "Error fetching data",
698:
              description:
699:
                "An error occurred while fetching data from the server. Using default data.",
700:
              variant: "destructive",
701:
            });
702:
         }
703:
        };
704:
        fetchData();
705:
      }, []);
706:
707:
      const saveReportData = async () => {
708:
       try {
709:
          const response = await fetch("/api/report-data", {
            method: "POST",
710:
711:
            headers: {
              "Content-Type": "application/json",
712:
713:
            },
714:
            body: JSON.stringify(reportData),
715:
          });
716:
717:
          if (response.ok) {
718:
            toast({
```

```
title: "Report data saved!",
719:
720:
              description: "Your progress has been saved to the backend.",
721:
            });
722:
          } else {
723:
            const errorData = await response.json();
724:
            toast({
              title: "Failed to save data",
725:
726:
              description:
727:
                variant: "destructive",
728:
729:
            });
          }
730:
731:
        } catch (error) {
732:
          console.error("Error saving report data:", error);
733:
          toast({
734:
            title: "Error saving data",
735:
            description: "An unexpected error occurred while saving data.",
736:
            variant: "destructive",
737:
           });
738:
        }
      };
739:
740:
741:
      const resetSection = (section: keyof ComprehensiveReportData) => {
742:
        setReportData((prev) => {
743:
          const defaultData = getDefaultReportData();
744:
          return { ...prev, [section]: defaultData[section] };
745:
         });
746:
         toast({
          title: `${section} reset!`,
747:
748:
           description: `The ${section} section has been reset to default values.`,
749:
         });
750:
      };
751:
      const updatePatientInfo = (field: keyof PatientInfo, value: string) => {
752:
753:
        setReportData((prev) => ({
754:
          ...prev,
           patientInfo: { ...prev.patientInfo, [field]: value },
755:
756:
        }));
757:
      };
758:
759:
      const updateReportContent = (field: keyof ReportContent, value: string) => {
760:
        setReportData((prev) => ({
761:
          ...prev,
762:
           content: { ...prev.content, [field]: value },
763:
        }));
764:
      };
765:
766:
      const updateReportSettings = (field: keyof ReportSettings, value: string) => {
767:
       setReportData((prev) => ({
768:
           ...prev,
769:
           settings: { ...prev.settings, [field]: value },
770:
        }));
771:
      };
772:
773:
      // NEW: Update function for dynamicDietFieldDefinitions
774:
      const updateDynamicDietFieldDefinitions = (
775:
        definitions: DynamicDietFieldDefinition[]
776:
      ) => {
777:
        setReportData((prev) => ({
778:
779:
          dynamicDietFieldDefinitions: definitions,
780:
        }));
781:
      };
782:
783:
      // NEW: Update function for patientDietAnalysisResults
784:
      const updatePatientDietAnalysisResult = (
785:
        fieldId: string,
786:
        data: Partial < Patient Diet Analysis Result >
787:
788:
       setReportData((prev) => {
789:
          const existingIndex = prev.patientDietAnalysisResults.findIndex(
790:
           (r) => r.fieldId === fieldId
791:
```

```
792:
          const newResults = [...prev.patientDietAnalysisResults];
793:
794:
          if (existingIndex > -1) {
795:
            newResults[existingIndex] = { ...newResults[existingIndex], ...data };
          } else {
796:
797:
           // If result for this fieldId doesn't exist, create a new one
798:
           newResults.push({
799:
              fieldId,
:008
              score: 0,
              level: "NORMAL",
801:
802:
             recommendation: "",
803:
              ...data,
804:
            });
805:
          return { ...prev, patientDietAnalysisResults: newResults };
806:
807:
        });
808:
      };
809:
      const updateNutritionData = (
810:
811:
       category: keyof NutritionData,
812:
       nutrient: string,
        field: keyof NutrientData,
813:
814:
        value: string | number
815: ) => {
      setReportData((prev) => ({
816:
817:
        ...prev,
818:
         nutritionData: {
819:
            ...prev.nutritionData,
820:
           [category]: {
821:
              ...prev.nutritionData[category],
822:
              [nutrient]: {
823:
                ...prev.nutritionData[category][
                 nutrient as keyof (typeof prev.nutritionData)[typeof category]
824:
825:
826:
                [field]: value,
827:
              },
            },
222:
          },
829:
830:
        }));
      };
831:
832:
833:
      const updateSportsAndFitness = (
      section: keyof SportsAndFitness,
835:
       field: string,
836:
        data: Partial<ExerciseData>
     ) => {
837:
838:
       setReportData((prev) => ({
839:
         ...prev,
840:
         sportsAndFitness: {
841:
          ...prev.sportsAndFitness,
842:
            [section]: {
843:
             ...prev.sportsAndFitness[section],
844:
              [field]: {
845:
                ...prev.sportsAndFitness[section][
846:
                  field as keyof (typeof prev.sportsAndFitness)[typeof section]
847:
                ],
848:
                ...data,
849:
              },
850:
            },
          },
851:
852:
        }));
853:
      };
854:
855:
      const updateLifestyleCondition = (
       section: keyof LifestyleConditions,
856:
857:
       field: string,
858:
       status: HealthConditionStatus["status"]
      ) => {
859:
860:
       setReportData((prev) => ({
861:
         ...prev,
862:
         lifestyleConditions: {
863:
           ...prev.lifestyleConditions,
864:
            [section]: {
```

```
865:
               ...prev.lifestyleConditions[section],
               [field]: {
866:
867:
                 ...prev.lifestyleConditions[section][
868:
                   field as keyof (typeof prev.lifestyleConditions)[typeof section]
869:
870:
                 status: status,
871:
              },
872:
             },
873:
           },
874:
         }));
875:
876:
877:
       const updateMetabolicCore = (
        field: keyof MetabolicCore,
272:
879:
        data: Partial<MetabolicGeneData>
880:
      ) => {
881:
       setReportData((prev) => ({
882:
          ...prev,
          metabolicCore: {
883:
884:
             ...prev.metabolicCore,
885:
             [field]: {
               ...prev.metabolicCore[field],
886:
               ...data,
887:
888:
            },
889:
          },
890:
         }));
891:
892:
893:
       const updateDigestiveHealth = (
894:
       field: keyof DigestiveHealth,
895:
        data: Partial<DigestiveHealthData>
896:
      ) => {
897:
       setReportData((prev) => ({
898:
         ...prev,
899:
           digestiveHealth: {
900:
             ...prev.digestiveHealth,
901:
             [field]: {
              ...prev.digestiveHealth[field],
902:
903:
               ...data,
904:
             },
905:
           },
906:
         }));
907:
      };
908:
909:
      const updateGenesAndAddiction = (
910:
        field: keyof GenesAndAddiction,
911:
        data: Partial < Addiction Data >
912:
      ) => {
913:
       setReportData((prev) => ({
914:
          ...prev,
915:
           genesAndAddiction: {
916:
           ...prev.genesAndAddiction,
917:
             [field]: {
918:
              ...prev.genesAndAddiction[field],
919:
               ...data,
920:
            },
921:
           },
922:
        }));
923:
       };
924:
925:
      const updateSleepAndRest = (
926:
       field: keyof SleepAndRest,
927:
        data: Partial<SleepData>
928:
      ) => {
929:
       setReportData((prev) => ({
930:
          ...prev,
931:
           sleepAndRest: {
932:
             ...prev.sleepAndRest,
933:
             [field]: {
934:
               ...prev.sleepAndRest[field],
935:
               ...data,
936:
             },
937:
```

```
938:
        }));
939:
940:
941:
       const updateAllergiesAndSensitivity = (
        field: keyof AllergiesAndSensitivity,
942:
943:
        data: Partial<AllergyData> | string
944:
       ) => {
945:
        setReportData((prev) => ({
946:
           ...prev,
           allergiesAndSensitivity: \{
947:
948:
             ...prev.allergiesAndSensitivity,
949:
             [field]:
               typeof data === "string"
950:
951:
                 ? data
952:
                 : {
                      ...(prev.allergiesAndSensitivity[
953:
954:
                       field as Exclude<
955:
                         keyof AllergiesAndSensitivity,
956:
                          "generalAdvice"
957:
958:
                     ] as AllergyData),
                     ...data,
959:
                   },
960:
961:
           },
962:
         }));
963:
       };
964:
965:
       const updatePreventiveHealth = (
       section: keyof PreventiveHealth,
966:
967:
        data: any
968:
       ) => {
969:
         setReportData((prev) => ({
970:
           ...prev,
971:
           [section]: data,
972:
         }));
973:
       };
974:
975:
       const addFamilyGeneticImpact = () => {
976:
       setReportData((prev) => ({
977:
           ...prev,
978:
           familyGeneticImpact: [
979:
            ...prev.familyGeneticImpact,
             { gene: "", normalAlleles: "", yourResult: "", healthImpact: "" },
980:
981:
           1,
982:
         }));
983:
       };
984:
985:
       const updateFamilyGeneticImpact = (
986:
       index: number,
987:
         field: keyof FamilyGeneticImpact,
988:
        value: string
989:
      ) => {
990:
         setReportData((prev) => {
991:
          const newImpacts = [...prev.familyGeneticImpact];
992:
           newImpacts[index] = { ...newImpacts[index], [field]: value };
993:
           return { ...prev, familyGeneticImpact: newImpacts };
994:
         });
995:
       };
996:
       const removeFamilyGeneticImpact = (index: number) => {
997:
998:
         setReportData((prev) => ({
999:
1000:
            familyGeneticImpact: prev.familyGeneticImpact.filter(
1001:
              (_, i) => i !== index
1002:
            ),
1003:
          }));
1004:
        };
1005:
1006:
        const updateGeneTestResult = (
1007:
         index: number,
1008:
          field: keyof GeneTestResult,
1009:
          value: string
1010:
        ) => {
```

```
1011:
         setReportData((prev) => {
1012:
           const newGeneTests = [...prev.geneTestResults];
1013:
            newGeneTests[index] = { ...newGeneTests[index], [field]: value };
1014:
           return { ...prev, geneTestResults: newGeneTests };
1015:
1016:
      };
1017:
1018:
       const addGeneTestResult = () => {
1019:
        setReportData((prev) => ({
1020:
           ...prev,
1021:
            geneTestResults: [
1022:
              ...prev.geneTestResults,
              { geneName: "", variation: "", result: "" },
1023:
           ],
1024:
1025:
          }));
1026:
        };
1027:
1028:
       const removeGeneTestResult = (index: number) => {
1029:
         setReportData((prev) => ({
1030:
           ...prev,
1031:
            geneTestResults: prev.geneTestResults.filter((_, i) => i !== index),
1032:
         }));
        };
1033:
1034:
1035:
       const updateReportSummaries = (
1036:
        field: keyof ReportSummaries,
1037:
         value: string
      ) => {
1038:
1039:
        setReportData((prev) => ({
1040:
            summaries: { ...prev.summaries, [field]: value },
1041:
1042:
          }));
1043:
        };
1044:
1045:
       return (
1046:
        <div className="container mx-auto py-10">
1047:
           <hl className="text-3xl font-bold mb-5">Admin Dashboard</hl>
1048:
1049:
            <div className="mb-5 flex gap-2 no-print">
1050:
              <Button onClick={saveReportData}>Save Data
1051:
              <Button onClick={() => setReportData(getDefaultReportData())}>
1052:
               Reset All
1053:
              </Button>
1054:
            </div>
1055:
1056:
            <Tabs defaultValue="patient-info" className="w-[100%]">
1057:
             <div className="w-full overflow-x-auto scrollbar-hide">
1058:
                <TabsList className="flex gap-2 min-w-max bg-white shadow-sm px-4 py-2 rounded-md border border-
                  <TabsTrigger value="patient-info">? Patient Info</TabsTrigger>
1059:
                  <TabsTrigger value="content">? Content</TabsTrigger>
1060:
                  <TabsTrigger value="settings">?? Settings</TabsTrigger>
1061:
1062:
                  <TabsTrigger value="diet-fields">? Diet Fields</TabsTrigger>
1063:
                  <TabsTrigger value="nutrition">? Nutrition</TabsTrigger>
1064:
                  <TabsTrigger value="sports-fitness">
1065:
                    ????? Sports & Fitness
1066:
                  </TabsTrigger>
                  <TabsTrigger value="lifestyle-conditions">? Lifestyle</TabsTrigger>
1067:
1068:
                  <TabsTrigger value="metabolic-core">? Metabolic Core</TabsTrigger>
1069:
                  <TabsTrigger value="digestive-health">
1070:
                    ? Digestive Health
1071:
                  </TabsTrigger>
1072:
                  <TabsTrigger value="genes-addiction">
1073:
                    ? Genes & Addiction
1074:
                  </TabsTrigger>
                  <TabsTrigger value="sleep-rest">? Sleep & Rest</TabsTrigger>
1075:
1076:
                  <TabsTrigger value="allergies-sensitivity">
1077:
                    ? Allergies
1078:
                  </TabsTrigger>
1079:
                  <TabsTrigger value="preventive-health">
1080:
                    ?? Preventive Health
1081:
                  </TabsTrigger>
1082:
                  <TabsTrigger value="family-genetic-impact">
1083:
                    ? Family Impact
```

```
1084:
                  </TabsTrigger>
1085:
                  <TabsTrigger value="genes">? Gene Results</TabsTrigger>
1086:
                  <TabsTrigger value="summaries">? Summaries</TabsTrigger>
1087:
                  <TabsTrigger value="pdf-export">? PDF Export</TabsTrigger>
1088:
                  <TabsTrigger value="import-export">? Import/Export</TabsTrigger>
1089:
                </TabsList>
1090:
             </div>
1091:
              <TabsContent value="patient-info">
1092:
               <PatientInfoAdmin
1093:
                 patientInfo={reportData.patientInfo}
1094:
1095:
                  updatePatientInfo={updatePatientInfo}
1096:
                  onSave={() => saveReportData()}
1097:
                 onReset={() => resetSection("patientInfo")}
1098:
               />
1099:
             </TabsContent>
             <TabsContent value="content">
1100:
1101:
               <ContentAdmin
                 content={reportData.content}
1102:
1103:
                 updateContent={updateReportContent}
1104:
                 onSave={() => saveReportData()}
1105:
                 onReset={() => resetSection("content")}
1106:
1107:
             </TabsContent>
             <TabsContent value="settings">
1108:
1109:
               <SettingsAdmin
1110:
                 settings={reportData.settings}
1111:
                 updateSettings={updateReportSettings}
1112:
                 onSave={() => saveReportData()}
1113:
                 onReset={() => resetSection("settings")}
1114:
                />
1115:
              </TabsContent>
              <TabsContent value="diet-fields">
1116:
1117:
                {" "}
                {/* Changed tab content value */}
1118:
1119:
                <DynamicDietFieldAdmin
1120:
                 dynamicDietFieldDefinitions={reportData.dynamicDietFieldDefinitions}
1121:
                 updateDynamicDietFieldDefinitions={
1122:
                   updateDynamicDietFieldDefinitions
1123:
1124:
                  onSave={() => saveReportData()}
1125:
                 onReset={() => resetSection("dynamicDietFieldDefinitions")}
1126:
               />
1127:
             </TabsContent>
1128:
             <TabsContent value="nutrition">
1129:
                <NutritionAdmin
1130:
                 nutritionData={reportData.nutritionData}
1131:
                 updateNutritionData={updateNutritionData}
1132:
                 onSave={() => saveReportData()}
1133:
                 onReset={() => resetSection("nutritionData")}
1134:
               />
1135:
              </TabsContent>
1136:
             <TabsContent value="sports-fitness">
1137:
               <SportsFitnessAdmin</pre>
1138:
                  sportsAndFitness={reportData.sportsAndFitness}
1139:
                  updateSportsAndFitness={updateSportsAndFitness}
1140:
                  onSave={() => saveReportData()}
                 onReset={() => resetSection("sportsAndFitness")}
1141:
1142:
                />
1143:
              </TabsContent>
1144:
              <TabsContent value="lifestyle-conditions">
1145:
                <LifestyleConditionsAdmin
1146:
                  lifestyleConditions={reportData.lifestyleConditions}
1147:
                  updateLifestyleCondition={updateLifestyleCondition}
1148:
                  onSave={() => saveReportData()}
1149:
                 onReset={() => resetSection("lifestyleConditions")}
1150:
                />
1151:
              </TabsContent>
1152:
              <TabsContent value="metabolic-core">
1153:
               <MetabolicCoreAdmin
                  metabolicCore={reportData.metabolicCore}
1154:
                  updateMetabolicCore={updateMetabolicCore}
1155:
1156:
                  onSave={() => saveReportData()}
```

```
1157:
                  onReset={() => resetSection("metabolicCore")}
                />
1158:
1159:
              </TabsContent>
              <TabsContent value="digestive-health">
1160:
1161:
                <DigestiveHealthAdmin
1162:
                  digestiveHealth={reportData.digestiveHealth}
1163:
                  updateDigestiveHealth={updateDigestiveHealth}
1164:
                  onSave={() => saveReportData()}
                  onReset={() => resetSection("digestiveHealth")}
1165:
                />
1166:
1167:
              </TabsContent>
1168:
             <TabsContent value="genes-addiction">
1169:
                <GenesAddictionAdmin
1170:
                  genesAndAddiction={reportData.genesAndAddiction}
                  updateGenesAndAddiction={updateGenesAndAddiction}
1171:
1172:
                  onSave={() => saveReportData()}
1173:
                  onReset={() => resetSection("genesAndAddiction")}
1174:
             </TabsContent>
1175:
1176:
             <TabsContent value="sleep-rest">
1177:
                <SleepRestAdmin
1178:
                  sleepAndRest={reportData.sleepAndRest}
1179:
                  updateSleepAndRest={updateSleepAndRest}
1180:
                  onSave={() => saveReportData()}
                 onReset={() => resetSection("sleepAndRest")}
1181:
1182:
                />
1183:
              </TabsContent>
1184:
              <TabsContent value="allergies-sensitivity">
1185:
               <AllergiesSensitivityAdmin
1186:
                 allergiesAndSensitivity={reportData.allergiesAndSensitivity}
1187:
                  updateAllergiesAndSensitivity={updateAllergiesAndSensitivity}
1188:
                  onSave={() => saveReportData()}
1189:
                 onReset={() => resetSection("allergiesAndSensitivity")}
               />
1190:
              </TabsContent>
1191:
1192:
             <TabsContent value="preventive-health">
1193:
                <PreventiveHealthAdmin</pre>
1194:
                 preventiveHealth={reportData.preventiveHealth}
1195:
                  updatePreventiveHealth={updatePreventiveHealth}
1196:
                  onSave={() => saveReportData()}
1197:
                  onReset={() => resetSection("preventiveHealth")}
1198:
                />
1199:
              </TabsContent>
1200:
             <TabsContent value="family-genetic-impact">
1201:
               <FamilyGeneticImpactAdmin</pre>
1202:
                  familyGeneticImpact={reportData.familyGeneticImpact}
1203:
                  addFamilyGeneticImpact={addFamilyGeneticImpact}
1204:
                  updateFamilyGeneticImpact={updateFamilyGeneticImpact}
1205:
                  removeFamilyGeneticImpact={removeFamilyGeneticImpact}
1206:
                  onSave={() => saveReportData()}
1207:
                 onReset={() => resetSection("familyGeneticImpact")}
               />
1208:
1209:
              </TabsContent>
1210:
              <TabsContent value="genes">
1211:
                <GeneResultsAdmin
                  geneTestResults={reportData.geneTestResults}
1212:
                  updateGeneTestResult={updateGeneTestResult}
1213:
1214:
                  addGeneTestResult={addGeneTestResult}
1215:
                  removeGeneTestResult={removeGeneTestResult}
1216:
                  onSave={() => saveReportData()}
1217:
                 onReset={() => resetSection("geneTestResults")}
1218:
                />
1219:
              </TabsContent>
1220:
              <TabsContent value="summaries">
1221:
               <SummariesAdmin
1222:
                 summaries={reportData.summaries}
1223:
                  updateSummaries={updateReportSummaries}
1224:
                  onSave={() => saveReportData()}
1225:
                  onReset={() => resetSection("summaries")}
1226:
               />
1227:
              </TabsContent>
1228:
              <TabsContent value="pdf-export">
1229:
                <PDFGenerator reportData={reportData} />
```

```
1230:
             </TabsContent>
1231:
             <TabsContent value="import-export">
1232:
              <ImportExportAdmin</pre>
1233:
                 reportData={reportData}
1234:
                 setReportData={setReportData}
1235:
               />
1236:
             </TabsContent>
1237:
           </Tabs>
1238:
         </div>
1239: );
1240: };
1241:
1242: export default AdminPage;
```

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

```
1: import { type NextRequest, NextResponse } from "next/server"
3: // In-memory storage for demo purposes
4: let reportData: any = null
5:
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 {
     const data = await request.json()
17:
      reportData = data
18:
19:
       return NextResponse.json({ message: "Data saved successfully" })
20: } catch (error) {
21:
      return NextResponse.json({ message: "Error saving data" }, { status: 500 })
22:
    }
23: }
```

■ File: app\api\report-data\route.ts

```
______
 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"
 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 Doe",
       gender: "MALE",
13:
       birthDate: "1990-01-01",
14:
       sampleCode: "DNL1000000110",
15:
16:
       sampleDate: "2023-01-15",
17:
       reportDate: "2023-02-01",
 18:
       reportAuth: "Dr. Jane Smith, PhD",
       genomicAnalytics: "Genomics Lab Inc.",
19:
 20:
       checkedBy: "Dr. Alice Brown",
       scientificContent: "Dr. Robert White",
21:
 22:
     },
 23:
     content: {
 24:
      disclaimer:
 25:
         "This report is for informational purposes only and should not be used as a substitute for profession
 26:
      introduction:
 27:
          "Welcome to your personalized nutrigenomics report. This document provides insights into how your gen
```

```
28:
        genomicsExplanation:
 29:
           "Genomics is the study of an organism's complete set of DNA, including all of its genes. It helps us
 30:
         genesHealthImpact:
 31:
           "Your genes play a significant role in determining your health predispositions. This report highlight
 32:
        fundamentalsPRS:
 33:
           "Polygenic Risk Scores (PRS) combine the effects of many genetic variants to estimate an individual's
 34:
        utilityDoctors:
 35:
           "This report is designed to be a valuable tool for doctors and dietitians, providing actionable genet
 36:
        microarrayExplanation:
 37:
           "Microarray technology allows for the simultaneous measurement of the expression levels of thousands
 38:
        microarravData:
 39:
           "Your microarray data has been analyzed to identify specific genetic variations relevant to your heal
 40:
      },
41:
      settings: {
 42:
        title: "Comprehensive Health Report",
 43:
         subtitle: "A Detailed Analysis of Your Genetics",
         companyName: "Health Solutions Inc.",
 44:
 45:
        headerColor: "#2C3E50",
        accentColor: "#E74C3C",
 46:
 47:
        fonts: {
 48:
          primary: "Helvetica, Arial, sans-serif",
          secondary: "Georgia, serif",
 49:
50:
          mono: "Courier New, monospace",
 51:
 52:
      },
      // NEW: Default dynamic diet field definitions
 53:
 54:
      dynamicDietFieldDefinitions: [
 55:
 56:
           _uuid: uuidv4(),
 57:
           id: "carbohydrate_sensitivity",
           label: "Carbohydrate Sensitivity",
 58:
 59:
           category: "Macronutrients",
          min: 1.
 60:
 61:
          max: 10,
          highRecommendation: "Reduce carbohydrate intake, focus on complex carbs.",
 62:
 63:
           normalRecommendation: "Maintain balanced carbohydrate intake.",
 64:
           lowRecommendation: "Ensure adequate carbohydrate intake.",
 65:
        },
 66:
        {
           _uuid: uuidv4(),
 67:
 68:
           id: "fat_sensitivity",
          label: "Fat Sensitivity",
 69:
 70:
          category: "Macronutrients",
71:
          min: 1,
 72:
          max: 10,
 73:
          highRecommendation: "Reduce saturated and trans fats; focus on healthy fats.",
 74:
          normalRecommendation: "Maintain balanced fat intake.",
 75:
           lowRecommendation: "Ensure adequate healthy fat intake.",
 76:
 77:
 78:
           _uuid: uuidv4(),
 79:
          id: "protein_requirement",
 :08
          label: "Protein Requirement",
 81:
          category: "Macronutrients",
 82:
          min: 1,
          max: 10.
83:
          highRecommendation: "Increased protein intake recommended.",
 84:
 85:
          normalRecommendation: "Ensure adequate protein intake.",
 86:
           lowRecommendation: "Consider increasing protein intake for muscle maintenance.",
87:
 88:
         {
 89:
           _uuid: uuidv4(),
 90:
           id: "meal_frequency",
 91:
           label: "Meal Frequency",
          category: "Meal Pattern",
92:
 93:
          min: 1,
94:
          max: 10,
 95:
          highRecommendation: "Consider smaller, more frequent meals.",
          normalRecommendation: "Maintain regular meal frequency.",
96:
97:
          lowRecommendation: "Consider fewer, larger meals.",
98:
99:
100:
           _uuid: uuidv4(),
```

```
id: "alcohol_sensitivity",
101:
          label: "Alcohol Sensitivity",
102:
103:
          category: "Food Sensitivities",
104:
          min: 1,
          max: 10,
105:
106:
         highRecommendation: "Limit alcohol consumption due to genetic sensitivity.",
107:
         normalRecommendation: "Moderate alcohol intake is fine.",
108:
          lowRecommendation: "Normal alcohol metabolism.",
109:
110:
       {
111:
          _uuid: uuidv4(),
112:
          id: "caffeine_sensitivity",
113:
          label: "Caffeine Sensitivity",
114:
          category: "Food Sensitivities",
115:
         min: 1.
116:
          max: 10,
          highRecommendation: "Limit caffeine intake due to slow metabolism.",
117:
118:
          normalRecommendation: "Normal caffeine metabolism; moderate intake is fine.",
          lowRecommendation: "Fast caffeine metabolism; higher intake may be tolerated.",
119:
120:
        },
     ],
121:
122:
      // NEW: Default patient-specific results for dynamic diet fields
123:
      patientDietAnalysisResults: [
124:
125:
         fieldId: "carbohydrate_sensitivity",
126:
          score: 5.
127:
          level: "NORMAL",
          recommendation: "Maintain balanced carbohydrate intake.",
128:
129:
        },
130:
       {
131:
          fieldId: "fat_sensitivity",
132:
          score: 7,
         level: "HIGH",
133:
         recommendation: "Reduce saturated and trans fats; focus on healthy fats.",
134:
135:
       },
136:
       {
137:
          fieldId: "protein_requirement",
138:
         score: 3,
139:
         level: "LOW",
140:
          recommendation: "Ensure adequate protein intake for muscle maintenance.",
141:
142:
        fieldId: "meal_frequency",
143:
144:
         score: 6,
145:
          level: "FREQUENT",
146:
          recommendation: "Consider smaller, more frequent meals.",
147:
148:
       {
          fieldId: "alcohol_sensitivity",
149:
150:
          score: 9,
          level: "HIGH".
151:
152:
         recommendation: "Limit alcohol consumption due to genetic sensitivity.",
153:
       },
154:
       {
155:
          fieldId: "caffeine_sensitivity",
156:
          score: 2.
          level: "LOW",
157:
158:
          recommendation: "Normal caffeine metabolism; moderate intake is fine.",
159:
        },
     ],
160:
161: nutritionData: {
162:
        vitamins: {
163:
          vitaminA: { score: 3, healthImpact: "Skin & Vision", intakeLevel: "ENHANCED INTAKE", source: "DIET" }
164:
          vitaminB12: {
165:
            score: 6,
166:
            healthImpact: "Nervous System & Bones",
            intakeLevel: "ENHANCED INTAKE (METHYLCOBALAMIN)",
167:
168:
            source: "DIET",
169:
170:
          vitaminB2: { score: 3, healthImpact: "Energy Metabolism", intakeLevel: "ENHANCED INTAKE", source: "DI
171:
          vitaminB6: { score: 6, healthImpact: "Tissue growth repair", intakeLevel: "ENHANCED INTAKE", source:
          vitaminB9: {
172:
173:
            score: 3,
```

```
healthImpact: "RBC development & Heart health",
174:
175:
            intakeLevel: "ENHANCED INTAKE (L METHYLFOLATE)",
176:
            source: "DIET",
177:
          },
          vitaminC: { score: 3, healthImpact: "Skin & Immunity", intakeLevel: "ENHANCED INTAKE", source: "DIET"
178:
179:
          vitaminD: {
180:
            score: 6,
181:
            healthImpact: "Bones & Diabetes",
            intakeLevel: "ENHANCED INTAKE & SUN EXPOSURE",
182:
            source: "DIET & SUN EXPOSURE",
183:
184:
          vitaminE: { score: 5, healthImpact: "Skin & Immune system", intakeLevel: "ENHANCED INTAKE", source: "
185:
186:
         },
187:
        fattyAcids: {
188:
          omegaFattyAcids: {
189:
            score: 5,
            healthImpact: "Cardiac health & Triglycerides",
190:
191:
            intakeLevel: "ENHANCED INTAKE (VEG SOURCES)",
            source: "ENHANCED INTAKE (VEG/FISH OIL) & DIET",
192:
193:
          },
194:
       },
       elements: {
195:
196:
         calcium: {
197:
           score: 3.
           healthImpact: "Bone health & Nerve function",
198:
            intakeLevel: "ENHANCED INTAKE",
199:
200:
            source: "DIET",
201:
202:
         iodine: {
203:
          score: 3,
204:
            healthImpact: "Detoxification & Thyroid hormones",
205:
            intakeLevel: "ENHANCED INTAKE",
            source: "DIET",
206:
         },
207:
208:
          iron: { score: 3, healthImpact: "Haemoglobin & Energy", intakeLevel: "RESTRICTED INTAKE", source: "DI
209:
          magnesium: {
210:
            score: 3,
211:
           healthImpact: "Heart health & Immunity",
212:
           intakeLevel: "ENHANCED INTAKE",
            source: "DIET",
213:
         },
214:
215:
          phosphorus: {
          score: 3,
           healthImpact: "Bone health & Kidney function",
217:
218:
           intakeLevel: "ENHANCED INTAKE",
219:
            source: "DIET",
220:
         },
221:
         selenium: {
222:
            score: 3.
223:
            healthImpact: "Cognitive & Muscle function",
            intakeLevel: "ENHANCED INTAKE",
224:
           source: "DIET",
         },
226:
227:
          zinc: { score: 3, healthImpact: "Fertility & Skin", intakeLevel: "ENHANCED INTAKE", source: "DIET" },
228:
229:
        complexNutrients: {
230:
         antiInflammatory: {
231:
            score: 5,
232:
            healthImpact: "Pain control & Organ health",
            intakeLevel: "ENHANCED INTAKE",
233:
234:
            source: "DIET",
         },
235:
236:
          antioxidants: {
237:
            score: 6,
            healthImpact: "Skin & Immune system",
238:
239:
            intakeLevel: "ENHANCED INTAKE",
240:
            source: "DIET",
241:
          },
      },
242:
243: },
244: sportsAndFitness: {
245:
       exerciseType: {
246:
          endurancePotential: {
```

```
247:
             level: "High Endurance Potential".
248:
             description: "Excellent genetic predisposition for endurance activities",
249:
250:
           powerPotential: { level: "Average Power Potential", description: "Moderate power output capacity" },
           strengthProfile: { level: "High Strength Profile", description: "Good potential for strength training
251:
252:
          exerciseTime: { level: "Evening time is more beneficial than morning", description: "MORNING Vs. EVEN
253:
         },
254:
        performance: {
           enduranceCapacity: { level: "High Endurance Potential", description: "Superior aerobic capacity" },
255:
           fatigueResistance: {
256:
257:
             level: "Normal fatigue resistance. Average endurance capacity",
258:
             description: "Average endurance capacity",
259:
260:
          bloodFlow: {
261:
             level: "Reduced vascular efficiency, affects endurance sports.",
262:
             description: "Affects endurance sports",
263:
264:
           oxygenEfficiency: {
            level: "Normal VO2 Max. Need practice to excel in endurance sports",
265:
266:
            description: "Need practice to excel",
267:
268:
           waterLoss: {
             level:
269:
270:
               "Increased water and electrolyte loss tendency. Focus on Hydration and electrolyte management dur
            description: "Focus on hydration",
271:
272:
273:
           lactateClearing: {
            level: "High lactate clearance. Beneficial for Endurance sports.",
274:
            description: "Beneficial for endurance",
275:
276:
277:
          recoveryEfficiency: {
278:
             level: "High recovery efficiency. Enhanced sports potential & reduced injury risk",
             description: "Enhanced sports potential",
279:
280:
281:
          bodyComposition: {
282:
             level: "Low fat accumulation. Increased muscle tendency.",
283:
             description: "Increased muscle tendency",
284:
285:
           injuryRisk: {
286:
             level: "High injury tendency. Thorough injury management steps to be taken.",
287:
             description: "Thorough injury management needed",
288:
289:
          achillesTendonInjury: {
290:
            level: "Low injury tendency. Ensure adequate warmup before exercises",
291:
            description: "Ensure adequate warmup",
292:
293:
           ligamentInjury: {
294:
             level: "Low ACL injury tendency. Ensure adequate warmup before exercises",
             description: "Ensure adequate warmup",
295:
296:
           },
297:
           rupture: {
            level: "Low rupture tendency. Ensure adequate warmup before exercises",
299:
            description: "Ensure adequate warmup",
300:
           },
301:
          muscleCramps: {
             level: "Low risk of muscle cramps. Ensure adequate warmup before exercises",
302:
303:
             description: "Ensure adequate warmup",
304:
           },
305:
         },
306:
307:
      lifestyleConditions: {
308:
         heartVascularHealth: {
309:
           hypertension: { status: "strength" },
310:
           leftVentricularHypertrophy: { status: "strength" },
           atherosclerosis: { status: "improvement" },
311:
312:
           familialHypercholesterolemia: { status: "strength" },
           cardiomyopathy: { status: "strength" },
313:
314:
           cholesterolImbalance: { status: "improvement" },
           stroke: { status: "improvement" },
315:
316:
         },
317:
         diabesity: {
318:
           obesity: { status: "improvement" },
319:
           diabetesType2: { status: "improvement" },
```

```
320:
        }.
321:
        liverHealth: {
322:
         nafld: { status: "improvement" },
          liverCirrhosis: { status: "strength" },
323:
324:
325:
        boneHealth: {
326:
         osteoporosis: { status: "improvement" },
          osteoarthritis: { status: "improvement" },
327:
328:
         gutHealth: {
329:
          irritableBowelSyndrome: { status: "improvement" },
330:
331:
          celiacDisease: { status: "strength" },
332:
333:
        hormoneSystem: {
334:
         hypothyroidism: { status: "improvement" },
335:
336:
      },
337:
      metabolicCore: {
338:
       methylation: {
          genes: ["MTHFR"],
340:
          genotype: "C/T",
341:
          impact: "Reduced folate metabolism",
          advice: "Consider L-methylfolate supplementation.",
342:
343:
344:
        inflammation: {
         genes: ["CRP"],
345:
           genotype: "G/A",
          impact: "Increased inflammatory response",
347:
          advice: "Incorporate anti-inflammatory foods.",
348:
349:
350:
       oxidativeStress: {
351:
          genes: ["SOD2"],
          genotype: "T/C",
352:
          impact: "Reduced antioxidant defense",
354:
          advice: "Increase antioxidant-rich foods and supplements.",
355:
         },
356:
        detoxification: {
357:
          genes: ["GSTP1"],
358:
          genotype: "A/G",
359:
          impact: "Impaired detoxification capacity",
          advice: "Support liver health with cruciferous vegetables.",
360:
361:
        vitaminDMetabolism: {
363:
          genes: ["VDR"],
364:
          genotype: "C/C",
365:
           impact: "Reduced Vitamin D absorption",
          advice: "Ensure adequate Vitamin D intake and sun exposure.",
366:
367:
368:
       lipidMetabolism: {
369:
          genes: ["APOE"],
370:
           genotype: "E3/E4",
          impact: "Increased LDL cholesterol tendency",
372:
          advice: "Monitor lipid levels and follow a heart-healthy diet.",
373:
         },
374:
        insulinResistance: {
          genes: ["TCF7L2"],
375:
          genotype: "T/T",
376:
377:
          impact: "Higher risk of insulin resistance",
378:
          advice: "Focus on low glycemic index foods and regular exercise.",
379:
380:
        circadianRhythm: {
381:
          genes: ["CLOCK"],
           genotype: "C/G",
382:
383:
           impact: "Altered sleep-wake cycle",
          advice: "Maintain consistent sleep schedule and optimize sleep environment.",
384:
385:
386:
         exerciseResponsiveness: {
387:
          genes: ["ACTN3"],
388:
           genotype: "R/X",
          impact: "Enhanced power and strength response to training",
389:
390:
          advice: "Incorporate strength and power training into routine.",
391:
         }.
392:
         snackingTendency: {
```

```
genes: ["FTO"],
393:
394:
          genotype: "A/A",
395:
           impact: "Increased tendency for snacking and higher BMI",
396:
          advice: "Practice mindful eating and portion control.",
397:
398:
        oestrogenElimination: {
399:
         genes: ["COMT"],
400:
          genotype: "G/A",
          impact: "Slower estrogen elimination",
401:
          advice: "Support liver detoxification pathways.",
402:
403:
404:
       powerVsEndurance: {
405:
          genes: ["ACE"],
406:
           genotype: "I/D",
407:
          impact: "Balanced power and endurance potential",
408:
          advice: "Vary training to include both power and endurance exercises.",
409:
        },
410:
        injuryRecovery: {
          genes: ["COL1A1"],
411:
412:
          genotype: "G/T",
413:
           impact: "Slower collagen repair, increased injury risk",
414:
          advice: "Focus on adequate protein and Vitamin C for tissue repair.",
415:
416:
        fluidLossTendency: {
         genes: ["AGT"],
417:
           genotype: "T/C",
418:
419:
          impact: "Increased fluid and electrolyte loss during exercise",
420:
          advice: "Ensure proper hydration and electrolyte replenishment.",
421:
        },
422:
       vo2Max: {
         genes: ["PPARGC1A"],
423:
           genotype: "G/G",
424:
          impact: "High VO2 Max potential",
425:
          advice: "Optimize cardiovascular training for peak performance.",
427:
        },
428:
      },
429:
      digestiveHealth: {
430:
       qutHealth: { level: "NORMAL GUT HEALTH", description: "Good overall digestive function" },
431:
        glutenIntolerance: { level: "LOW INTOLERANCE", description: "CONDITIONAL GLUTEN ELIMINATION NEEDED" },
        celiacDiseaseTendency: { level: "LOW TENDENCY", description: "Low genetic risk for celiac disease" },
432:
433:
        impactOnBonesJoints: {
         level: "NO IMPACT ON BONE HEALTH",
434:
          description: "Digestive health does not affect bone health",
436:
        },
437:
        lactoseIntolerance: { level: "HIGH INTOLERANCE", description: "LACTOSE ELIMINATION NEEDED" },
438:
        probioticsRequirement: { level: "PROBIOTICS NEEDED", description: "FOOD & SUPPLEMENTS" },
439:
440:
      genesAndAddiction: {
       alcohol\mathtt{Addiction}: { tendency: "LOW", description: "Low genetic predisposition to alcohol dependency" \},
441:
         smokingAddiction: { tendency: "NORMAL", description: "Average nicotine addiction susceptibility" },
442:
        snackingHabits: { tendency: "HIGH", description: "Genetic tendency toward frequent snacking" },
443:
444:
        altruism: { tendency: "HIGH", description: "Strong genetic predisposition toward helping others" },
445:
446:
      sleepAndRest: {
447:
        sleepCycle: {
          impact: "DELAYED SLEEP CYCLE",
448:
           intervention: "EXERCISE IN THE EVENING AVOID CARBS DURING BREAKFAST",
449:
450:
451:
        sleepApnea: {
           impact: "INCREASED CHANCES OF SLEEP APNEA",
452:
453:
           intervention: "EXERCISE REGULARLY SEEK MEDICAL ADVICE IF ISSUE PERSISTS",
454:
455:
         sleepDepth: { impact: "LOW SLEEP DEPTH", intervention: "CONSUME CURD RICE IN DINNER FOR BETTER SLEEP" }
456:
         stressSensitivity: {
          impact: "LOW STRESS SENSITIVITY",
457:
458:
           intervention: "EXERCISE REGULARLY FOR A BETTER SLEEP CYCLE",
459:
        },
460:
      },
461:
      allergiesAndSensitivity: {
       dustAllergy: { tendency: "NORMAL" },
462:
        pesticideSensitivity: { tendency: "HIGH" },
463:
         smokeSensitivity: { tendency: "HIGH" },
464:
         automobileSmokeSensitivity: { tendency: "HIGH" },
465:
```

```
466:
       generalAdvice:
           "THE BEST WAY TO REDUCE ALLERGIES IS TO STAY AWAY FROM THE SOURCE, NO ROCKET SCIENCE HOWEVER THE FOLL
467:
468:
      geneTestResults: [
469:
470:
471:
          geneName: "ALDH2 Aldehyde dehydrogenase 2",
472:
          variation: "G>A",
473:
          result: "GG",
474:
475:
476:
          geneName: "MTHFR Methylenetetrahydrofolate reductase",
          variation: "C>T",
477:
478:
          result: "CT",
479:
480: ],
481: metabolicSummary: {
      strengths: ["Efficient detoxification", "Normal lipid metabolism"],
482:
483:
        weaknesses: ["Increased oxidative stress", "Higher risk of insulin resistance"],
484:
485: preventiveHealth: {
486:
      diagnosticTests: {
487:
          halfYearly: ["PLASMA SUGAR (FASTING & PP)", "VITAMIN D"],
          yearly: ["HbA1c", "LIPID PROFILE", "SERUM HOMOCYSTEINE", "VITAMIN B12", "LIVER PROFILE"],
488:
489:
490:
       nutritionalSupplements: [
          { supplement: "VITAMIN D", needed: true },
491:
492:
           { supplement: "METHYL FOLATE + METHYL COBALAMINE + B6", needed: true },
           { supplement: "OMEGA FATTY ACIDS (FISH OIL)", needed: true },
493:
          { supplement: "FOLIC ACID + COBALAMINE + B6", needed: true },
494:
495:
          { supplement: "OMEGA FATTY ACIDS (VEG)", needed: true },
          { supplement: "VITAMIN E", needed: true },
496:
497:
           { supplement: "PROBIOTICS", needed: true },
       ],
498:
499:
     },
500: familyGeneticImpact: [
501:
      {
502:
          gene: "MnSOD",
503:
         normalAlleles: "AA",
504:
         yourResult: "AG",
505:
          healthImpact: "INCREASED TENDENCY OF OXIDATIVE STRESS NEED OF ANTI-OXIDANT SUPPLEMENTS",
506:
507:
       gene: "FTO",
normalAlleles: "TT",
508:
509:
510:
          yourResult: "AT",
511:
          healthImpact:
512:
            "INCREASED TENDENCY OF INSULIN RESISTANCE WEIGHT AND CALORIE MANAGEMENT IMPORTANT TO MANAGE AND RED
513:
       },
514: ],
515:
      summaries: {
516:
      nutrigenomicsSummary:
        "Based on the overall nutrigenomics analysis, provide expert summary for personalized diet and lifest
518:
       exerciseGenomicsSummary:
519:
          "Based on the overall genomics analysis, provide expert summary for personalized exercise plan...",
     },
520:
521: }
522:
523: export async function GET() {
524:
     try {
525:
       // Ensure the data directory exists
526:
        const dataDir = path.dirname(dataFilePath)
527:
        await fs.mkdir(dataDir, { recursive: true })
528:
529:
        let data: ComprehensiveReportData
530:
531:
        try {
          const fileContent = await fs.readFile(dataFilePath, "utf-8")
532:
533:
          data = JSON.parse(fileContent)
534:
         } catch (readError: any) {
          if (readError.code === "ENOENT") {
535:
            // File does not exist, initialize with default data
536:
            data = defaultReportData
537:
538:
            await fs.writeFile(dataFilePath, JSON.stringify(data, null, 2), "utf-8")
```

```
} else {
539:
540:
            // Other read errors
541:
            console.error("Error reading report data file:", readError)
            return NextResponse.json({ error: "Failed to read report data" }, { status: 500 })
542:
543:
544:
       }
545:
546:
        return NextResponse.json(data)
547:
      } catch (error) {
        console.error("Error in GET /api/report-data:", error)
548:
        return NextResponse.json({ error: "Internal Server Error" }, { status: 500 })
549:
550:
     }
551: }
552:
553: export async function POST(request: Request) {
554: try {
555:
       const data: ComprehensiveReportData = await request.json()
556:
557:
        // Basic validation (can be expanded)
       if (!data | | !data.patientInfo | | !data.content) {
         return NextResponse.json({ error: "Invalid report data provided" }, { status: 400 })
559:
560:
561:
562:
        // Ensure the data directory exists
        const dataDir = path.dirname(dataFilePath)
563:
        await fs.mkdir(dataDir, { recursive: true })
564:
565:
        await fs.writeFile(dataFilePath, JSON.stringify(data, null, 2), "utf-8")
566:
       return NextResponse.json({ message: "Report data saved successfully" })
568:
      } catch (error) {
        console.error("Error in POST /api/report-data:", error)
569:
        return NextResponse.json({ error: "Internal Server Error" }, { status: 500 })
570:
571:
572: }
```

■ 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"
 7:
 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<{
19: children: React.ReactNode
 20: }>) {
 21:
    return (
      <html lang="en" suppressHydrationWarning>
 23:
         <body className={inter.className}>
 24:
          <ThemeProvider attribute="class" defaultTheme="system" enableSystem disableTransitionOnChange>
             {children}
 25:
 26:
             <Toaster />
 27:
           </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,
    Eye,
 8:
 9: Download,
10:
    Database,
11:
     Dna,
12:
     Activity,
13: Heart.
14: Brain,
15:
     Utensils,
16:
     Zap,
    AlertCircle,
17:
18: Users,
19: } from "lucide-react";
20:
21: export default function HomePage() {
22:
       <div className="flex flex-col items-center w-full justify-center min-h-screen bg-gradient-to-br from-gr</pre>
23:
         {/* Quick Actions */}
24:
25:
         <div className="grid md:grid-cols-4 gap-6 mb-12 mt-12">
           <Link href="/admin">
26:
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>
             </Card>
33:
34:
           </Link>
35:
36:
           <Link href="/report/preview">
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" />
                 <h3 className="font-bold text-lg">Preview Report</h3>
40:
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-lg">Generate PDF</h3>
51:
                 Export to PDF
52:
               </CardContent>
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">
               <Database className="h-12 w-12 mx-auto mb-4" />
58:
59:
               <h3 className="font-bold text-lg">Data Management</h3>
60:
               CRUD operations
             </CardContent>
61:
62:
           </Card>
         </div>
63:
64:
         {/* Report Sections */}
65:
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">
68:
             <CardTitle className="text-2xl">
69:
               ? Report Sections Included
70:
             </CardTitle>
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>
 :08
                  <h4 className="font-semibold text-red-800">Diet Analysis</h4>
                  81:
 82:
                    Macronutrients, sensitivities, meal patterns
 83:
                  84:
                 </div>
 85:
               </div>
 86:
 87:
               <div className="flex items-center gap-3 p-4 bg-blue-50 rounded-lg">
                 <Activity className="h-8 w-8 text-blue-600" />
 88:
 89:
                  <h4 className="font-semibold text-blue-800">Nutrition</h4>
 90:
 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">
 98:
                 <Zap className="h-8 w-8 text-green-600" />
 99:
                 <div>
                  <h4 className="font-semibold text-green-800">
100:
101:
                   Sports & Fitness
102:
                  </h4>
103:
                  104:
                    Exercise types, performance factors
105:
                  106:
                 </div>
107:
               </div>
108:
109:
              <div className="flex items-center gap-3 p-4 bg-yellow-50 rounded-lg">
110:
                 <Heart className="h-8 w-8 text-yellow-600" />
111:
112:
                  <h4 className="font-semibold text-yellow-800">
113:
                   Lifestyle Conditions
114:
                  </h4>
115:
                  116:
                    Health risks and strengths
117:
                  118:
                 </div>
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:
                  </h4>
127:
                  128:
                    Gene analysis and impacts
129:
                  130:
                 </div>
131:
               </div>
132:
133:
               <div className="flex items-center gap-3 p-4 bg-indigo-50 rounded-lg">
134:
                <Brain className="h-8 w-8 text-indigo-600" />
135:
                 <div>
                  <h4 className="font-semibold text-indigo-800">
136:
137:
                    Digestive Health
138:
                  </h4>
139:
                  Gut health, intolerances
140:
141:
                  142:
                 </div>
143:
              </div>
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>
              </div>
153:
154:
              <div className="flex items-center gap-3 p-4 bg-teal-50 rounded-lg">
155:
                <Brain className="h-8 w-8 text-teal-600" />
156:
157:
                 <h4 className="font-semibold text-teal-800">Sleep & Rest</h4>
158:
159:
                 Sleep patterns, quality
160:
                </div>
              </div>
161:
162:
              <div className="flex items-center gap-3 p-4 bg-cyan-50 rounded-lg">
163:
164:
                <AlertCircle className="h-8 w-8 text-cyan-600" />
165:
                <div>
166:
                 <h4 className="font-semibold text-cyan-800">
167:
                  Allergies & Sensitivity
168:
                 </h4>
169:
                 170:
                   Environmental sensitivities
171:
                 </div>
172:
173:
              </div>
174:
175:
              <div className="flex items-center gap-3 p-4 bg-lime-50 rounded-lg">
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:
190:
                 <h4 className="font-semibold text-amber-800">
191:
                  Family Genetic Impact
192:
                 </h4>
193:
                 194:
                   Inherited traits, family recommendations
195:
                 </div>
196:
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'
16:
       // For this example, we fetch the single stored report data
17:
       const response = await fetch(
18:
         `${
           process.env.NEXT_PUBLIC_APP_URL || "http://localhost:3000"
19:
20:
         }/api/report-data`,
21:
         { cache: "no-store" }
22:
23:
24:
       if (!response.ok) {
25:
         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:
     return (
48:
      <div className="min-h-screen bg-gray-100 print:bg-white">
49:
         <ComprehensiveReportViewer reportData={reportData} />
50:
        </div>
51: );
52: }
```

■ 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`,
         { 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:
        const data = await response.json();
 20:
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 ReportPdfPage() {
     const reportData = await getReportData();
29:
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:
36:
      );
    }
37:
38:
39:
    return (
40:
      <div className="min-h-screen bq-white print:bq-white">
41:
         <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";
3:
4: async function getReportData(): Promise<ComprehensiveReportData | null> {
    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:
       if (!response.ok) {
13:
14:
        console.error(
15:
           `Failed to fetch report data: ${response.status} ${response.statusText}`
16:
         );
17:
         return null;
       }
18:
19:
      const data = await response.json();
20:
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">
33:
34:
           Failed to load report data for preview.
35:
         </div>
36:
       );
    }
37:
38:
39:
     return (
40:
       <div className="min-h-screen bg-gray-100 print:bg-white">
41:
         <ComprehensiveReportViewer reportData={reportData} />
42:
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
13: updateAllergiesAndSensitivity: (field: keyof AllergiesAndSensitivity, data: Partial<AllergyData> | string
14: onSave: () => void
15:
     onReset: () => void
16: }
17:
18: export default function AllergiesSensitivityAdmin({
19: allergiesAndSensitivity,
20: updateAllergiesAndSensitivity,
21: onSave,
22: onReset.
23: }: AllergiesSensitivityAdminProps) {
24: const renderAllergyField = (
25:
       field: Exclude<keyof AllergiesAndSensitivity, "generalAdvice">,
26:
       data: AllergyData,
27:
       title: string,
28: ) => (
      <Card key={field} className="border-2 border-orange-100 bg-orange-50/30">
29:
30:
         <CardHeader className="pb-3">
31:
           <CardTitle className="text-lg text-orange-800">{title}</CardTitle>
32:
         </CardHeader>
         <CardContent className="space-y-4">
33:
34:
           <div className="space-y-2">
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"
               className="border-2 focus:border-orange-500"
40:
41:
             />
42:
           </div>
43:
          </CardContent>
44:
        </Card>
45:
     )
46:
47:
     return (
      <Card className="shadow-lg border-0 bg-white">
48:
         <CardHeader className="bg-gradient-to-r from-orange-500 to-red-600 text-white rounded-t-lg">
49:
50:
           <CardTitle className="text-2x1">? Allergies & Sensitivity</CardTitle>
51:
           <CardDescription className="text-orange-100">
52:
             Manage genetic predispositions for various allergies and environmental sensitivities
53:
            </CardDescription>
54:
         </CardHeader>
          <CardContent className="space-y-8 p-8">
55:
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:
             </Button>
62:
              <Button onClick={onSave} size="sm">
63:
               <Save className="h-4 w-4 mr-2" />
64:
                Save Changes
65:
             </Button>
66:
           </div>
67:
68:
            {/* Allergy & Sensitivity Fields */}
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:
                    key.replace(/([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase()),
 77:
                ) }
 78:
 79:
            </div>
 :08
            {/* General Advice */}
 81:
 82:
            <div className="space-y-2">
              <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-orange-200 pb-2">? General A
 83:
 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:
                rows={5}
 89:
                className="border-2 focus:border-orange-500 text-sm"
                placeholder="Enter general advice for managing allergies and sensitivities..."
 90:
 91:
            </div>
 92:
 93:
 94:
             {/* Section Guidelines */}
 95:
            <div className="bg-orange-50 border-2 border-orange-200 rounded-lg p-6">
              <h4 className="font-semibold text-orange-800 mb-2">? Allergies & Sensitivity Guidelines:</h4>
 96:
 97:
              <div className="text-sm text-orange-700 space-y-2">
 98:
                99:
                  <
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:
                    <strong>Smoke Sensitivity:</strong> Genetic predisposition to sensitivity from smoke (e.g.,
106:
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:
        </Card>
119: )
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;
     updateContent: (field: keyof ReportContent, value: string) => void;
18:
19:
     onSave: () => void; // Added onSave
```

```
20:
     onReset: () => void; // Added onReset
21: }
22:
23: export default function ContentAdmin({
24: content,
25: updateContent,
26: onSave,
27:
     onReset,
28: }: ContentAdminProps) {
    return (
       <Card className="shadow-lg border-0 bg-white">
         <CardHeader className="bg-gradient-to-r from-green-500 to-teal-600 text-white rounded-t-lg">
31:
            <CardTitle className="text-2xl">? Report Content</CardTitle>
32:
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">
41:
                <RotateCcw className="h-4 w-4 mr-2" />
42:
                Reset
43:
              </But.ton>
44:
             <Button onClick={onSave} size="sm">
               <Save className="h-4 w-4 mr-2" />
45:
46:
                Save Changes
47:
             </Button>
48:
            </div>
49:
50:
           <div className="space-y-3">
51:
              <Label
               htmlFor="introduction"
52:
               className="text-lg font-semibold text-gray-800"
53:
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}
63:
               className="border-2 focus:border-green-500 text-sm leading-relaxed"
64:
              />
65:
            </div>
66:
            <div className="space-y-3">
67:
              <Label
68:
               htmlFor="genomicsExplanation"
69:
               className="text-lg font-semibold text-gray-800"
70:
71:
               ? What is Genomics?
72:
              </Label>
73:
              <Textarea
74:
               id="genomicsExplanation"
75:
                value={content.genomicsExplanation}
76:
                onChange={(e) =>
77:
                  updateContent("genomicsExplanation", e.target.value)
78:
79:
                placeholder="Enter genomics explanation"
80:
               rows={8}
81:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
82:
              />
83:
            </div>
84:
            <div className="space-y-3">
85:
             <Label
               htmlFor="genesHealthImpact"
86:
87:
               className="text-lg font-semibold text-gray-800"
88:
89:
               ? Genes and Health Impact
90:
              </Label>
91:
              <Textarea
92:
               id="genesHealthImpact"
```

```
93:
                value={content.genesHealthImpact}
 94:
                onChange={(e) => updateContent("genesHealthImpact", e.target.value)}
 95:
                placeholder="Enter genes and health impact content"
 96:
 97:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
 98:
              />
 99:
            </div>
            <div className="space-y-3">
100:
              <Label
101:
                htmlFor="fundamentalsPRS"
102:
                className="text-lg font-semibold text-gray-800"
103:
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:
              />
115:
            </div>
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}
               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"
136:
137:
                ? Microarray Explanation
138:
              </Label>
139:
              <Textarea
140:
                id="microarrayExplanation"
141:
                value={content.microarrayExplanation}
142:
                onChange={(e) =>
143:
                  updateContent("microarrayExplanation", e.target.value)
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
                htmlFor="microarrayData"
152:
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:
               />
165:
             </div>
```

■ File: components\admin\diet-analysis-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 { 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"
12: interface DietAnalysisAdminProps {
13:
     dietAnalysis: DietAnalysis
14:
      updateDietAnalysis: (section: keyof DietAnalysis, field: string, data: Partial<MacronutrientData>) => voi
15: onSave: () => void // Added onSave
     onReset: () => void // Added onReset
 16:
17: }
 18:
19: export default function DietAnalysisAdmin({
 20: dietAnalysis,
 21: updateDietAnalysis,
 22: onSave,
 23:
      onReset,
 24: }: DietAnalysisAdminProps) {
 25: const renderMacronutrientField = (
      section: keyof DietAnalysis,
 26:
 27:
        field: string,
 28:
       data: MacronutrientData,
 29:
       title: string,
30: ) => (
      <Card key={field} className="border-2 border-blue-100 bg-blue-50/30">
 31:
 32:
         <CardHeader className="pb-3">
           <CardTitle className="text-lg text-blue-800">{title}/CardTitle>
33:
 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:
 41:
                  min="1"
                  max="10"
42:
 43:
                  value={data.score}
 44:
                  onChange={(e) => updateDietAnalysis(section, field, { score: Number.parseInt(e.target.value)
 45:
                  className="border-2 focus:border-blue-500"
 46:
                />
              </div>
 47:
              <div className="space-y-2">
 48:
 49:
                <Label className="text-sm font-medium">Level</Label>
 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>
 55:
                    <SelectItem value="HIGH">HIGH</SelectItem>
                    <SelectItem value="NORMAL">NORMAL
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>
61:
                    <SelectItem value="LESS SUITABLE">LESS SUITABLE
                  </SelectContent>
 62:
                </Select>
 63:
 64:
              </div>
```

```
</div>
 65:
             <div className="space-y-2">
 66:
               <Label className="text-sm font-medium">Recommendation</Label>
 67:
               <Textarea
 68:
 69:
                 value={data.recommendation}
                 onChange={(e) => updateDietAnalysis(section, field, { recommendation: e.target.value })}
 70:
 71:
                 rows={3}
 72:
                 className="border-2 focus:border-blue-500 text-sm"
 73:
 74:
             </div>
 75:
           </CardContent>
 76:
         </Card>
 77:
 78:
 79:
      return (
 :08
         <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">
 81:
 82:
             <CardTitle className="text-2xl">? Diet Analysis</CardTitle>
             <CardDescription className="text-amber-100">
 83:
 84:
               Configure macronutrients, meal patterns, and food sensitivities
 85:
             </CardDescription>
 86:
           </CardHeader>
 87:
           <CardContent className="space-y-8 p-8">
             {/* Action Buttons */}
 88:
             <div className="flex justify-end gap-2 mb-6">
 89:
 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">
 95:
                 <Save className="h-4 w-4 mr-2" />
 96:
                 Save Changes
 97:
               </But.ton>
 98:
             </div>
 99:
100:
             {/* Macronutrients Section */}
101:
             <div className="space-y-4">
102:
               <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-amber-200 pb-2">? Macronutri
103:
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
104:
                 {renderMacronutrientField(
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:
122:
               </div>
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
128:
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
129:
                 {renderMacronutrientField(
130:
                   "mealPattern",
131:
                   "mealFrequency",
132:
                   dietAnalysis.mealPattern.mealFrequency,
133:
                   "Meal Frequency",
                 ) }
134:
135:
                 {renderMacronutrientField(
136:
                   "mealPattern".
137:
                    "mealReplacement",
```

```
138:
                   dietAnalysis.mealPattern.mealReplacement,
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">
152:
              <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-amber-200 pb-2">
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:
                ) }
                {renderMacronutrientField(
162:
163:
                   "foodSensitivities",
164:
                   "caffeineSensitivity",
                   dietAnalysis.foodSensitivities.caffeineSensitivity,
165:
166:
                   "Caffeine Sensitivity",
167:
                ) }
168:
                 {renderMacronutrientField(
169:
                   "foodSensitivities",
170:
                   "glutenSensitivity",
                  dietAnalysis.foodSensitivities.glutenSensitivity,
171:
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:
                 ) }
186:
               </div>
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>
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
194:
195:
                 {renderMacronutrientField(
196:
                    "tasteSensitivities",
197:
                   "spiceTolerance",
198:
                   dietAnalysis.tasteSensitivities.spiceTolerance,
199:
                   "Spice Tolerance",
200:
                 ) }
201:
                 {renderMacronutrientField(
                   "tasteSensitivities",
202:
203:
                   "sweetTaste",
                   dietAnalysis.tasteSensitivities.sweetTaste,
204:
205:
                   "Sweet Taste",
206:
                 ) }
207:
                 {renderMacronutrientField(
208:
                   "tasteSensitivities",
209:
                   "tasteSensitivity",
210:
                   dietAnalysis.tasteSensitivities.tasteSensitivity,
```

■ File: components\admin\digestive-health-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 { DigestiveHealth, DigestiveHealthData } from "@/types/report-types"
10:
11: interface DigestiveHealthAdminProps {
12: digestiveHealth: DigestiveHealth
      updateDigestiveHealth: (field: keyof DigestiveHealth, data: Partial<DigestiveHealthData>) => void
13:
14:
      onSave: () => void
      onReset: () => void
15:
16: }
17:
 18: export default function DigestiveHealthAdmin({
 19: digestiveHealth,
 20: updateDigestiveHealth,
 21: onSave,
      onReset,
 22:
 23: }: DigestiveHealthAdminProps) {
      const renderDigestiveHealthField = (field: keyof DigestiveHealth, data: DigestiveHealthData, title: strin
       <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">
            <div className="space-y-2">
31:
              <Label className="text-sm font-medium">Level</Label>
 32:
              <Input
 33:
                value={data.level}
 34:
                onChange={(e) => updateDigestiveHealth(field, { level: e.target.value })}
 35:
                placeholder="e.g., NORMAL GUT HEALTH"
                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}
                on Change=\{(\texttt{e}) \texttt{ => updateDigestiveHealth(field, \{ \texttt{description: e.target.value } \})} \}
 43:
 44:
                rows={3}
 45:
                className="border-2 focus:border-red-500 text-sm"
 46:
              />
 47:
            </div>
 48:
          </CardContent>
 49:
        </Card>
 50:
      )
 51:
 52:
       <Card className="shadow-lg border-0 bg-white">
          <CardHeader className="bg-gradient-to-r from-red-500 to-orange-600 text-white rounded-t-lg">
 54:
 55:
            <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">
 63:
              <Button onClick={onReset} variant="outline" size="sm">
                <RotateCcw className="h-4 w-4 mr-2" />
 64:
 65:
                Reset
 66:
              </Button>
 67:
              <Button onClick={onSave} size="sm">
 68:
                <Save className="h-4 w-4 mr-2" />
 69:
                Save Changes
              </But.ton>
 70:
 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,
                  \label{lem:key.replace(/([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase()), } \\
 79:
 :08
                ),
              ) }
 81:
 82:
            </div>
 83:
 84:
            {/* Section Guidelines */}
            <div className="bg-red-50 border-2 border-red-200 rounded-lg p-6">
 85:
              <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:
 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:
                  <1i>>
103:
                    <strong>Lactose Intolerance:</strong> Genetic ability to digest lactose.
104:
                  105:
                  <1i>>
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 { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@/components/ui/card"
7: import { Button } from "@/components/ui/button"
8: import { Plus, Save, RotateCcw, Trash2, GripVertical } from "lucide-react"
9: import { useToast } from "@/components/ui/use-toast"
10: import { FieldInput, FieldTextarea, FieldSelect } from "@/components/admin/dynamic-field-helpers"
11: import type { DynamicDietFieldDefinition } from "@/types/report-types"
12:
13: interface DynamicDietFieldAdminProps {
14: dynamicDietFieldDefinitions: DynamicDietFieldDefinition[]
```

```
15:
     updateDynamicDietFieldDefinitions: (definitions: DynamicDietFieldDefinition[]) => void
16: onSave: () => void
17:
     onReset: () => void
18: }
19:
20: export default function DynamicDietFieldAdmin({
21: dynamicDietFieldDefinitions,
22:
     updateDynamicDietFieldDefinitions,
     onSave,
23:
24:
     onReset,
25: }: DynamicDietFieldAdminProps) {
26: const [localFields, setLocalFields] = useState<DynamicDietFieldDefinition[]>(dynamicDietFieldDefinitions)
27:
     const [categories, setCategories] = useState<string[]>([
28:
       "Macronutrients",
29:
       "Meal Pattern",
30:
       "Food Sensitivities",
       "Taste Sensitivities",
31:
32:
     ]) // Predefined categories for diet analysis
33:
     const [showCreateModal, setShowCreateModal] = useState(false)
34:
    const [newFieldData, setNewFieldData] = useState<Omit<DynamicDietFieldDefinition, "_uuid" | "id">>>({
35:
      label: "",
       category: categories[0] | | "", // Default to first category
36:
37:
       min: 1,
38:
       max: 10.
      highRecommendation: "",
39:
      normalRecommendation: "",
40:
41:
       lowRecommendation: "",
    })
42:
43:
     const { toast } = useToast()
44:
45:
     useEffect(() => {
46:
      setLocalFields(dynamicDietFieldDefinitions)
47:
     }, [dynamicDietFieldDefinitions])
48:
     const addNewField = () => {
49:
50:
      if (!newFieldData.label.trim()) {
51:
         toast({
           title: "Validation Error",
52:
53:
           description: "Field label is required.",
54:
           variant: "destructive",
55:
         })
56:
         return
57:
      }
58:
59:
      const fieldId = newFieldData.label
60:
         .toLowerCase()
         .replace(/\s+/g, "_")
61:
62:
         .replace(/[^a-z0-9_]/g, "")
       const isDuplicate = localFields.some((field) => field.id === fieldId)
63:
64:
       if (isDuplicate) {
65:
66:
        toast({
67:
           title: "Validation Error",
68:
           description: "A field with this label (ID) already exists.",
69:
           variant: "destructive",
        })
70:
71:
         return
72:
73:
74:
       const newField: DynamicDietFieldDefinition = {
75:
         _uuid: uuidv4(),
76:
         id: fieldId,
77:
         ...newFieldData,
78:
79:
:08
       const updatedFields = [...localFields, newField]
81:
       setLocalFields(updatedFields)
82:
       updateDynamicDietFieldDefinitions(updatedFields)
83:
       setShowCreateModal(false)
84:
       setNewFieldData({
85:
        label: "",
86:
         category: categories[0] || "",
87:
         min: 1.
```

```
88:
           max: 10.
 89:
           highRecommendation: "",
 90:
           normalRecommendation: "",
 91:
           lowRecommendation: "",
         })
 92:
 93:
         toast({
           title: "Field Added",
 94:
 95:
           description: `"${newField.label}" has been added. Remember to Save Changes.`,
 96:
 97:
      }
 98:
 99:
       const handleCreateModalClose = () => {
100:
        setShowCreateModal(false)
101:
         setNewFieldData({
102:
          label: "",
103:
           category: categories[0] || "",
           min: 1,
104:
105:
           max: 10,
           highRecommendation: "",
106:
          normalRecommendation: "",
107:
108:
           lowRecommendation: "",
109:
         })
110:
111:
       const updateLocalField = (index: number, key: keyof DynamicDietFieldDefinition, value: any) => {
112:
113:
        const updated = [...localFields]
114:
         if (key === "id") {
          const newId = String(value)
115:
116:
             .toLowerCase()
117:
             .replace(/\s+/g, "_")
             .replace(/[^a-z0-9_]/g, "")
118:
119:
           const isDuplicate = localFields.some((f, i) => i !== index && f.id === newId)
           if (isDuplicate) {
120:
121:
            toast({
              title: "Validation Error",
122:
123:
               description: "Field ID must be unique.",
124:
               variant: "destructive",
125:
             })
126:
            return
127:
128:
           updated[index] = { ...updated[index], [key]: newId }
129:
         } else {
130:
          updated[index] = { ...updated[index], [key]: value }
131:
         }
132:
         setLocalFields(updated)
133:
         updateDynamicDietFieldDefinitions(updated) // Update parent state immediately
134:
135:
       const deleteField = (idToDelete: string) => {
136:
137:
        if (!window.confirm("Are you sure you want to delete this field? This action cannot be undone.")) {
138:
          return
139:
         }
140:
         const updatedFields = localFields.filter((field) => field.id !== idToDelete)
141:
         setLocalFields(updatedFields)
142:
         updateDynamicDietFieldDefinitions(updatedFields)
143:
         toast({
           title: "Field Deleted",
144:
           description: "Field removed. Remember to Save Changes.",
145:
146:
           variant: "destructive",
147:
         })
148:
       }
149:
150:
      const onDragEnd = (result: any) => {
151:
         if (!result.destination) return
152:
153:
         const reordered = Array.from(localFields)
154:
         const [moved] = reordered.splice(result.source.index, 1)
         reordered.splice(result.destination.index, 0, moved)
155:
156:
157:
        setLocalFields(reordered)
         updateDynamicDietFieldDefinitions(reordered) // Update parent state
158:
159:
         toast({
160:
           title: "Fields Reordered",
```

```
description: "Order updated. Remember to Save Changes.",
161:
162:
        })
163:
      }
164:
165:
      return (
166:
       <Card className="shadow-lg border-0 bg-white">
167:
           <CardHeader className="bg-gradient-to-r from-amber-500 to-orange-600 text-white rounded-t-lg">
             <CardTitle className="text-2xl">? Dynamic Diet Field Management</CardTitle>
168:
             <CardDescription className="text-amber-100">
169:
170:
               Define and manage the types of diet analysis fields for your reports.
171:
             </CardDescription>
172:
           </CardHeader>
173:
           <CardContent className="space-y-8 p-8">
174:
             <div className="flex justify-end gap-2 mb-6">
175:
               <Button onClick={onReset} variant="outline" size="sm">
176:
                 <RotateCcw className="h-4 w-4 mr-2" />
177:
                 Reset Section
178:
               </Button>
               <Button onClick={onSave} size="sm">
179:
180:
                <Save className="h-4 w-4 mr-2" />
181:
                 Save All Changes
182:
               </Button>
183:
             </div>
184:
            <div className="flex justify-between items-center mb-6">
185:
               <h3 className="text-xl font-semibold text-gray-800">Configured Fields</h3>
186:
187:
               <Button onClick={() => setShowCreateModal(true)} size="sm">
188:
                 <Plus className="h-4 w-4 mr-2" />
189:
                 Add New Field
190:
               </Button>
191:
             </div>
192:
193:
             {localFields.length === 0 ? (
               <div className="text-center py-12 text-gray-500 italic">No dynamic diet fields defined yet.</div>
194:
195:
             ) : (
196:
               <DragDropContext onDragEnd={onDragEnd}>
197:
                 <Droppable droppableId="fields">
198:
                   {(provided) => (
199:
                     <div {...provided.droppableProps} ref={provided.innerRef} className="space-y-4">
200:
                       {localFields.map((field, index) => (
201:
                         <Draggable key={field._uuid} draggableId={field._uuid} index={index}>
202:
                           \{(provided, snapshot) => (
203:
                             <div
204:
                               ref={provided.innerRef}
205:
                               {...provided.draggableProps}
206:
                               className={`border rounded-lg p-4 bg-white shadow-sm transition-all duration-200
207:
                                 snapshot.isDragging ? "bg-gray-100 ring-2 ring-blue-500 shadow-lg" : "hover:sha
208:
                               }`}
209:
210:
                               <div className="flex items-center justify-between mb-4">
211:
                                 <div className="flex items-center gap-2">
212:
                                   <span {...provided.dragHandleProps} className="cursor-grab text-gray-400">
213:
                                     <GripVertical className="h-5 w-5" />
214:
                                   </span>
215:
                                   <h4 className="text-lg font-semibold text-gray-900">
                                     {index + 1}. {field.label} (ID: {field.id})
216:
217:
                                    </h4>
218:
                                 </div>
219:
                                 <Button
                                   variant="destructive"
220:
221:
                                   size="sm"
222:
                                   onClick={() => deleteField(field.id)}
223:
                                   className="ml-4"
224:
                                   <Trash2 className="h-4 w-4" />
225:
226:
227:
                               </div>
228:
229:
                               <div className="grid grid-cols-1 md:grid-cols-2 lg:grid-cols-3 gap-4">
230:
                                 <FieldInput
                                   label="Field ID (Auto-generated from Label)"
231:
232:
                                   value={field.id}
233:
                                   onChange={(val) => updateLocalField(index, "id", val)}
```

```
234:
                                    disabled // ID is derived from label, not directly editable
235:
                                  <FieldInput
236:
237:
                                    label="Label"
238:
                                    value={field.label}
239:
                                    onChange={(val) => updateLocalField(index, "label", val)}
240:
241:
                                  <FieldSelect
242:
                                    label="Category"
243:
                                    value={field.category}
244:
                                    options={categories}
245:
                                    onChange={(val) => updateLocalField(index, "category", val)}
247:
                                  <FieldInput
248:
                                    label="Min Score"
249:
                                    type="number"
250:
                                    value={field.min}
251:
                                    onChange={(val) => updateLocalField(index, "min", val)}
252:
                                    min={0}
253:
                                    max={field.max}
254:
                                  />
255:
                                  <FieldInput
256:
                                    label="Max Score"
257:
                                    t.vpe="number"
258:
                                    value={field.max}
                                    onChange={(val) => updateLocalField(index, "max", val)}
259:
260:
                                    min={field.min}
261:
262:
                                  <FieldTextarea
263:
                                    label="High Recommendation"
264:
                                    value={field.highRecommendation}
265:
                                    onChange={(val) => updateLocalField(index, "highRecommendation", val)}
266:
                                  <FieldTextarea
267:
                                    label="Normal Recommendation"
268:
269:
                                    value={field.normalRecommendation}
270:
                                    onChange={(val) => updateLocalField(index, "normalRecommendation", val)}
271:
272:
                                  <FieldTextarea
273:
                                    label="Low Recommendation"
274:
                                    value={field.lowRecommendation}
275:
                                    onChange={(val) => updateLocalField(index, "lowRecommendation", val)}
276:
                                  />
                                </div>
277:
278:
                              </div>
                            ) }
279:
280:
                          </Draggable>
281:
                        ))}
282:
                        {provided.placeholder}
283:
                      </div>
                   ) }
284:
                 </Droppable>
286:
               </DragDropContext>
287:
             ) }
288:
           </CardContent>
289:
290:
           {/* Create New Field Modal */}
291:
           {showCreateModal && (
292:
             <div className="fixed inset-0 bg-black bg-opacity-50 flex items-center justify-center z-50 p-4">
               <div className="bg-white rounded-lg p-6 w-full max-w-md max-h-[90vh] overflow-y-auto shadow-xl">
293:
294:
                 <h3 className="text-xl font-bold mb-4">Add New Diet Field Definition</h3>
295:
                 <div className="space-y-4">
296:
                   <FieldInput
297:
                     label="Field Label"
298:
                     value={newFieldData.label}
299:
                     onChange={(val) => setNewFieldData({ ...newFieldData, label: val })}
300:
                     placeholder="e.g., Gluten Sensitivity"
301:
                     required
302:
303:
                   <FieldSelect
                     label="Category"
304:
305:
                     value={newFieldData.category}
306:
                     options={categories}
```

```
onChange={(val) => setNewFieldData({ ...newFieldData, category: val })}
307:
308:
309:
                   <div className="grid grid-cols-2 gap-4">
310:
                     <FieldInput
311:
                       label="Min Score"
312:
                       type="number"
313:
                       value={newFieldData.min}
314:
                       onChange={(val) => setNewFieldData({ ...newFieldData, min: Number(val) })}
315:
316:
                       max={newFieldData.max}
317:
318:
                     <FieldInput
319:
                       label="Max Score"
320:
                       type="number"
321:
                       value={newFieldData.max}
322:
                       onChange={(val) => setNewFieldData({ ...newFieldData, max: Number(val) })}
323:
                       min={newFieldData.min}
324:
                   </div>
325:
326:
                   <FieldTextarea
327:
                     label="High Recommendation"
328:
                     value={newFieldData.highRecommendation}
329:
                     onChange={(val) => setNewFieldData({ ...newFieldData, highRecommendation: val })}
                     placeholder="Recommendation for high score"
330:
331:
                   <FieldTextarea
332:
333:
                     label="Normal Recommendation"
334:
                     value={newFieldData.normalRecommendation}
335:
                     onChange={(val) => setNewFieldData({ ...newFieldData, normalRecommendation: val })}
336:
                    placeholder="Recommendation for normal score"
337:
                   />
338:
                   <FieldTextarea
339:
                     label="Low Recommendation"
340:
                     value={newFieldData.lowRecommendation}
                     on Change=\{(val) => setNewFieldData(\{ ...newFieldData, lowRecommendation: val \})\}
341:
342:
                     placeholder="Recommendation for low score"
                   />
343:
344:
                 </div>
345:
                 <div className="flex justify-end gap-3 mt-6">
346:
                   <Button variant="outline" onClick={handleCreateModalClose}>
347:
                     Cancel
348:
                   </But.ton>
349:
                   <Button onClick={addNewField}>Add Field/Button>
350:
                 </div>
351:
               </div>
352:
             </div>
           ) }
353:
354:
         </Card>
355:
      )
356: }
```

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

```
______
 1: "use client"
 2:
 3: import type React from "react"
 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> = ({
18:
```

```
19:
     value.
20: onChange,
    type = "text",
21:
     disabled = false,
22:
     placeholder = "",
23:
24:
    required = false,
25: min,
26:
     max,
27: }) => (
    <div className="flex flex-col">
28:
       <label className="text-sm font-medium text-gray-700 mb-1">{label}/label>
29:
30:
       <input
31:
         type={type}
         disabled={disabled}
32:
33:
         placeholder={placeholder}
34:
         required={required}
35:
         min={min}
36:
         max=\{max\}
         className={`w-full border rounded-md px-3 py-2 text-sm focus:outline-none focus:ring-2 focus:ring-blu
37:
38:
           disabled ? "bg-gray-100 text-gray-500 cursor-not-allowed" : "bg-white border-gray-300 hover:border-
          }`}
39:
40:
         value={value ?? ""}
         onChange={(e) => onChange(type === "number" ? Number(e.target.value) : e.target.value)}
41:
42:
       />
43:
     </div>
44: )
45:
46: interface FieldTextareaProps {
    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">
54:
       <label className="text-sm font-medium text-gray-700 mb-1">{label}</label>
55:
        <textarea
56:
         rows={3}
57:
         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
         className="w-full border border-gray-300 rounded-md px-3 py-2 text-sm focus:outline-none focus:ring-2
75:
76:
         value={value ?? ""}
77:
         onChange={(e) => onChange(e.target.value)}
78:
79:
          <option value="">? Select Category ?</option>
: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:
                  <1i>>
 93:
                    \verb| <strong> Smoking Addiction: </strong> Genetic susceptibility to nicotine addiction. \\
 94:
                  95:
                  <1i>>
 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\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) {
17:
     const { toast } = useToast()
18:
19: const exportData = () => {
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
 26:
          link.download = `genomics-report-${new Date().toISOString().split("T")[0]}.json`
27:
          link.click()
 28:
         URL.revokeObjectURL(url)
 29:
          toast({
 30:
            title: "Export Successful!",
 31:
            description: "Report data has been downloaded as a JSON file.",
32:
          })
 33:
       } catch (error) {
          console.error("Error exporting data:", error)
34:
 35:
          toast({
            title: "Export Failed!",
 36:
 37:
           description: "There was an error exporting the data. Please try again.",
 38:
            variant: "destructive",
 39:
          })
 40:
        }
      }
 41:
 42:
      const importData = (event: React.ChangeEvent<HTMLInputElement>) => {
43:
 44:
       const file = event.target.files?.[0]
 45:
        if (file) {
 46:
         const reader = new FileReader()
 47:
          reader.onload = (e) => {
 48:
           try {
 49:
              const importedData = JSON.parse(e.target?.result as string) as ComprehensiveReportData
```

```
50:
              // Basic validation to ensure it's a report data structure
              if (importedData && importedData.patientInfo && importedData.content) {
 51:
 52:
                setReportData(importedData)
 53:
                toast({
                  title: "Import Successful!",
 54:
 55:
                  description: "Report data has been imported successfully.",
 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({
 63:
                title: "Import Failed!",
 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:
      return (
        <Card className="shadow-lg border-0 bg-white">
 74:
          <CardHeader className="bg-gradient-to-r from-orange-500 to-red-600 text-white rounded-t-lg">
 75:
 76:
            <CardTitle className="text-2x1">? 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">
 80:
            <div className="grid md:grid-cols-2 gap-8">
 81:
              <div className="space-y-4">
                <h3 className="text-xl font-semibold text-gray-800">? Export Data</h3>
 82:
 83:
                Download your current report configuration as a JSON file for backup or sharing.
 84:
 85:
                86:
                <Button onClick={exportData} className="w-full bg-orange-600 hover:bg-orange-700">
 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:
 97:
                  <Label htmlFor="import-file" className="cursor-pointer">
                    <Upload className="h-8 w-8 mx-auto mb-2 text-gray-400" />
 98:
 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>
              107:
108:
                < Importing data will completely replace your current configuration</li>
109:
                Always export your current data before importing new data
110:
                ? Only import JSON files that were exported from this system
                Make sure to save your changes after importing
111:
112:
              113:
            </div>
114:
          </CardContent>
115:
        </Card>
116:
     )
117: }
```

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

```
-----
 1: "use client"
 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
13: updateLifestyleCondition: (
      section: keyof LifestyleConditions,
14:
      field: string,
15:
16:
       status: HealthConditionStatus["status"],
17: ) => void
18: onSave: () => void
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 = (
      section: keyof LifestyleConditions,
31:
32:
       field: string,
       data: HealthConditionStatus,
33:
34:
       title: string,
     ) => (
35:
36:
      <div key={field} className="grid grid-cols-3 gap-4 items-center border-b pb-2">
37:
         <Label className="font-medium text-gray-700">{title}</Label>
         <div className="col-span-2">
38:
           <Select
39:
             value={data.status}
40:
41:
             onValueChange={(value: HealthConditionStatus["status"]) => updateLifestyleCondition(section, fiel
42:
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:
     const getSectionTitle = (section: keyof LifestyleConditions) => {
55:
56:
     switch (section) {
        case "heartVascularHealth":
57:
58:
           return "?? Heart & Vascular Health"
59:
         case "diabesity":
60:
           return "? Diabesity (Diabetes & Obesity)"
61:
        case "liverHealth":
62:
           return "? Liver Health"
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:
  74:
            const getSectionIcon = (section: keyof LifestyleConditions) => {
  75:
               switch (section) {
  76:
                   case "heartVascularHealth":
  77:
                      return "??"
  78:
                   case "diabesity":
  79:
                       return "?"
  :08
                   case "liverHealth":
                       return "?"
  81:
  82:
                   case "boneHealth":
  83:
                      return "?"
  84:
                    case "gutHealth":
                       return "?"
  85:
  86:
                    case "hormoneSystem":
  87:
                       return "?"
  88:
                    default:
  89:
                        return "?"
  90:
                 }
  91:
            }
  92:
  93:
            return (
  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>
101:
                     <CardContent className="space-y-8 p-8">
102:
                         {/* Action Buttons */}
103:
                         <div className="flex justify-between items-center">
                            <div className="flex gap-2 flex-wrap">
104:
                                {(Object.keys(lifestyleConditions) as Array<keyof LifestyleConditions>).map((section) => (
105:
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>
114:
                                        <span className="capitalize">{section.replace(/([A-Z])/g, " $1")}</span>
115:
                                    </Button>
116:
                                ))}
117:
                            </div>
118:
                            <div className="flex gap-2">
119:
                                <Button onClick={onReset} variant="outline" size="sm">
120:
                                    <RotateCcw className="h-4 w-4 mr-2" />
121:
                                    Reset
122:
                                </Button>
                               <Button onClick={onSave} size="sm">
124:
                                    <Save className="h-4 w-4 mr-2" />
125:
                                    Save Changes
126:
                                </Button>
127:
                            </div>
128:
                         </div>
129:
130:
                         {/* Section Content */}
                         <div className="space-y-6">
131:
132:
                            <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-yellow-200 pb-2">
133:
                               {getSectionTitle(activeSection)}
134:
                            </h3>
135:
                            <div className="grid md:grid-cols-2 gap-6">
136:
137:
                                {Object.entries(lifestyleConditions[activeSection]).map(([key, item]) =>
138:
                                    renderConditionField(
139:
                                        activeSection,
                                        key,
140:
141:
                                        item as HealthConditionStatus,
142:
                                        \label{eq:key.replace(([A-Z])/g, " $1").replace((^./, (str) => str.toUpperCase()), (str) => str.toUpp
143:
                                    ),
144:
                                ) }
```

```
</div>
145:
            </div>
146:
147:
148:
            {/* Section Guidelines */}
            <div className="bg-yellow-50 border-2 border-yellow-200 rounded-lg p-6">
149:
              <h4 className="font-semibold text-yellow-800 mb-2">? Lifestyle Conditions Guidelines:</h4>
150:
151:
              <div className="text-sm text-yellow-700 space-y-2">
152:
                153:
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:
                  <1i>>
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:
                167:
              </div>
168:
            </div>
169:
            {/* Summary Statistics */}
170:
171:
            <div className="grid md:grid-cols-2 gap-4">
              <div className="bg-green-50 border border-green-200 rounded-lg p-4 text-center">
172:
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:
178:
                </div>
                <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"
12:
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,
23:
     onSave,
24:
     onReset,
25: }: MetabolicCoreAdminProps) {
     const [searchTerm, setSearchTerm] = useState("")
26:
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()) | |
34:
          data.impact.toLowerCase().includes(searchTerm.toLowerCase()) ||
35:
          data.advice.toLowerCase().includes(searchTerm.toLowerCase()) | |
36:
          data.genes.some((gene) => gene.toLowerCase().includes(searchTerm.toLowerCase()))
37:
       return matchesSearch
38:
     })
39:
     const getImpactColor = (impact: string) => {
40:
41:
        if (impact.toLowerCase().includes("high") || impact.toLowerCase().includes("increased")) {
42:
          return "bg-red-100 border-red-300 text-red-800"
43:
        if (impact.toLowerCase().includes("low") || impact.toLowerCase().includes("reduced")) {
44:
45:
         return "bg-green-100 border-green-300 text-green-800"
46:
47:
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:
61:
       if (impact.toLowerCase().includes("low") || impact.toLowerCase().includes("reduced")) {
62:
         return "?"
63:
64:
        if (
65:
          impact.toLowerCase().includes("normal") ||
66:
          impact.toLowerCase().includes("average") | |
67:
          impact.toLowerCase().includes("balanced")
68:
        ) {
         return "?"
69:
       }
70:
71:
       return "?"
72:
     }
73:
74:
      const addGene = (area: keyof MetabolicCore) => {
        const currentGenes = metabolicCore[area].genes
75:
76:
        updateMetabolicCore(area, { genes: [...currentGenes, ""] })
77:
78:
79:
     const removeGene = (area: keyof MetabolicCore, index: number) => {
:08
        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) => {
85:
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">
 98:
           <CardHeader className="bg-gradient-to-r from-purple-500 to-indigo-600 text-white rounded-t-lg">
 99:
             <CardTitle className="text-2xl">? Metabolic Core Analysis</CardTitle>
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 */}
106:
             <div className="flex flex-col md:flex-row justify-between items-start md:items-center gap-4">
107:
               <div className="flex-1">
108:
                 <Input
109:
                   placeholder="Search metabolic areas or impacts..."
110:
                   value={searchTerm}
111:
                   onChange={(e) => setSearchTerm(e.target.value)}
112:
                   className="border-2 focus:border-purple-500"
113:
                 />
114:
               </div>
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>
120:
                 <Button onClick={onSave} size="sm">
121:
                   <Save className="h-4 w-4 mr-2" />
122:
                   Save Changes
123:
                 </Button>
               </div>
124:
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) =>
134:
                         metabolicCore[area].impact.toLowerCase().includes("high") ||
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>
               <div className="bg-green-50 border border-green-200 rounded-lg p-4 text-center">
141:
                 <div className="text-2xl font-bold text-green-600">
142:
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:
                 <div className="text-2xl font-bold text-blue-600">
156:
157:
                   {metabolicAreas.reduce((total, area) => total + metabolicCore[area].genes.length, 0)}
158:
                 </div>
159:
                 <div className="text-sm text-blue-700">Total Genes</div>
160:
               <div className="bg-purple-50 border border-purple-200 rounded-lg p-4 text-center">
161:
                 <div className="text-2xl font-bold text-purple-600">{metabolicAreas.length}</div>
162:
                 <div className="text-sm text-purple-700">Metabolic Areas</div>
163:
164:
               </div>
```

```
165:
             </div>
166:
167:
             {/* Metabolic Areas */}
168:
             <div className="space-y-6">
               {filteredAreas.map((area) => {
169:
170:
                 const data = metabolicCore[area]
171:
                 return (
172:
                   <Card key={area} className="border-2 border-purple-100 bg-purple-50/30">
                      <CardHeader className="pb-4">
173:
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:
                            span = a.replace(([A-Z])/g, " $1").replace((^./, (str) => str.toUpperCase())) </space{
178:
                          </CardTitle>
179:
                          <Badge className={`${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">
186:
                            <Label className="text-sm font-semibold">Genes (Alleles)</Label>
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 className="grid md:grid-cols-2 lg:grid-cols-3 gap-2">
192:
193:
                            {data.genes.map((gene, index) => (
194:
                              <div key={index} className="flex gap-2">
195:
                                <Input
196:
                                  value={gene}
                                  onChange={(e) => updateGene(area, index, e.target.value)}
197:
198:
                                  placeholder="e.g., MTHFR (A>C)"
                                  className="border-2 focus:border-purple-500 font-mono text-sm"
199:
200:
201:
                                <Button
202:
                                  onClick={() => removeGene(area, index)}
203:
                                  size="sm"
204:
                                  variant="destructive"
205:
                                  className="px-2"
206:
207:
                                  <Trash2 className="h-3 w-3" />
208:
                                </Button>
209:
                              </div>
210:
                            ))}
211:
                          </div>
212:
                        </div>
213:
214:
                        {/* Genotype */}
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 })}
221:
                              placeholder="e.g., TT, GG, GG, GG, CC"
222:
                              className="border-2 focus:border-purple-500 font-mono"
223:
                            />
224:
                            <But.t.on
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"
                        className="border-2 focus:border-purple-500 font-semibold"
242:
243:
                       />
244:
                     </div>
245:
                     {/* Advice */}
246:
                     <div className="space-y-2">
247:
248:
                       <Label className="text-sm font-semibold">Advice & Recommendations</Label>
249:
                       <Textarea
250:
                         value={data.advice}
                        onChange={(e) => updateMetabolicCore(area, { advice: e.target.value })}
251:
252:
253:
                         placeholder="Detailed advice based on genetic analysis..."
254:
                        className="border-2 focus:border-purple-500 text-sm"
255:
                     </div>
256:
257:
                   </CardContent>
258:
                 </Card>
259:
             })}
260:
261:
            </div>
262:
263:
            {filteredAreas.length === 0 && (
264:
             <div className="text-center py-12">
               <div className="text-6xl mb-4">?</div>
265:
266:
               <h3 className="text-xl font-semibold text-gray-700 mb-2">No results found</h3>
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>
274:
             <div className="text-sm text-purple-700 space-y-2">
275:
               <q>>
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:
279:
               <div className="grid md:grid-cols-2 gap-4 mt-4">
281:
                   <h5 className="font-semibold mb-2">Key Features:</h5>
282:
                   283:
                     Gene-by-gene analysis with specific alleles
                     Personalized genotype results
284:
285:
                     Direct health impact assessment
286:
                     Actionable advice for each metabolic area
287:
                   </div>
288:
289:
                 <div>
290:
                   <h5 className="font-semibold mb-2">Expert Usage:</h5>
291:
                   292:
                     Functional medicine practitioners love this section
293:
                     Enables precise intervention strategies
                     Supports both preventive and active management
294:
295:
                     Provides scientific basis for recommendations
296:
                   297:
                 </div>
298:
               </div>
299:
             </div>
300:
           </div>
301:
          </CardContent>
302:
        </Card>
303: )
304: }
```

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

```
1: "use client";
 2:
3: import {
 4: Card,
 5: CardContent,
     CardDescription,
 6:
 7:
     CardHeader,
8: CardTitle,
 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,
17: SelectValue,
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";
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,
51:
      field: string,
52:
       data: Partial<NutrientData>
53: ) => void;
54: onSave?: () => void;
55: onReset?: () => void;
56: }
57:
58: export default function NutritionAdmin({
59: nutritionData: propNutritionData,
60: updateNutritionData: propUpdateNutritionData,
61: onSave: propOnSave,
62:
     onReset: propOnReset,
63: }: NutritionAdminProps) {
64: // Default data structure
65: const defaultNutrientData: NutrientData = {
66:
     score: 5,
       healthImpact: "",
67:
      intakeLevel: "NORMAL INTAKE",
68:
69:
       source: "DIET",
70:
     };
71:
```

```
72: const initialNutritionData: NutritionData = {
       vitamins: {
 73:
 74:
          vitaminA: {
 75:
            score: 6,
            healthImpact: "Vision & Immune",
 76:
            intakeLevel: "ENHANCED INTAKE",
 77:
 78:
            source: "DIET",
 79:
          },
 :08
          vitaminB12: {
            score: 8.
 81:
            healthImpact: "Energy & Nerves",
 82:
            intakeLevel: "ENHANCED INTAKE (METHYLCOBALAMIN)",
 83:
            source: "SUPPLEMENTS",
 84:
 85:
          vitaminC: {
 86:
 87:
           score: 4,
            healthImpact: "Immune & Collagen",
 88:
 89:
            intakeLevel: "NORMAL INTAKE",
            source: "DIET",
 90:
 91:
         },
 92:
          vitaminD: {
 93:
            score: 9,
 94:
            healthImpact: "Bones & Immune",
            intakeLevel: "ENHANCED INTAKE & SUN EXPOSURE",
 95:
 96:
            source: "DIET & SUN EXPOSURE",
 97:
          },
 98:
          folate: {
 99:
           score: 7,
           healthImpact: "DNA & Blood",
101:
           intakeLevel: "ENHANCED INTAKE (L METHYLFOLATE)",
102:
            source: "DIET & SUPPLEMENTS",
103:
          },
104:
        },
105:
       fattyAcids: {
106:
         omega3: {
107:
            score: 8,
           healthImpact: "Heart & Brain",
108:
           intakeLevel: "ENHANCED INTAKE",
109:
110:
           source: "ENHANCED INTAKE (VEG/FISH OIL) & DIET",
111:
         },
         omega6: {
112:
113:
          score: 3,
114:
           healthImpact: "Inflammation",
115:
           intakeLevel: "RESTRICTED INTAKE",
116:
            source: "DIET",
         },
117:
       },
118:
119:
       elements: {
        iron: {
120:
          score: 6,
healthImpact: "Blood & Energy",
121:
122:
           intakeLevel: "ENHANCED INTAKE (VEG SOURCES)",
124:
           source: "DIET",
125:
          },
126:
          zinc: {
127:
           score: 5,
128:
           healthImpact: "Immune & Healing",
           intakeLevel: "NORMAL INTAKE",
129:
            source: "DIET",
130:
131:
132:
         magnesium: {
133:
           score: 7,
            healthImpact: "Muscle & Nerve",
134:
            intakeLevel: "ENHANCED INTAKE",
135:
            source: "DIET & SUPPLEMENTS",
136:
137:
         },
138:
       },
       complexNutrients: {
139:
        antioxidants: {
140:
141:
           score: 5,
142:
           healthImpact: "Cell Protection",
143:
            intakeLevel: "ENHANCED INTAKE",
144:
            source: "DIET",
```

```
145:
          },
146:
          polyphenols: {
147:
            score: 4,
148:
            healthImpact: "Anti-inflammatory",
            intakeLevel: "ENHANCED INTAKE",
149:
150:
            source: "DIET",
151:
          },
152:
         },
153:
       };
154:
155:
      // State management
       const [nutritionData, setNutritionData] = useState<NutritionData>(
156:
157:
       propNutritionData | initialNutritionData
158:
159:
      const [activeSection, setActiveSection] =
160:
       useState<keyof NutritionData>("vitamins");
      const [isAddDialogOpen, setIsAddDialogOpen] = useState(false);
161:
162:
       const [newNutrientName, setNewNutrientName] = useState("");
      const [isEditMode, setIsEditMode] = useState<string | null>(null);
163:
164:
      const [editingName, setEditingName] = useState("");
165:
166:
      // CRUD Operations
167:
       const updateNutritionData = (
168:
        section: keyof NutritionData,
169:
        field: string,
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:
183:
         // Call prop function if provided
184:
         if (propUpdateNutritionData) {
185:
           propUpdateNutritionData(section, field, data);
186:
187:
      };
188:
189:
      const addNutrient = (section: keyof NutritionData, name: string) => {
190:
        if (
191:
          !name.trim() ||
192:
           nutritionData[section][name.toLowerCase().replace(/\s+/g, "")]
193:
         ) {
194:
          return false;
195:
196:
197:
         const fieldName = name.toLowerCase().replace(/\s+/g, "");
198:
         setNutritionData((prev) => ({
199:
           ...prev,
           [section]: {
200:
201:
             ...prev[section],
202:
             [fieldName]: { ...defaultNutrientData },
203:
           },
         }));
204:
205:
        return true;
206:
      };
207:
208:
       const deleteNutrient = (section: keyof NutritionData, field: string) => {
209:
       setNutritionData((prev) => {
210:
         const newSection = { ...prev[section] };
211:
          delete newSection[field];
212:
          return {
213:
             ...prev,
            [section]: newSection,
214:
215:
          };
216:
         });
217:
       };
```

```
218:
219:
     const renameNutrient = (
220:
     section: keyof NutritionData,
        oldField: string,
221:
       newName: string
222:
223: ) => {
224:
      if (
        !newName.trim() ||
225:
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 = () => {
      console.log("Saving nutrition data:", nutritionData);
251:
       if (propOnSave) {
252:
253:
         propOnSave();
254:
       } else {
255:
         alert("Nutrition data saved successfully!");
      }
256:
257:
      };
258:
259:
      const onReset = () => {
      setNutritionData(initialNutritionData);
       if (propOnReset) {
261:
262:
         propOnReset();
263:
264:
     };
265:
      const handleAddNutrient = () => {
266:
267:
       if (addNutrient(activeSection, newNutrientName)) {
         setNewNutrientName("");
268:
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 = (
      section: keyof NutritionData,
285:
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:
                   <Button
305:
                    size="sm"
306:
                    variant="outline"
307:
                    onClick={() => {
308:
                      setIsEditMode(null);
                      setEditingName("");
309:
310:
                    }}
311:
312:
313:
                   </Button>
314:
                </div>
315:
              ) : (
                <div className="flex items-center gap-2 flex-1">
316:
317:
                  <span>{title}</span>
318:
                  <Button
319:
                    size="sm"
320:
                    variant="ghost"
321:
                    onClick={() => {
322:
                      setIsEditMode(field);
323:
                      setEditingName(title);
324:
                    }}
325:
326:
                    <Edit3 className="h-3 w-3" />
327:
                   </Button>
328:
                 </div>
329:
              ) }
330:
331:
              <div className="flex items-center gap-2">
332:
                <Badge
333:
                  variant="outline"
                  className={`${
334:
335:
                    data.score >= 7
336:
                      ? "border-red-500 text-red-700"
337:
                       : data.score >= 4
338:
                       ? "border-yellow-500 text-yellow-700"
339:
                       : "border-green-500 text-green-700"
                  }`}
340:
341:
                  Score: {data.score}/10
342:
343:
                 </Badge>
344:
                <Button
345:
                  size="sm"
                  variant="ghost"
346:
347:
                  onClick={() => deleteNutrient(section, field)}
348:
                  className="text-red-600 hover:bg-red-100"
349:
                  <Trash2 className="h-4 w-4" />
350:
351:
                </Button>
352:
               </div>
353:
             </CardTitle>
354:
           </CardHeader>
           <CardContent className="space-y-4">
355:
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}
```

```
onChange={(e) => {
364:
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:
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-v-2">
390:
              <Label className="text-sm font-medium">Intake Level</Label>
391:
              <Select
392:
                value={data.intakeLevel}
393:
                onValueChange={(value) =>
394:
                  updateNutritionData(section, field, { intakeLevel: value })
395:
396:
                <SelectTrigger className="border-2 focus:border-green-500">
397:
398:
                   <SelectValue />
399:
                </SelectTrigger>
400:
                <SelectContent>
401:
                  <SelectItem value="ENHANCED INTAKE">ENHANCED INTAKE</SelectItem>
402:
                  <SelectItem value="NORMAL INTAKE">NORMAL INTAKE
                  <SelectItem value="RESTRICTED INTAKE">
403:
404:
                    RESTRICTED INTAKE
405:
                   </SelectItem>
                  <SelectItem value="ENHANCED INTAKE (METHYLCOBALAMIN)">
407:
                    ENHANCED INTAKE (METHYLCOBALAMIN)
408:
                   </SelectItem>
409:
                   <SelectItem value="ENHANCED INTAKE (L METHYLFOLATE)">
410:
                    ENHANCED INTAKE (L METHYLFOLATE)
411:
                   </SelectItem>
412:
                  <SelectItem value="ENHANCED INTAKE & SUN EXPOSURE">
413:
                    ENHANCED INTAKE & SUN EXPOSURE
414:
                   </SelectItem>
415:
                  <SelectItem value="ENHANCED INTAKE (VEG SOURCES)">
416:
                    ENHANCED INTAKE (VEG SOURCES)
417:
                  </SelectItem>
418:
                </SelectContent>
              </Select>
419:
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) =>
427:
                  updateNutritionData(section, field, { source: value })
                }
428:
429:
                <SelectTrigger className="border-2 focus:border-green-500">
430:
431:
                   <SelectValue />
432:
                </SelectTrigger>
433:
                <SelectContent>
434:
                  <SelectItem value="DIET">DIET</SelectItem>
435:
                  <SelectItem value="SUPPLEMENTS">SUPPLEMENTS/SelectItem>
436:
                   <SelectItem value="DIET & SUPPLEMENTS">
```

```
437:
                    DIET & SUPPLEMENTS
438:
                  </SelectItem>
439:
                  <SelectItem value="DIET & SUN EXPOSURE">
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>
446:
              </Select>
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":
           return "? Complex Nutrients";
461:
         default:
462:
463:
            return section;
464:
        }
465:
     };
466:
467:
      const getSectionIcon = (section: keyof NutritionData) => {
      switch (section) {
468:
469:
        case "vitamins":
           return "?";
470:
471:
         case "fattyAcids":
472:
           return "?";
473:
         case "elements":
474:
           return "?";
475:
         case "complexNutrients":
476:
           return "?";
477:
          default:
478:
            return "?";
479:
        }
480: };
481:
482:
      return (
483:
       <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">
            <CardTitle className="text-2xl">? Nutrition Analysis/CardTitle>
485:
486:
            <CardDescription className="text-green-100">
487:
              Configure vitamins, minerals, fatty acids, and complex nutrients with
488:
              full CRUD operations
489:
            </CardDescription>
490:
          </CardHeader>
491:
           <CardContent className="space-y-8 p-8">
            {/* Action Buttons */}
492:
            <div className="flex justify-between items-center flex-wrap gap-4">
493:
              <div className="flex gap-2 flex-wrap">
494:
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:
                     </But.ton>
509:
                   )
```

```
510:
                 ) }
511:
                </div>
512:
               <div className="flex gap-2 flex-wrap">
513:
                 <Dialog open={isAddDialogOpen} onOpenChange={setIsAddDialogOpen}>
514:
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>
                          \texttt{Add New}\{\,\texttt{"}\,\,\,\texttt{"}\,\,\}
528:
529:
                          {getSectionTitle(activeSection).replace(/[^\w\s]/gi, "")}{" "}
530:
                          Item
531:
                        </DialogTitle>
532:
                        <DialogDescription>
                          Enter the name for the new nutrient in the {activeSection}{" "}
533:
534:
                          section.
535:
                        </DialogDescription>
536:
                      </DialogHeader>
537:
                      <div className="space-y-4 py-4">
538:
                        <div className="space-y-2">
539:
                          <Label htmlFor="nutrientName">Nutrient Name</Label>
540:
                          <Input
541:
                            id="nutrientName"
542:
                            value={newNutrientName}
543:
                            onChange={(e) => setNewNutrientName(e.target.value)}
                            placeholder="e.g., Vitamin E, Selenium, etc."
544:
545:
                            onKeyPress={(e) =>
                              e.key === "Enter" && handleAddNutrient()
546:
547:
                            }
548:
                          />
549:
                        </div>
550:
                      </div>
551:
                      <DialogFooter>
552:
                        <Button
553:
                          variant="outline"
554:
                          onClick={() => {
555:
                            setIsAddDialogOpen(false);
556:
                            setNewNutrientName("");
557:
                          }}
558:
559:
                          Cancel
560:
                        </But.ton>
561:
                        <Button
562:
                          onClick={handleAddNutrient}
563:
                          disabled={!newNutrientName.trim()}
564:
                          Add Nutrient
565:
566:
                        </Button>
                      </DialogFooter>
567:
568:
                    </DialogContent>
569:
                 </Dialog>
570:
571:
                 <Button onClick={onReset} variant="outline" size="sm">
572:
                    <RotateCcw className="h-4 w-4 mr-2" />
573:
                    Reset
574:
                 </But.ton>
575:
                 <Button onClick={onSave} size="sm">
                   <Save className="h-4 w-4 mr-2" />
576:
577:
                    Save Changes
578:
                 </Button>
579:
               </div>
580:
             </div>
581:
582:
             {/* Section Content */}
```

```
583:
           <div className="space-v-6">
584:
             <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-green-200 pb-2">
585:
               {getSectionTitle(activeSection)}
586:
587:
588:
             <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,
                  key
594:
595:
                     .replace(/([A-Z])/g, " $1")
596:
                     .replace(/^./, (str) => str.toUpperCase())
597:
                 )
               ) }
598:
             </div>
599:
600:
             {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 */}
614:
            <div className="bg-green-50 border-2 border-green-200 rounded-lg p-6">
             <h4 className="font-semibold text-green-800 mb-2">
615:
616:
               ? {getSectionTitle(activeSection)} Guidelines:
617:
             </h4>
618:
             <div className="text-sm text-green-700 space-y-2">
619:
               {activeSection === "vitamins" && (
620:
                 621:
                   <
                    Score 1-3: Low requirement, normal dietary intake sufficient
622:
623:
                   624:
                   <
625:
                    Score 4-6: Moderate requirement, enhanced dietary intake
                    recommended
626:
627:
                   628:
                   <
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:
                   <1i>>
637:
                    Essential minerals required for various metabolic processes
638:
                   639:
                   <
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:
               ) }
646:
               {activeSection === "fattyAcids" && (
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:
                ) }
658:
                {activeSection === "complexNutrients" && (
                  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:
                    Object.values(nutritionData[activeSection]).filter(
674:
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>
                <div className="text-sm text-yellow-700">Moderate Priority</div>
689:
690:
              </div>
691:
              <div className="bg-green-50 border border-green-200 rounded-lg p-4 text-center">
692:
                <div className="text-2xl font-bold text-green-600">
693:
694:
                    Object.values(nutritionData[activeSection]).filter(
695:
                     (item: any) => item.score < 4
696:
                    ).length
697:
                  }
698:
                </div>
699:
                <div className="text-sm text-green-700">Low Priority</div>
700:
              </div>
701:
              <div className="bg-blue-50 border border-blue-200 rounded-lg p-4 text-center">
702:
                <div className="text-2xl font-bold text-blue-600">
703:
                  {Object.keys(nutritionData[activeSection]).length}
704:
                </div>
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,
    SelectContent,
15:
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, useEffect } 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);
40:
     const handleImageUpload = (
42:
      event: React.ChangeEvent<HTMLInputElement>,
43:
       signatureField: "signature1" | "signature2"
44:
      ) => {
45:
       const file = event.target.files?.[0];
       if (file) {
46:
47:
         // Validate file type
48:
         if (!file.type.startsWith("image/")) {
49:
            alert("Please select an image file");
50:
           return;
51:
         }
52:
53:
         // Validate file size (5MB limit)
         if (file.size > 5 * 1024 * 1024) {
54:
55:
           alert("File size should be less than 5MB");
56:
           return;
57:
         }
58:
59:
         const reader = new FileReader();
60:
         reader.onload = (e) => {
61:
            const base64String = e.target?.result as string;
62:
            updatePatientInfo(signatureField, base64String);
63:
          };
64:
         reader.readAsDataURL(file);
65:
       }
66:
     };
67:
68:
      const removeSignature = (
69:
      signatureField: "signature1" | "signature2",
70:
        fileInputRef: React.RefObject<HTMLInputElement>
71:
      ) => {
72:
        updatePatientInfo(signatureField, "");
73:
       if (fileInputRef.current) {
74:
          fileInputRef.current.value = "";
75:
        }
76:
     };
77:
78:
     return (
79:
       <Card className="shadow-lg border-0 bg-white">
:08
          <CardHeader className="bg-gradient-to-r from-blue-500 to-purple-600 text-white rounded-t-lg">
81:
            <CardTitle className="text-2xl">? Patient Information</CardTitle>
82:
            <CardDescription className="text-blue-100">
83:
              Complete patient details as they appear on the report cover page
84:
            </CardDescription>
85:
          </CardHeader>
```

```
86:
          <CardContent className="space-y-6 p-8">
 87:
             {/* Action Buttons */}
 88:
             <div className="flex justify-end gap-2 mb-6">
 89:
               <Button onClick={onReset} variant="outline" size="sm">
                <RotateCcw className="h-4 w-4 mr-2" />
 90:
 91:
                 Reset
 92:
               </Button>
 93:
              <Button onClick={onSave} size="sm">
 94:
                 <Save className="h-4 w-4 mr-2" />
                 Save Changes
 95:
 96:
               </Button>
 97:
            </div>
 98:
             {/* Basic Information */}
 99:
100:
            <div className="space-y-4">
101:
              <h3 className="text-lg font-semibold text-gray-800 pb-2">
102:
                Personal Information
103:
               <div className="grid md:grid-cols-3 gap-6">
104:
                <div className="space-y-2">
106:
                   <Label
107:
                     htmlFor="name"
108:
                     className="text-sm font-semibold text-gray-700 required"
109:
110:
                    Patient Name *
111:
                   </Label>
112:
                   <Input
                     id="name"
113:
114:
                     value={patientInfo.name}
115:
                    onChange={(e) => updatePatientInfo("name", e.target.value)}
                     placeholder="Enter full patient name"
116:
117:
                     className="border-2 focus:border-blue-500"
118:
                     required
                   />
119:
                 </div>
120:
121:
                 <div className="space-y-2">
122:
                   <Label
123:
                    htmlFor="gender"
124:
                    className="text-sm font-semibold text-gray-700 required"
125:
126:
                     Gender *
127:
                   </Label>
                   <Select
                     value={patientInfo.gender}
129:
130:
                     onValueChange={(value) => updatePatientInfo("gender", value)}
131:
132:
                     <SelectTrigger className="border-2 focus:border-blue-500">
133:
                       <SelectValue placeholder="Select gender" />
134:
                     </SelectTrigger>
135:
                     <SelectContent>
                       <SelectItem value="MALE">Male</SelectItem>
136:
137:
                       <SelectItem value="FEMALE">Female/SelectItem>
138:
                       <SelectItem value="OTHER">Other</SelectItem>
139:
                     </SelectContent>
140:
                   </Select>
                 </div>
141:
                 <div className="space-y-2">
142:
143:
                   <Label
144:
                     htmlFor="birthDate"
                     className="text-sm font-semibold text-gray-700 required"
145:
146:
147:
                    Birth Date *
148:
                   </Label>
149:
                   <Input
                     id="birthDate"
150:
151:
                     type="date"
                     value={patientInfo.birthDate}
152:
153:
                     onChange={(e) => updatePatientInfo("birthDate", e.target.value)}
154:
                     className="border-2 focus:border-blue-500"
155:
                    required
156:
                   />
                 </div>
157:
158:
               </div>
```

```
159:
            </div>
160:
161:
            {/* Sample Information */}
            <div className="space-y-4">
162:
              <h3 className="text-lg font-semibold text-gray-800 border-b pb-2">
163:
164:
                Sample Information
165:
              </h3>
166:
              <div className="grid md:grid-cols-3 gap-6">
167:
                <div className="space-y-2">
                  <Label
168:
169:
                    htmlFor="sampleCode"
170:
                    className="text-sm font-semibold text-gray-700 required"
171:
172:
                    Sample Code *
173:
                  </Label>
174:
                  <Input
                    id="sampleCode"
175:
176:
                    value={patientInfo.sampleCode}
                    onChange={(e) =>
177:
178:
                      updatePatientInfo("sampleCode", e.target.value)
179:
180:
                    placeholder="e.g., DNL100000110"
181:
                    className="border-2 focus:border-blue-500 font-mono"
182:
                    required
183:
                   />
                  184:
185:
                    Unique identifier for the DNA sample
186:
                  187:
                </div>
188:
                <div className="space-y-2">
189:
                  <Label
190:
                    htmlFor="sampleDate"
191:
                    className="text-sm font-semibold text-gray-700 required"
192:
193:
                    Sample Collection Date *
194:
                   </Label>
195:
                   <Input
196:
                    id="sampleDate"
197:
                    type="date"
198:
                    value={patientInfo.sampleDate}
199:
                    onChange={(e) =>
200:
                      updatePatientInfo("sampleDate", e.target.value)
201:
202:
                    className="border-2 focus:border-blue-500"
203:
                    required
204:
                  />
205:
                </div>
206:
                <div className="space-y-2">
207:
                  <Label
208:
                    htmlFor="reportDate"
209:
                    className="text-sm font-semibold text-gray-700 required"
210:
211:
                    Report Date *
212:
                   </Label>
213:
                   <Input
214:
                    id="reportDate"
215:
                    type="date"
216:
                    value={patientInfo.reportDate}
217:
                    onChange={(e) =>
218:
                      updatePatientInfo("reportDate", e.target.value)
219:
220:
                    className="border-2 focus:border-blue-500"
221:
                    required
222:
                  />
                </div>
223:
224:
               </div>
225:
            </div>
226:
227:
            {/* Authorization & Verification */}
228:
            <div className="space-y-4 border-t border-black py-6">
229:
              <h2 className="text-center font-bold text-gray-800 pb-2">
                REPORT AUTHENTICATION & ANALYTICS
230:
231:
               </h2>
```

```
<div className="grid md:grid-cols-2 gap-6">
232:
233:
                 <div className="space-y-2 flex justify-center items-center">
234:
                   <Label
235:
                     htmlFor="reportAuth"
                     className="text-lg text-center font-bold text-gray-700"
236:
237:
238:
                    GENOMIC DATA ANALYTICS
239:
                     <br />
240:
                     CHECKED & VERIFIED BY
241:
                   </Label>
                </div>
242:
                <div className="space-y-2 flex justify-center items-center">
243:
244:
                   <Label
245:
                    htmlFor="genomicAnalytics"
246:
                    className="text-lg text-center font-bold text-gray-700"
247:
248:
                     SCIENTIFIC CONTENT
249:
                     <br />
                    CHECKED & VERIFIED BY
250:
251:
                  </Label>
252:
                 </div>
253:
               </div>
254:
255:
               {/* Signature Upload Section */}
               <div className="space-y-4 mt-6 pt-6 border-gray-200">
256:
257:
                 <div className="grid md:grid-cols-2 gap-6">
258:
                   { /* Signature 1 */}
                   <div className="space-y-3">
259:
                     <Label className="text-sm font-semibold text-gray-700">
260:
261:
                      Primary Signature
262:
                     </Label>
263:
                     <div className="border-2 border-dashed border-gray-300 rounded-lg p-4 bg-gray-50">
264:
                       {patientInfo.signature1 ? (
265:
                         <div className="relative">
266:
                          <ima
267:
                             src={patientInfo.signature1}
268:
                             alt="Primary Signature"
269:
                             className="max-w-full max-h-32 object-contain mx-auto"
270:
                           />
271:
                           <Button
272:
                             onClick={() =>
273:
                               removeSignature("signature1", fileInput1Ref)
274:
                             variant="outline"
275:
276:
                             size="sm"
277:
                             className="absolute top-0 right-0 h-6 w-6 p-0"
278:
279:
                             <X className="h-3 w-3" />
280:
                           </Button>
281:
                         </div>
282:
                       ) : (
283:
                         <div className="text-center">
284:
                           <Upload className="h-8 w-8 text-gray-400 mx-auto mb-2" />
285:
                           286:
                            Upload primary signature
                           287:
288:
                           <Button
                             onClick={() => fileInput1Ref.current?.click()}
289:
290:
                             variant="outline"
                             size="sm"
291:
292:
293:
                             <Upload className="h-4 w-4 mr-2" />
294:
                             Choose File
295:
                           </Button>
296:
                         </div>
297:
                       ) }
298:
                       <input
299:
                         ref={fileInput1Ref}
300:
                         type="file"
301:
                         accept="image/*"
302:
                         onChange={(e) => handleImageUpload(e, "signature1")}
                         className="hidden"
303:
304:
```

```
305:
                    </div>
306:
                    307:
                     Upload signature image (PNG, JPG, JPEG - Max 5MB)
308:
309:
                  </div>
310:
311:
                  {/* Signature 2 */}
312:
                  <div className="space-y-3">
313:
                    <Label className="text-sm font-semibold text-gray-700">
314:
                     Secondary Signature
315:
                    <div className="border-2 border-dashed border-gray-300 rounded-lg p-4 bg-gray-50">
316:
317:
                      {patientInfo.signature2 ? (
318:
                        <div className="relative">
319:
                         <ima
320:
                            src={patientInfo.signature2}
321:
                           alt="Secondary Signature"
322:
                           className="max-w-full max-h-32 object-contain mx-auto"
                          />
323:
324:
325:
                           onClick={() =>
326:
                             removeSignature("signature2", fileInput2Ref)
327:
328:
                           variant="outline"
329:
                           size="sm"
                           className="absolute top-0 right-0 h-6 w-6 p-0"
330:
331:
                           <X className="h-3 w-3" />
332:
333:
                          </Button>
334:
                        </div>
335:
                      ) : (
336:
                        <div className="text-center">
337:
                         <Upload className="h-8 w-8 text-gray-400 mx-auto mb-2" />
338:
                          339:
                           Upload secondary signature
340:
                          341:
                          <Button
                           onClick={() => fileInput2Ref.current?.click()}
342:
343:
                           variant="outline"
344:
                           size="sm"
345:
346:
                           <Upload className="h-4 w-4 mr-2" />
347:
                           Choose File
348:
                          </Button>
349:
                        </div>
                      ) }
350:
351:
                      <input
352:
                       ref={fileInput2Ref}
                       type="file"
353:
354:
                       accept="image/*"
355:
                       onChange={(e) => handleImageUpload(e, "signature2")}
356:
                       className="hidden"
357:
                     />
358:
                    </div>
359:
                    Upload signature image (PNG, JPG, JPEG - Max 5MB)
360:
361:
362:
                  </div>
363:
                </div>
364:
              </div>
365:
366:
              {/* Rest of the verification fields */}
367:
              <div className="grid md:grid-cols-2 gap-6">
368:
                <div className="space-y-2">
                  <Label
369:
370:
                   htmlFor="checkedBy"
371:
                    className="text-sm font-semibold text-gray-700"
372:
373:
                   Checked & Verified By
374:
                  </Label>
375:
                  <Input
376:
                    id="checkedBy"
377:
                    value={patientInfo.checkedBy}
```

```
onChange={(e) => updatePatientInfo("checkedBy", e.target.value)}
378:
379:
                   placeholder="Enter verifier name"
380:
                   className="border-2 focus:border-blue-500"
381:
                 382:
383:
                   Medical professional who verified the report
384:
                 385:
               </div>
386:
               <div className="space-y-2">
387:
                 <Label
                   htmlFor="scientificContent"
388:
389:
                   className="text-sm font-semibold text-gray-700"
390:
                   Scientific Content Verified By
391:
392:
                 </Label>
393:
                 <Input
394:
                   id="scientificContent"
395:
                   value={patientInfo.scientificContent}
396:
                   onChange={(e) =>
397:
                     updatePatientInfo("scientificContent", e.target.value)
398:
399:
                   placeholder="Enter scientific content verifier"
400:
                   className="border-2 focus:border-blue-500"
401:
                 />
402:
                 403:
                   Scientific expert who verified the content accuracy
404:
                 405:
               </div>
             </div>
406:
407:
           </div>
408:
409:
           <div className="space-y-3">
410:
            <Label
             htmlFor="disclaimer"
411:
412:
               className="text-lg font-semibold text-gray-800"
413:
414:
               Disclaimer
415:
            </Label>
416:
            <Textarea
417:
              id="disclaimer"
418:
               value={patientInfo.disclaimer}
419:
               onChange={(e) => updatePatientInfo("disclaimer", e.target.value)}
420:
              placeholder="Enter disclaimer text"
421:
               rows={10}
422:
               className="border-2 focus:border-green-500 text-sm leading-relaxed"
423:
             />
424:
           </div>
425:
426:
           <style jsx>{`
427:
            .required::after {
               content: " *";
428:
429:
               color: #ef4444;
             }
430:
            `}</style>
431:
432:
          </CardContent>
433:
       </Card>
434: );
435: }
```

■ 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
9:
10: interface PDFGeneratorProps {
```

```
11:
    reportData: ComprehensiveReportData
12: }
13:
14: export default function PDFGenerator({ reportData }: PDFGeneratorProps) {
15: const [isGenerating, setIsGenerating] = useState(false)
16:
     const { toast } = useToast() // Initialize useToast
17:
18:
     // State for PDF settings (can be expanded if more options are needed for actual PDF generation)
19:
     const [pdfSettings, setPdfSettings] = useState({
       format: "A4",
20:
       orientation: "portrait",
22:
       margins: "normal",
23:
       quality: "high",
24:
       includeGraphics: true,
25:
       includeColors: true,
26:
     })
27:
28:
     const handlePrintOrDownload = async (action: "print" | "download") => {
29:
       setIsGenerating(true)
31:
          // Open a new window to the PDF generation page
32:
          const printWindow = window.open("/report/pdf", "_blank")
33:
34:
          if (printWindow) {
            // Wait for the content to load in the new window
35:
           printWindow.onload = () => {
36:
37:
              // Give a small delay to ensure all content and styles are rendered
38:
              setTimeout(() => {
               if (action === "print") {
39:
40:
                 printWindow.print()
41:
                  toast({
42:
                    title: "Print Dialog Opened",
                    description: "Please select 'Save as PDF' or your printer in the dialog.",
43:
                  })
44:
                } else {
45:
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({
50:
                    title: "Download Initiated",
                    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:
           printWindow.onerror = () => {
57:
58:
             toast({
59:
               title: "Error".
60:
                description: "Could not open print window. Please check pop-up blockers.",
               variant: "destructive",
61:
62:
              })
63:
              setIsGenerating(false)
64:
            }
65:
          } else {
66:
            toast({
67:
             title: "Error",
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({
76:
           title: "Error",
           description: "An unexpected error occurred during PDF generation.",
77:
78:
           variant: "destructive",
79:
          })
:08
         setIsGenerating(false)
81:
82:
     }
83:
```

```
const previewPDF = () => {
 84:
         window.open("/report/preview", "_blank")
 85:
 86:
         toast({
 87:
           title: "Preview Opened",
 88:
           description: "Your report preview is open in a new tab.",
 89:
         })
      }
 90:
 91:
 92:
      return (
         <Card className="shadow-lg border-0 bg-white">
 93:
           <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 */}
100:
             <div className="grid md:grid-cols-3 gap-4">
101:
               <Button
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}
114:
                className="h-20 flex flex-col items-center justify-center gap-2 bg-blue-600 hover:bg-blue-700"
115:
                 <Printer className="h-6 w-6" />
116:
                 <span>{isGenerating ? "Generating..." : "Print Report"}</span>
117:
118:
               </Button>
119:
120:
               <Button
121:
                onClick={() => handlePrintOrDownload("download")}
122:
                 disabled={isGenerating}
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" />
                 <span>{isGenerating ? "Preparing..." : "Download PDF"}</span>
127:
               </Button>
128:
             </div>
129:
130:
             {/* PDF Settings */}
131:
             <div className="space-y-4">
               <h3 className="text-lg font-semibold text-gray-800">PDF Settings (for Print Dialog)</h3>
132:
               <div className="grid md:grid-cols-2 gap-6">
133:
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:
                     <select
138:
                       value={pdfSettings.format}
                       onChange={(e) => setPdfSettings((prev) => ({ ...prev, format: e.target.value }))}
139:
                       className="w-full border border-gray-300 rounded-md px-3 py-2 focus:outline-none focus:ri
140:
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 x 14 in)</option>
145:
                     </select>
146:
                   </div>
147:
148:
                   <div>
149:
                     <label className="block text-sm font-medium text-gray-700 mb-2">Orientation</label>
150:
                     <select
151:
                       value={pdfSettings.orientation}
                       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:
                     </select>
                   </div>
158:
159:
160:
161:
                     <label className="block text-sm font-medium text-gray-700 mb-2">Margins</label>
162:
163:
                       value={pdfSettings.margins}
                       onChange={(e) => setPdfSettings((prev) => ({ ...prev, margins: e.target.value }))}
164:
                       className="w-full border border-gray-300 rounded-md px-3 py-2 focus:outline-none focus:ri
165:
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:
                     </select>
172:
                   </div>
                 </div>
173:
174:
                 <div className="space-y-4">
175:
176:
177:
                     <label className="block text-sm font-medium text-gray-700 mb-2">Quality</label>
178:
                     <select
179:
                       value={pdfSettings.quality}
                       onChange={(e) => setPdfSettings((prev) => ({ ...prev, quality: e.target.value }))}
180:
                       className="w-full border border-gray-300 rounded-md px-3 py-2 focus:outline-none focus:ri
181:
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>
188:
                   </div>
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:
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:
                         className="mr-2"
207:
208:
                       <span className="text-sm text-gray-700">Include Colors</span>
209:
                     </label>
210:
                   </div>
211:
                 </div>
               </div>
212:
             </div>
213:
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>
218:
               <div className="grid md:grid-cols-2 gap-4 text-sm">
219:
                 <div>
220:
                   <span className="font-medium">Patient:</span> {reportData.patientInfo.name || "Not specified"
221:
                 </div>
222:
                   <span className="font-medium">Sample Code:</span> {reportData.patientInfo.sampleCode || "Not
223:
224:
                 </div>
225:
                 <div>
                   <span className="font-medium">Report Date:</span> {reportData.patientInfo.reportDate || "Not
226:
227:
                 </div>
228:
                 <div>
229:
                   <span className="font-medium">Total Pages:</span> ~47 pages (estimate)
```

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

■ File: components\admin\preventive-health-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 { 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
     updatePreventiveHealth: (section: keyof PreventiveHealth, data: any) => void
13:
14:
      onSave: () => void
     onReset: () => void
15:
16: }
17:
18: export default function PreventiveHealthAdmin({
 19:
     preventiveHealth,
20: updatePreventiveHealth,
 21: onSave,
 22:
     onReset.
 23: }: PreventiveHealthAdminProps) {
24: const addDiagnosticTest = (type: "halfYearly" | "yearly") => {
       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]]
        newTests[index] = value
 33:
 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 = () => {
         updatePreventiveHealth("nutritionalSupplements", [
 48:
 49:
           ...preventiveHealth.nutritionalSupplements,
 50:
           { supplement: "", needed: true },
 51:
         ])
 52:
      }
 53:
 54:
       const updateNutritionalSupplement = (index: number, field: "supplement" | "needed", value: string | boole
 55:
         const newSupplements = [...preventiveHealth.nutritionalSupplements]
         newSupplements[index] = { ...newSupplements[index], [field]: value }
 56:
         updatePreventiveHealth("nutritionalSupplements", newSupplements)
 57:
 58:
 59:
 60:
      const removeNutritionalSupplement = (index: number) => {
 61:
        updatePreventiveHealth(
 62:
           "nutritionalSupplements",
 63:
           preventiveHealth.nutritionalSupplements.filter((_, i) => i !== index),
 64:
      }
 65:
 66:
 67:
       return (
 68:
         <Card className="shadow-lg border-0 bg-white">
 69:
           <CardHeader className="bg-gradient-to-r from-teal-500 to-cyan-600 text-white rounded-t-lg">
             <CardTitle className="text-2xl">? Preventive Health</CardTitle>
 70:
 71:
             <CardDescription className="text-teal-100">
               Manage recommended diagnostic tests and nutritional supplements based on genetic insights
 72:
 73:
             </CardDescription>
 74:
           </CardHeader>
 75:
           <CardContent className="space-y-8 p-8">
 76:
             {/* Action Buttons */}
 77:
             <div className="flex justify-end gap-2 mb-6">
 78:
               <Button onClick={onReset} variant="outline" size="sm">
                 <RotateCcw className="h-4 w-4 mr-2" />
 79:
 :08
                 Reset
 81:
               </Button>
 82:
               <Button onClick={onSave} size="sm">
 83:
                 <Save className="h-4 w-4 mr-2" />
 84:
                 Save Changes
 85:
               </Button>
 86:
             </div>
 87:
             {/* Diagnostic Tests Section */}
 88:
             <div className="space-y-4">
               <h3 className="text-x1 font-semibold text-gray-800 border-b-2 border-teal-200 pb-2">? Diagnostic
 90:
 91:
               <div className="grid md:grid-cols-2 gap-6">
 92:
                 {/* Half-Yearly Tests */}
 93:
                 <Card className="border-2 border-blue-100 bg-blue-50/30">
 94:
                   <CardHeader className="pb-3">
                     <CardTitle className="text-lg text-blue-800 flex justify-between items-center">
 95:
 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:
104:
                       </Button>
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:
111:
                           value={test}
112:
                           onChange={(e) => updateDiagnosticTest("halfYearly", index, e.target.value)}
113:
                           placeholder="e.g., PLASMA SUGAR (FASTING & PP)"
114:
                           className="border-2 focus:border-blue-500 text-sm"
115:
116:
                         <Button
117:
                           onClick={() => removeDiagnosticTest("halfYearly", index)}
118:
                           size="sm'
119:
                           variant="destructive"
```

```
120:
                          className="px-2"
121:
122:
                          <Trash2 className="h-3 w-3" />
123:
124:
                      </div>
125:
                    ))}
126:
                     {preventiveHealth.diagnosticTests.halfYearly.length === 0 && (
127:
                      No half-yearly tests added.
128:
                   </CardContent>
129:
130:
                </Card>
131:
132:
                {/* Yearly Tests */}
122:
                 <Card className="border-2 border-green-100 bg-green-50/30">
134:
                   <CardHeader className="pb-3">
135:
                     <CardTitle className="text-lg text-green-800 flex justify-between items-center">
136:
                      Yearly Tests
137:
                       <Button onClick={() => addDiagnosticTest("yearly")} size="sm" variant="outline" className
                        <Plus className="h-3 w-3 mr-1" /> Add Test
138:
139:
                       </Button>
140:
                    </CardTitle>
141:
                   </CardHeader>
142:
                   <CardContent className="space-y-3">
143:
                     \{ {\tt preventive Health.diagnostic Tests.yearly.map((test, index) => (} \\
                       <div key={index} className="flex items-center gap-2">
144:
145:
                        <Tnput
146:
                          value={test}
                          onChange={(e) => updateDiagnosticTest("yearly", index, e.target.value)}
147:
148:
                          placeholder="e.g., HbA1c"
149:
                          className="border-2 focus:border-green-500 text-sm"
150:
                         <Button
151:
152:
                          onClick={() => removeDiagnosticTest("yearly", index)}
153:
                          size="sm'
154:
                          variant="destructive"
155:
                          className="px-2"
156:
157:
                          <Trash2 className="h-3 w-3" />
158:
                        </Button>
159:
                      </div>
160:
                     ))}
161:
                     {preventiveHealth.diagnosticTests.yearly.length === 0 && (
162:
                       No yearly tests added.
163:
                    ) }
164:
                  </CardContent>
165:
                </Card>
166:
              </div>
167:
            </div>
168:
169:
             {/* Nutritional Supplements Section */}
            <div className="space-y-4">
170:
171:
              <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-teal-200 pb-2">
172:
                ? Nutritional Supplements
173:
              </h3>
174:
              <Card className="border-2 border-purple-100 bg-purple-50/30">
175:
                <CardHeader className="pb-3">
                   <CardTitle className="text-lg text-purple-800 flex justify-between items-center">
176:
177:
                    Recommended Supplements
178:
                     <Button
179:
                      onClick={addNutritionalSupplement}
180:
                      size="sm"
181:
                      variant="outline"
182:
                      className="text-xs bq-transparent"
183:
                      <Plus className="h-3 w-3 mr-1" /> Add Supplement
184:
185:
                    </Button>
186:
                   </CardTitle>
187:
                 </CardHeader>
188:
                 <CardContent className="space-y-3">
                   {preventiveHealth.nutritionalSupplements.map((supplement, index) => (
189:
190:
                     <div key={index} className="grid grid-cols-[1fr_auto_auto] items-center gap-2">
191:
                      <Input.
192:
                        value={supplement.supplement}
```

```
193:
                        onChange={(e) => updateNutritionalSupplement(index, "supplement", e.target.value)}
                       placeholder="e.g., VITAMIN D"
194:
195:
                       className="border-2 focus:border-purple-500 text-sm"
196:
197:
                      <div className="flex items-center space-x-2">
198:
                       <Checkbox
199:
                         id={`needed-${index}`}
200:
                         checked={supplement.needed}
                         onCheckedChange={(checked: boolean) => updateNutritionalSupplement(index, "needed", c
201:
202:
                       <Label htmlFor={`needed-${index}`} className="text-sm">
203:
204:
                         Needed
205:
                        </Label>
206:
                      </div>
207:
                      <But.t.on
208:
                       onClick={() => removeNutritionalSupplement(index)}
209:
                       size="sm"
210:
                       variant="destructive"
211:
                       className="px-2"
212:
213:
                       <Trash2 className="h-3 w-3" />
214:
                      </Button>
215:
                   </div>
216:
                  ))}
                  {preventiveHealth.nutritionalSupplements.length === 0 && (
217:
218:
                    No nutritional supplements added.
219:
                  ) }
220:
                </CardContent>
221:
              </Card>
222:
            </div>
223:
224:
            {/* Section Guidelines */}
225:
            <div className="bq-teal-50 border-2 border-teal-200 rounded-lq p-6">
             <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:
                  <1i>>
230:
                   This section helps determine the requirement of nutrients in form of supplements and period
231:
232:
                  233:
                  <1i>>
                   <strong>Diagnostic Tests:</strong> Suggests blood tests or other diagnostics to be done hal
234:
                   yearly based on genetic predispositions.
236:
                  237:
                  <
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:
                </div>
243:
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"
9:
10: interface ReportContentAdminProps {
11: 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: return (
19:
        <Card className="shadow-lg border-0 bg-white">
         <CardHeader className="bg-gradient-to-r from-green-500 to-teal-600 text-white rounded-t-lg">
20:
            <CardTitle className="text-2xl">? Report Content</CardTitle>
21:
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">
28:
                <RotateCcw className="h-4 w-4 mr-2" />
29:
                Reset
30:
              </Button>
              <Button onClick={onSave} size="sm">
31:
                <Save className="h-4 w-4 mr-2" />
33:
                Save Changes
34:
              </Button>
35:
            </div>
36:
            <div className="space-y-3">
37:
             <Label htmlFor="disclaimer" className="text-lg font-semibold text-gray-800">
38:
39:
                ?? Disclaimer
40:
              </Label>
41:
              <Textarea
42:
               id="disclaimer"
43:
                value={content.disclaimer}
44:
                onChange={(e) => updateContent("disclaimer", e.target.value)}
               placeholder="Enter disclaimer text"
45:
46:
               rows={10}
               className="border-2 focus:border-green-500 text-sm leading-relaxed"
47:
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)}
58:
                placeholder="Enter introduction text"
59:
               rows={8}
60:
               className="border-2 focus:border-green-500 text-sm leading-relaxed"
61:
              />
62:
            </div>
63:
            <div className="space-y-3">
64:
              <Label htmlFor="genomicsExplanation" className="text-lg font-semibold text-gray-800">
65:
               ? What is Genomics?
66:
              </Label>
67:
              <Textarea
68:
               id="genomicsExplanation"
69:
                value={content.genomicsExplanation}
                onChange={(e) => updateContent("genomicsExplanation", e.target.value)}
70:
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}
83:
                onChange={(e) => updateContent("genesHealthImpact", e.target.value)}
                placeholder="Enter genes and health impact content"
84:
                rows={8}
85:
```

```
86:
                 className="border-2 focus:border-green-500 text-sm leading-relaxed"
 87:
               />
 88:
             </div>
 89:
             <div className="space-y-3">
              <Label htmlFor="fundamentalsPRS" className="text-lg font-semibold text-gray-800">
 90:
 91:
                ? Fundamentals and PRS
 92:
               </Label>
 93:
               <Textarea
                 id="fundamentalsPRS"
 94:
 95:
                 value={content.fundamentalsPRS}
 96:
                 onChange={(e) => updateContent("fundamentalsPRS", e.target.value)}
 97:
                 placeholder="Enter fundamentals and PRS content"
 98:
 99:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
100:
              />
101:
            </div>
102:
            <div className="space-v-3">
103:
              <Label htmlFor="utilityDoctors" className="text-lg font-semibold text-gray-800">
104:
                ???? Utility for Doctors and Dietitians
105:
              </Label>
106:
              <Textarea
107:
                id="utilityDoctors"
108:
                 value={content.utilityDoctors}
                onChange={(e) => updateContent("utilityDoctors", e.target.value)}
109:
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">
116:
              <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}
122:
                onChange={(e) => updateContent("microarrayExplanation", e.target.value)}
123:
                placeholder="Enter microarray explanation"
124:
                rows={8}
125:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
126:
127:
           </div>
           <div className="space-y-3">
129:
             <Label htmlFor="microarrayData" className="text-lg font-semibold text-gray-800">
130:
                ? Your Microarray Data
131:
              </Label>
132:
              <Textarea
133:
                id="microarrayData"
                value={content.microarrayData}
134:
                onChange={(e) => updateContent("microarrayData", e.target.value)}
135:
136:
                placeholder="Enter microarray data content"
137:
                rows={8}
138:
                className="border-2 focus:border-green-500 text-sm leading-relaxed"
139:
               />
140:
             </div>
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 {
        settings: ReportSettings
12:
         updateSettings: (field: keyof ReportSettings, value: string) => void
13:
          onSave: () => void
14:
         onReset: () => void
15: }
16:
17: \ \texttt{export default function ReportSettingsAdmin(\{ \ \texttt{settings, updateSettings, onSave, onReset }\} : \ \texttt{ReportSettingsAdmin(\{ \ \texttt{settings, updateSettings, onSave, onReset }\} : \ \texttt{ReportSettingsAdmin(\{ \ \texttt{settings, updateSettings, onSave, onReset }\} : \ \texttt{ReportSettingsAdmin(\{ \ \texttt{settings, updateSettings, onSave, onReset }\} : \ \texttt{ReportSettingsAdmin(\{ \ \texttt{settings, updateSettings, onSave, onReset }\} : \ \texttt{ReportSettingsAdmin(\{ \ \texttt{settings, updateSettings, updateSettings, onSave, onReset }\} : \ \texttt{ReportSettingsAdmin(\{ \ \texttt{settings, updateSettings, updateSett
18:
             <Card className="shadow-lg border-0 bg-white">
19:
                 <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>
25:
                  </CardHeader>
26:
                 <CardContent className="space-y-6 p-8">
27:
                      {/* Action Buttons */}
                      <div className="flex justify-end gap-2 mb-6">
28:
29:
                         <Button onClick={onReset} variant="outline" size="sm">
30:
                             <RotateCcw className="h-4 w-4 mr-2" />
31:
                             Reset
32:
                         </Button>
33:
                         <Button onClick={onSave} size="sm">
                             <Save className="h-4 w-4 mr-2" />
34:
                             Save Changes
35:
36:
                         </But.ton>
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">
                                 Report Title
42:
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:
63:
                         </div>
64:
                         <div className="space-y-2">
                            <Label htmlFor="companyName" className="text-sm font-semibold text-gray-700">
65:
66:
                                Company Name
67:
                             </Label>
68:
                             <Input
69:
                                 id="companyName"
70:
                                value={settings.companyName}
71:
                                 onChange={(e) => updateSettings("companyName", e.target.value)}
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>
:08
                             <div className="flex gap-2">
81:
                                <Input.
82:
                                    id="headerColor"
```

```
83:
                     type="color"
 84:
                     value={settings.headerColor}
 85:
                     onChange={(e) => updateSettings("headerColor", e.target.value)}
                     className="w-16 h-10 border-2 focus:border-purple-500"
 86:
 87:
                   />
 88:
                   <Input
 89:
                     value={settings.headerColor}
                     onChange={(e) => updateSettings("headerColor", e.target.value)}
 90:
                     className="flex-1 border-2 focus:border-purple-500 font-mono"
 91:
                     placeholder="#2C3E50"
 92:
 93:
                 </div>
 94:
 95:
               </div>
 96:
               <div className="space-y-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:
                     type="color"
104:
                     value={settings.accentColor}
105:
                     onChange={(e) => updateSettings("accentColor", e.target.value)}
106:
                     className="w-16 h-10 border-2 focus:border-purple-500"
107:
                   />
                   <Input
108:
109:
                     value={settings.accentColor}
                     onChange={(e) => updateSettings("accentColor", e.target.value)}
110:
111:
                     className="flex-1 border-2 focus:border-purple-500 font-mono"
112:
                     placeholder="#E74C3C"
113:
                   />
114:
                 </div>
               </div>
115:
116:
             </div>
117:
118:
             <div className="space-y-4">
119:
               <h3 className="text-lg font-semibold text-gray-800 border-b pb-2">Font Settings</h3>
               <div className="grid md:grid-cols-3 gap-6">
120:
121:
                 <div className="space-y-2">
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:
                     className="border-2 focus:border-purple-500"
131:
132:
                     placeholder="e.g., Helvetica, Arial, sans-serif"
                   />
133:
                 </div>
134:
135:
                 <div className="space-y-2">
136:
                   <Label htmlFor="secondaryFont" className="text-sm font-semibold text-gray-700">
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-y-2">
                   <Label htmlFor="monoFont" className="text-sm font-semibold text-gray-700">
150:
151:
                     Monospace Font
152:
                   </Label>
153:
                   <Input
                     id="monoFont"
154:
155:
                     value={settings.fonts.mono}
```

```
onChange={(e) => updateSettings("fonts", JSON.stringify({ ...settings.fonts, mono: e.target
156:
                   className="border-2 focus:border-purple-500"
157:
158:
                   placeholder="e.g., Courier New, monospace"
159:
               </div>
160:
161:
             </div>
162:
           </div>
163:
           <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>
             167:
               <1i>? Use hex codes for precise color matching (e.g., #RRGGBB).
168:
               ? Choose fonts that align with your brand's aesthetic.
169:
               < Ensure sufficient contrast for readability, especially for text.</li>
170:
             171:
           </div>
172:
          </CardContent>
173:
        </Card>
174: )
175: }
```

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

```
______
 1: "use client"
 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) {
       <Card className="shadow-lg border-0 bg-white">
 24:
 25:
          <CardHeader className="bg-gradient-to-r from-violet-500 to-purple-600 text-white rounded-t-lg">
           <CardTitle className="text-2xl">? Report Summaries</CardTitle>
26:
 27:
            <CardDescription className="text-violet-100">Edit the summary sections for experts</CardDescription
 28:
          </CardHeader>
 29:
          <CardContent className="space-y-8 p-8">
 30:
            {/* Action Buttons */}
            <div className="flex justify-end gap-2 mb-6">
31:
             <Button onClick={onReset} variant="outline" size="sm">
 32:
 33:
               <RotateCcw className="h-4 w-4 mr-2" />
 34:
               Reset
 35:
             </Button>
 36:
             <Button onClick={onSave} size="sm">
 37:
               <Save className="h-4 w-4 mr-2" />
 38:
               Save Changes
 39:
             </Button>
           </div>
40:
 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:
               For the nutrigenomics expert
 47:
 48:
                <Textarea
```

```
49:
                id="nutrigenomicsSummary"
50:
                value={summaries.nutrigenomicsSummary}
51:
                onChange={(e) => updateSummaries("nutrigenomicsSummary", e.target.value)}
52:
                className="border-2 focus:border-violet-500"
53:
54:
                placeholder="Based on the overall nutrigenomics analysis, provide expert summary for personal
              />
55:
56:
             </div>
57:
             <div className="space-y-3">
              <Label htmlFor="exerciseGenomicsSummary" className="text-lg font-semibold text-gray-800">
58:
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}
                className="border-2 focus:border-violet-500"
67:
68:
                placeholder="Based on the overall genomics analysis, provide expert summary for personalized
69:
              />
70:
             </div>
71:
           </div>
72:
           <div className="bq-blue-50 border-2 border-blue-200 rounded-lq p-6">
73:
            <h4 className="font-semibold text-blue-800 mb-2">? Expert Summary Guidelines:</h4>
74:
75:
             ? Provide actionable insights based on genetic analysis
76:
77:
              < Include specific recommendations for healthcare professionals</li>
78:
              ? Reference key genetic markers and their implications
79:
              < Suggest monitoring parameters and intervention strategies</li>
80:
               <!i>Keep language professional yet accessible
81:
            82:
           </div>
         </CardContent>
83:
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"
10: interface SettingsAdminProps {
11: settings: ReportSettings
      updateSettings: (field: keyof ReportSettings, value: string) => void
 12:
     onSave: () => void // Added onSave
13:
 14: onReset: () => void // Added onReset
15: }
16:
17: export default function SettingsAdmin({ settings, updateSettings, onSave, onReset }: SettingsAdminProps) {
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:
 21:
            <CardTitle className="text-2xl">? Report Settings</CardTitle>
            <CardDescription className="text-purple-100">
 22:
 23:
              Customize the appearance and branding of your report
 24:
            </CardDescription>
 25:
          </CardHeader>
 26:
          <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">
 30:
                <RotateCcw className="h-4 w-4 mr-2" />
```

```
31:
                 Reset.
 32:
               </Button>
 33:
               <Button onClick={onSave} size="sm">
                 <Save className="h-4 w-4 mr-2" />
 34:
 35:
                 Save Changes
 36:
               </Button>
 37:
            </div>
 38:
 39:
             <div className="grid md:grid-cols-2 gap-6">
               <div className="space-y-2">
 40:
                 <Label htmlFor="title" className="text-sm font-semibold text-gray-700">
 42:
                   Report Title
 43:
                 </Label>
 44:
                 <Input
 45:
                   id="title"
 46:
                   value={settings.title}
                   onChange={(e) => updateSettings("title", e.target.value)}
 47:
 48:
                   className="border-2 focus:border-purple-500 font-bold"
                />
 49:
 50:
               </div>
 51:
               <div className="space-y-2">
 52:
                 <Label htmlFor="subtitle" className="text-sm font-semibold text-gray-700">
 53:
                   Report Subtitle
 54:
                 </Label>
                <Input
 55:
                   id="subtitle"
 56:
 57:
                   value={settings.subtitle}
                   onChange={(e) => updateSettings("subtitle", e.target.value)}
 58:
                   className="border-2 focus:border-purple-500"
 59:
 60:
                 />
 61:
               </div>
 62:
               <div className="space-y-2">
                <Label htmlFor="companyName" className="text-sm font-semibold text-gray-700">
 63:
 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"
 :08
                     type="color"
                     value={settings.headerColor}
 81:
                     onChange={(e) => updateSettings("headerColor", e.target.value)}
 82:
 83:
                     className="w-16 h-10 border-2 focus:border-purple-500"
 84:
                   />
 85:
                   <Input
 86:
                     value={settings.headerColor}
 87:
                     onChange={(e) => updateSettings("headerColor", e.target.value)}
 88:
                     className="flex-1 border-2 focus:border-purple-500 font-mono"
 89:
                   />
                 </div>
 90:
 91:
               </div>
 92:
               <div className="space-y-2">
 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"
                     value={settings.accentColor}
100:
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:
                  />
109:
                </div>
110:
              </div>
111:
              <div className="space-v-2">
                <Label htmlFor="primaryFont" className="text-sm font-semibold text-gray-700">
112:
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"
                   className="border-2 focus:border-purple-500"
120:
121:
              </div>
122:
              <div className="space-y-2">
124:
                <Label htmlFor="secondaryFont" className="text-sm font-semibold text-gray-700">
125:
                   Secondary Font
126:
                 </Label>
127:
                 <Input.
                  id="secondaryFont"
128:
                  value={settings.fonts.secondary}
129:
                   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:
                />
134:
              </div>
135:
              <div className="space-y-2">
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}
142:
                  onChange={(e) => updateSettings("fonts", { ...settings.fonts, mono: e.target.value })}
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 {
    sleepAndRest: SleepAndRest
12:
13: updateSleepAndRest: (field: keyof SleepAndRest, data: Partial<SleepData>) => void
14: onSave: () \Rightarrow void
15:
     onReset: () => void
16: }
17:
18: export default function SleepRestAdmin({ sleepAndRest, updateSleepAndRest, onSave, onReset }: SleepRestAdmi
19: const renderSleepField = (field: keyof SleepAndRest, data: SleepData, title: string) => (
        <Card key={field} className="border-2 border-indigo-100 bg-indigo-50/30">
 20:
```

```
<CardHeader className="pb-3">
21:
22:
           <CardTitle className="text-lg text-indigo-800">{title}</CardTitle>
23:
         </CardHeader>
24:
         <CardContent className="space-y-4">
25:
           <div className="space-y-2">
26:
             <Label className="text-sm font-medium">Genetic Impact</Label>
27:
28:
               value={data.impact}
29:
               onChange={(e) => updateSleepAndRest(field, { impact: e.target.value })}
               placeholder="e.g., DELAYED SLEEP CYCLE"
30:
               className="border-2 focus:border-indigo-500"
31:
32:
             />
33:
           </div>
34:
           <div className="space-y-2">
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"
41:
               placeholder="e.g., EXERCISE IN THE EVENING AVOID CARBS DURING BREAKFAST"
42:
             />
43:
           </div>
44:
         </CardContent>
45:
       </Card>
    )
46:
47:
48:
     return (
      <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>
51:
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:
             </But.ton>
63:
             <Button onClick={onSave} size="sm">
64:
               <Save className="h-4 w-4 mr-2" />
65:
               Save Changes
66:
             </Button>
67:
           </div>
68:
           {/* Sleep & Rest Fields */}
69:
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,
75:
                 \verb|key.replace(/([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase()), |
76:
               ),
77:
             ) }
78:
           </div>
79:
80:
           {/* Section Guidelines */}
81:
           <div className="bg-indigo-50 border-2 border-indigo-200 rounded-lg p-6">
82:
             <h4 className="font-semibold text-indigo-800 mb-2">? Sleep & Rest Guidelines:</h4>
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:
                 <
89:
                   <strong>Sleep Apnea:</strong> Genetic predisposition to sleep-disordered breathing.
90:
                 91:
                 <
92:
                   <strong>Sleep Depth:/strong> Genetic factors affecting the quality and restorative nature
93:
```

```
94:
                  <1i>>
 95:
                    <strong>Stress Sensitivity:</strong> Genetic tendency to react to stress, impacting sleep.
 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>
          </CardContent>
102:
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
     updateSportsAndFitness: (section: keyof SportsAndFitness, field: string, data: Partial<ExerciseData>) =>
14:
15:
      onSave: () => void
     onReset: () => void
16:
17: }
18:
19: export default function SportsFitnessAdmin({
 20:
     sportsAndFitness,
21: updateSportsAndFitness,
22: onSave,
 23:
     onReset,
 24: }: SportsFitnessAdminProps) {
     const [activeSection, setActiveSection] = useState<keyof SportsAndFitness>("exerciseType")
 25:
 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">
 29:
          <CardHeader className="pb-3">
 30:
            <CardTitle className="text-lg text-green-800">{title}</CardTitle>
 31:
          </CardHeader>
          <CardContent className="space-y-4">
 32:
 33:
            <div className="space-y-2">
              <Label className="text-sm font-medium">Level</Label>
34:
 35:
              <Input
 36:
                value={data.level}
                onChange={(e) => updateSportsAndFitness(section, field, { level: e.target.value })}
 37:
 38:
                placeholder="e.g., High Endurance Potential"
               className="border-2 focus:border-green-500"
39:
              />
 40:
 41:
            </div>
 42:
            <div className="space-y-2">
43:
              <Label className="text-sm font-medium">Description</Label>
 44:
              <Textarea
 45:
                value={data.description}
 46:
                onChange={(e) => updateSportsAndFitness(section, field, { description: e.target.value })}
 47:
                className="border-2 focus:border-green-500 text-sm"
 48:
 49:
              />
50:
            </div>
 51:
          </CardContent>
52:
        </Card>
53:
 54:
     const getSectionTitle = (section: keyof SportsAndFitness) => {
 55:
 56:
        switch (section) {
```

```
57:
          case "exerciseType":
 58:
            return "???? Exercise Type Suitability"
 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 (
 78:
        <Card className="shadow-lg border-0 bg-white">
           <CardHeader className="bg-gradient-to-r from-green-500 to-emerald-600 text-white rounded-t-lg">
 79:
 80:
             <CardTitle className="text-2xl">???? Sports & Fitness</CardTitle>
             <CardDescription className="text-green-100">
 81:
 82:
               Configure exercise type suitability and performance factors
 83:
             </CardDescription>
 84:
           </CardHeader>
           <CardContent className="space-y-8 p-8">
 86:
             {/* Action Buttons */}
 87:
             <div className="flex justify-between items-center">
 88:
               <div className="flex gap-2 flex-wrap">
 89:
                 {(Object.keys(sportsAndFitness) as Array<keyof SportsAndFitness>).map((section) => (
 90:
                   <Button
                     key={section}
 91:
 92:
                     variant={activeSection === section ? "default" : "outline"}
 93:
                     size="sm"
 94:
                     onClick={() => setActiveSection(section)}
 95:
                     className="flex items-center gap-2"
 96:
                      <span>{getSectionIcon(section)}</span>
 97:
 98:
                     $$ \end{constraint} $$ \exp \className = "capitalize" > {section.replace(/([A-Z])/g, " $1")} </span> $$
 99:
                   </Button>
100:
                 ))}
101:
               </div>
102:
               <div className="flex gap-2">
103:
                 <Button onClick={onReset} variant="outline" size="sm">
104:
                   <RotateCcw className="h-4 w-4 mr-2" />
105:
                   Reset
106:
                 </Button>
107:
                 <Button onClick={onSave} size="sm">
108:
                   <Save className="h-4 w-4 mr-2" />
109:
                   Save Changes
110:
                 </Button>
111:
               </div>
             </div>
112:
113:
             {/* Section Content */}
114:
115:
             <div className="space-y-6">
               <h3 className="text-xl font-semibold text-gray-800 border-b-2 border-green-200 pb-2">
116:
117:
                 {getSectionTitle(activeSection)}
118:
               </h3>
119:
120:
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-6">
121:
                 {Object.entries(sportsAndFitness[activeSection]).map(([key, item]) =>
122:
                   renderExerciseField(
123:
                     activeSection,
124:
                     key,
125:
                     item as ExerciseData,
126:
                     key.replace(/([A-Z])/g, " $1").replace(/^./, (str) => str.toUpperCase()),
127:
128:
                 ) }
129:
               </div>
```

```
</div>
130:
131:
            {/* Section Guidelines */}
132:
            <div className="bg-green-50 border-2 border-green-200 rounded-lg p-6">
133:
             <h4 className="font-semibold text-green-800 mb-2">? {getSectionTitle(activeSection)} Guidelines:
134:
135:
             <div className="text-sm text-green-700 space-y-2">
136:
               {activeSection === "exerciseType" && (
137:
                 138:
139:
                     <strong>Endurance Potential:</strong> Genetic predisposition for long-duration activities
140:
                   141:
                   <
142:
                     <strong>Power Potential:</strong> Capacity for short, intense bursts of energy.
143:
                   144:
                   <1i>>
145:
                     <strong>Strength Profile:</strong> Genetic tendency for muscle strength and growth.
146:
                   147:
                     <strong>Exercise Time:</strong> Optimal time of day for exercise based on circadian rhyth
148:
149:
                   150:
                 151:
               ) }
152:
               {activeSection === "performance" && (
153:
                 154:
                     <strong>Endurance Capacity:</strong> Aerobic efficiency and stamina.
155:
156:
157:
                   <
158:
                     <strong>Fatigue Resistance:</strong> Ability to resist muscle fatigue during prolonged ac
159:
                   160:
                   <
161:
                     <strong>Blood Flow:</strong> Efficiency of blood circulation during exercise.
162:
                   163:
                     <strong>Oxygen Efficiency (VO2 Max):/strong> Body's ability to use oxygen during intense
164:
165:
                   166:
                   <1i>>
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:
                   <
176:
                     <strong>Body Composition:</strong> Genetic predisposition for muscle mass vs. fat accumul
177:
                   178:
                   <1i>>
179:
                     <strong>Injury Risk:</strong> Genetic susceptibility to various sports-related injuries.
180:
                   181:
182:
                     <strong>Achilles Tendon/Ligament/Rupture/Muscle Cramps:/strong> Specific injury predispo
183:
                   184:
                 ) }
185:
              </div>
186:
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"
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) {
23:
    return (
24:
       <Card className="shadow-lg border-0 bg-white">
         <CardHeader className="bg-gradient-to-r from-violet-500 to-purple-600 text-white rounded-t-lg">
25:
           <CardTitle className="text-2xl">? Report Summaries</CardTitle>
27:
           <CardDescription className="text-violet-100">Edit the summary sections for experts</CardDescription
28:
         </CardHeader>
29:
         <CardContent className="space-y-8 p-8">
30:
           { /* Action Buttons */}
           <div className="flex justify-end gap-2 mb-6">
31:
32:
             <Button onClick={onReset} variant="outline" size="sm">
33:
               <RotateCcw className="h-4 w-4 mr-2" />
34:
               Reset
35:
             </Button>
36:
             <Button onClick={onSave} size="sm">
37:
               <Save className="h-4 w-4 mr-2" />
38:
               Save Changes
39:
             </But.ton>
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-lq 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:
               </Label>
61:
               For the fitness genomics expert
62:
               <Textarea
                 id="exerciseGenomicsSummary"
63:
64:
                 value={summaries.exerciseGenomicsSummary}
65:
                 onChange={(e) => updateSummaries("exerciseGenomicsSummary", e.target.value)}
66:
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:
           <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>
78:
               < Reference key genetic markers and their implications</li>
79:
               < Suggest monitoring parameters and intervention strategies</li>
```

```
80: 80: 81: 
81: 
82: </div>
83: </CardContent>
84: </Card>
85: )
```

■ 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:
 8: import { Card, CardContent, CardHeader, CardTitle } from "@/components/ui/card";
 9: import { Badge } from "@/components/ui/badge";
10: import { Separator } from "@/components/ui/separator";
11:
12: interface ComprehensiveReportViewerProps {
13: reportData: ComprehensiveReportData;
14: }
15:
16: const SectionTitle = ({ title, icon }: { title: string; icon: string }) => (
17: <h2 className="text-3xl font-bold text-gray-800 mb-6 flex items-center gap-3 page-break-before">
       <span className="text-4xl">{icon}</span>
19:
        {title}
20:
     </h2>
21: );
 22:
 23: const SubSectionTitle = ({ title, icon }: { title: string; icon?: string }) => (
     <h3 className="text-2xl font-semibold text-gray-700 mb-4 mt-8 flex items-center gap-2">
        {icon && <span className="text-2xl">{icon}</span>}
 25:
        {title}
 27:
     </h3>
 28: );
29:
30: const DataCard = ({
 31: title,
     children,
32:
 33: }: {
 34:
     title: string;
35: children: React.ReactNode;
 36: }) => (
 37: <Card className="border-2 border-gray-200 bg-gray-50/50 shadow-sm">
 38:
       <CardHeader className="pb-2">
39:
         <CardTitle className="text-lg font-semibold text-gray-800">
40:
           {title}
41:
         </CardTitle>
 42:
       </CardHeader>
 43:
        <CardContent className="text-sm text-gray-700">{children}</CardContent>
44:
     </Card>
 45: );
 46:
 47: export default function ComprehensiveReportViewer({
 48: reportData,
 49: }: ComprehensiveReportViewerProps) {
 50: const {
     patientInfo,
 51:
52:
       content,
53:
       settings,
 54:
       dynamicDietFieldDefinitions, // NEW
      patientDietAnalysisResults, // NEW
55:
       nutritionData,
 56:
57:
        sportsAndFitness,
58:
       lifestyleConditions,
 59:
       metabolicCore,
 60:
       digestiveHealth.
 61:
        genesAndAddiction,
```

```
62:
         sleepAndRest.
 63:
         allergiesAndSensitivity,
 64:
         geneTestResults,
 65:
         metabolicSummary,
 66:
        preventiveHealth,
 67:
        familyGeneticImpact,
 68:
        summaries,
 69:
      } = reportData;
 70:
 71:
       const getImpactColor = (impact: string) => {
 72:
         if (
 73:
           impact.toLowerCase().includes("high") ||
 74:
           impact.toLowerCase().includes("increased")
 75:
           return "bg-red-100 text-red-800 border-red-300";
 76:
 77:
 78:
         if (
 79:
           impact.toLowerCase().includes("low") | |
 80:
           impact.toLowerCase().includes("reduced")
 81:
 82:
          return "bg-green-100 text-green-800 border-green-300";
 83:
 84:
         if (
 85:
           impact.toLowerCase().includes("normal") ||
           impact.toLowerCase().includes("average") ||
 86:
           impact.toLowerCase().includes("balanced")
 87:
 88:
          return "bg-blue-100 text-blue-800 border-blue-300";
 89:
         }
 90:
 91:
         return "bg-gray-100 text-gray-800 border-gray-300";
 92:
 93:
       const getStatusColor = (status: "strength" | "improvement") => {
 94:
       return status === "strength"
 95:
           ? "bg-green-100 text-green-800 border-green-300"
 96:
 97:
           : "bg-red-100 text-red-800 border-red-300";
 98:
      };
 99:
100:
       // Helper to group dynamic diet fields by category
101:
       const groupedDietFields = patientDietAnalysisResults.reduce((acc, result) => {
102:
         const fieldDef = dynamicDietFieldDefinitions.find(
103:
          (def) => def.id === result.fieldId
104:
105:
        if (fieldDef) {
106:
          if (!acc[fieldDef.category]) {
107:
            acc[fieldDef.category] = [];
108:
109:
          acc[fieldDef.category].push({ ...result, label: fieldDef.label });
110:
111:
       }, {} as Record<string, (typeof patientDietAnalysisResults)[0] & { label: string }[]>);
112:
113:
114:
      return (
115:
        <div className="container mx-auto py-10 px-6 max-w-4xl bg-white shadow-lg min-h-screen">
116:
           {/* Report Header */}
117:
           <header
118:
             className="text-center mb-12 py-8 rounded-lg"
             style={{ backgroundColor: settings.headerColor, color: "#fff" }}
119:
120:
121:
             <h1
122:
               className="text-5xl font-extrabold mb-2"
123:
               style={{ fontFamily: settings.fonts.primary }}
124:
125:
               {settings.title}
             </h1>
126:
127:
             <p
               className="text-2xl font-light"
128:
129:
              style={{ fontFamily: settings.fonts.secondary }}
130:
131:
               {settings.subtitle}
132:
             133:
             <p
134:
               className="text-lg mt-4"
```

```
style={{ fontFamily: settings.fonts.secondary }}
135:
136:
137:
            Patient: <span className="font-semibold">{patientInfo.name}</span> |
138:
            Sample Code:{" "}
            <span className="font-mono">{patientInfo.sampleCode}</span>
139:
140:
           141:
           142:
            Report Date: {patientInfo.reportDate} | Generated by:{" "}
143:
            {settings.companyName}
144:
           </header>
145:
146:
147:
         {/* Patient Information */}
         <SectionTitle title="Patient Information" icon="?" />
148:
149:
         <div className="grid md:grid-cols-2 gap-6 mb-8">
150:
          {/* Basic Info */}
151:
          <DataCard title="Name">
152:
            {patientInfo.name}
153:
          </DataCard>
154:
          <DataCard title="Gender">
155:
            {patientInfo.gender}
156:
          </DataCard>
157:
           <DataCard title="Birth Date">
158:
            {patientInfo.birthDate}
159:
           </DataCard>
          <DataCard title="Sample Code">
160:
            {patientInfo.sampleCode}
162:
          </DataCard>
163:
          <DataCard title="Sample Collection Date">
164:
            {patientInfo.sampleDate}
165:
          </DataCard>
166:
           <DataCard title="Report Generation Date">
167:
            {patientInfo.reportDate}
168:
           </DataCard>
169:
170:
           {/* Section Heading */}
           <Separator className="mt-12 col-span-full" />
171:
172:
           <h3 className="text-center font-bold mb-3 text-gray-600 col-span-full">
173:
            Report Authentication & Analytics
174:
           </h3>
175:
176:
          {/* Auth Info */}
177:
           178:
            Genomic Data Analytics - Checked & Verified By
179:
          180:
           181:
182:
            Scientific Content - Checked & Verified By
183:
           184:
185:
           {/* Primary Signature (Image Only) */}
           <div className="flex flex-col items-center justify-center">
187:
            {patientInfo.signature1 ? (
188:
              <imq
189:
                src={patientInfo.signature1}
190:
                alt="Primary Signature"
                className="max-h-32 object-contain"
191:
192:
              />
193:
            ) : (
              No signature available
194:
            ) }
195:
196:
           </div>
197:
198:
           {/* Secondary Signature (Image Only) */}
199:
           <div className="flex flex-col items-center justify-center">
200:
            {/* Secondary Signature */}
201:
            {patientInfo.signature2 ? (
202:
              <imq
203:
                src={patientInfo.signature2}
204:
               alt="Secondary Signature"
205:
                className="max-h-32 object-contain"
206:
              />
207:
            ) : (
```

```
208:
              No signature available
209:
            ) }
210:
          </div>
211:
          {/* Verifications */}
212:
213:
214:
          {patientInfo.checkedBy}
215:
          {patientInfo.scientificContent}
216:
          {/* Disclaimer - Full Width */}
217:
          <div className="col-span-full">
218:
219:
           <DataCard title="Disclaimer">
220:
             221:
               {patientInfo.disclaimer}
222:
             223:
            </DataCard>
224:
          </div>
225:
        </div>
226:
227:
        <Separator className="my-12" />
228:
229:
        {/* Report Content */}
230:
        <SectionTitle title="Report Content" icon="?" />
231:
        <div className="space-y-8 mb-8">
         <DataCard title="Welcome Letter Introduction">
232:
233:
           {content.introduction}
234:
          </DataCard>
          <DataCard title="What is Genomics?">
235:
236:
           {content.genomicsExplanation}
237:
          </DataCard>
238:
          <DataCard title="Genes and Health Impact">
239:
           {content.genesHealthImpact}
240:
          </DataCard>
          <DataCard title="Fundamentals and PRS">
241:
           {content.fundamentalsPRS}
242:
243:
          </DataCard>
244:
          <DataCard title="Utility for Doctors and Dietitians">
245:
           {content.utilityDoctors}
246:
          </DataCard>
247:
          <DataCard title="Microarray Explanation">
248:
           {content.microarrayExplanation}
249:
          </DataCard>
250:
          <DataCard title="Your Microarray Data">
251:
           {content.microarrayData}
252:
          </DataCard>
253:
         </div>
254:
         <Separator className="my-12" />
255:
256:
        {/* Dynamic Diet Analysis */}
257:
         <SectionTitle title="Diet Analysis" icon="?" />
258:
         {Object.keys(groupedDietFields).length === 0 && (
259:
          260:
            No diet analysis results available.
261:
          262:
         {Object.entries(groupedDietFields).map(([category, fields]) => (
263:
          <React.Fragment key={category}>
264:
            <SubSectionTitle title={category} icon="??" />
265:
266:
            <div className="grid md:grid-cols-2 gap-6 mb-8">
267:
             {fields.map((data, index) => (
268:
               <DataCard key={index} title={data.label}>
269:
270:
                  <strong>Score:</strong> {data.score}/10
271:
                 272:
                 >
273:
                  <strong>Level:</strong> {data.level}
274:
                 275:
                 >
276:
                  <strong>Recommendation:</strong> {data.recommendation}
277:
                 278:
               </DataCard>
279:
             ))}
280:
            </div>
```

```
281:
            </React.Fragment>
282:
          ))}
283:
           <Separator className="my-12" />
284:
           {/* Nutrition Data */}
285:
286:
           <SectionTitle title="Nutrition Analysis" icon="?" />
287:
           <SubSectionTitle title="Vitamins" icon="?" />
288:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
289:
             {Object.entries(nutritionData.vitamins).map(([key, data]) => (
290:
              <DataCard
291:
                key={key}
292:
                title={key
293:
                  .replace(/([A-Z])/g, " $1")
294:
                   .replace(/^./, (str) => str.toUpperCase())}
295:
296:
297:
                   <strong>Score:</strong> {data.score}/10
298:
299:
                 >
300:
                  <strong>Health Impact:</strong> {data.healthImpact}
301:
                302:
                <q>>
303:
                  <strong>Intake Level:</strong> {data.intakeLevel}
304:
                305:
306:
                  <strong>Source:</strong> {data.source}
307:
                308:
              </DataCard>
            ))}
309:
310:
          </div>
311:
312:
           <SubSectionTitle title="Fatty Acids" icon="?" />
           <div className="grid md:grid-cols-2 gap-6 mb-8">
313:
314:
            {Object.entries(nutritionData.fattyAcids).map(([key, data]) => (
315:
              <DataCard
316:
                key={key}
317:
                title={key
318:
                  .replace(/([A-Z])/g, " $1")
319:
                   .replace(/^./, (str) => str.toUpperCase())}
320:
321:
322:
                   <strong>Score:</strong> {data.score}/10
323:
                324:
                >
325:
                  <strong>Health Impact:</strong> {data.healthImpact}
326:
                 327:
                >
328:
                  <strong>Intake Level:</strong> {data.intakeLevel}
329:
                330:
                  <strong>Source:</strong> {data.source}
331:
332:
                333:
              </DataCard>
334:
            ))}
335:
           </div>
336:
337:
           <SubSectionTitle title="Essential Elements" icon="?" />
338:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
339:
             {Object.entries(nutritionData.elements).map(([key, data]) => (
340:
               <DataCard
341:
                key={key}
342:
                title={key
343:
                  .replace(/([A-Z])/g, " $1")
344:
                   .replace(/^./, (str) => str.toUpperCase())}
345:
346:
                 >
                  <strong>Score:</strong> {data.score}/10
347:
348:
                349:
350:
                  <strong>Health Impact:</strong> {data.healthImpact}
351:
                 352:
                 >
353:
                  <strong>Intake Level:</strong> {data.intakeLevel}
```

```
354:
                355:
                 >
356:
                  <strong>Source:</strong> {data.source}
357:
                 358:
              </DataCard>
359:
            ))}
360:
           </div>
361:
362:
           <SubSectionTitle title="Complex Nutrients" icon="?" />
           <div className="grid md:grid-cols-2 gap-6 mb-8">
363:
             {Object.entries(nutritionData.complexNutrients).map(([key, data]) => (
364:
365:
               <DataCard
366:
                key={key}
367:
                title={key
368:
                  .replace(/([A-Z])/g, " $1")
369:
                  .replace(/^./, (str) => str.toUpperCase())}
370:
371:
                >
                  <strong>Score:</strong> {data.score}/10
372:
373:
                 374:
375:
                  <strong>Health Impact:</strong> {data.healthImpact}
376:
                 377:
378:
                  <strong>Intake Level:</strong> {data.intakeLevel}
379:
                <q\>
380:
                 >
                  <strong>Source:</strong> {data.source}
381:
382:
                383:
              </DataCard>
384:
             ))}
385:
           </div>
           <Separator className="my-12" />
386:
387:
           {/* Sports & Fitness */}
388:
389:
           <SectionTitle title="Sports & Fitness" icon="????" />
           <SubSectionTitle title="Exercise Type Suitability" icon="????" />
390:
391:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
392:
             {Object.entries(sportsAndFitness.exerciseType).map(([key, data]) => (
393:
               <DataCard
394:
                key={key}
395:
                title={key
396:
                  .replace(/([A-Z])/g, " $1")
397:
                   .replace(/^./, (str) => str.toUpperCase())}
398:
399:
                >
400:
                  <strong>Level:</strong> {data.level}
401:
                 402:
403:
                  <strong>Description:</strong> {data.description}
404:
                405:
              </DataCard>
406:
            ))}
407:
          </div>
408:
           <SubSectionTitle title="Performance Factors" icon="?" />
409:
410:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
411:
             {Object.entries(sportsAndFitness.performance).map(([key, data]) => (
412:
               <DataCard
413:
                key={key}
414:
                title={key
415:
                  .replace(/([A-Z])/g, " $1")
416:
                   .replace(/^./, (str) => str.toUpperCase())}
417:
418:
                >
419:
                  <strong>Level:</strong> {data.level}
420:
                421:
                <q>>
                  <strong>Description:</strong> {data.description}
422:
423:
                424:
               </DataCard>
425:
            ))}
426:
           </div>
```

```
427:
           <Separator className="mv-12" />
428:
429:
           {/* Lifestyle Conditions */}
430:
           <SectionTitle title="Lifestyle Conditions" icon="?" />
           <SubSectionTitle title="Heart & Vascular Health" icon="??" />
431:
432:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
433:
             \{ \verb|Object.entries| ( \verb|lifestyleConditions.heartVascularHealth).map( \\
434:
               ([key, data]) => (
435:
                 <DataCard
                   key={key}
436:
437:
                   title={key
                      .replace(/([A-Z])/g, " $1")
438:
439:
                      .replace(/^./, (str) => str.toUpperCase())}
440:
441:
                   <a>>
442:
                      <strong>Status:</strong>{" "}
443:
                      <Badge className={getStatusColor(data.status)}>
444:
                        {data.status}
445:
                      </Badge>
446:
                   447:
                 </DataCard>
448:
449:
             ) }
450:
           </div>
451:
           <SubSectionTitle title="Diabesity (Diabetes & Obesity)" icon="?" />
452:
453:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
454:
             {Object.entries(lifestyleConditions.diabesity).map(([key, data]) => (
455:
               <DataCard
456:
                 key={key}
457:
                 title={key
458:
                    .replace(/([A-Z])/g, " $1")
                    .replace(/^./, (str) => str.toUpperCase())}
459:
460:
461:
                 >
462:
                   <strong>Status:</strong>{" "}
463:
                   <Badge className={getStatusColor(data.status)}>
464:
                     {data.status}
465:
                   </Badge>
466:
                 467:
               </DataCard>
468:
             ))}
469:
           </div>
470:
471:
           <SubSectionTitle title="Liver Health" icon="?" />
472:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
473:
             {Object.entries(lifestyleConditions.liverHealth).map(([key, data]) => (
474:
               <DataCard
                 key={key}
475:
476:
                 title={key
477:
                   .replace(/([A-Z])/g, " $1")
                   .replace(/^./, (str) => str.toUpperCase())}
478:
479:
480:
                 >
481:
                   <strong>Status:< " " }</pre>
482:
                   <Badge className={getStatusColor(data.status)}>
483:
                      {data.status}
484:
                   </Badge>
485:
                 486:
               </DataCard>
487:
             ))}
488:
           </div>
489:
490:
           <SubSectionTitle title="Bone Health" icon="?" />
           <div className="grid md:grid-cols-2 gap-6 mb-8">
491:
492:
             {Object.entries(lifestyleConditions.boneHealth).map(([key, data]) => (
493:
               <DataCard
494:
                 key={key}
495:
                 title={key
496:
                   .replace(/([A-Z])/g, " $1")
497:
                   .replace(/^./, (str) => str.toUpperCase())}
498:
499:
                 >
```

```
500:
                   <strong>Status:</strong>{" "}
501:
                   <Badge className={getStatusColor(data.status)}>
502:
                     {data.status}
503:
                   </Badge>
504:
                 505:
               </DataCard>
506:
             ))}
507:
           </div>
508:
           <SubSectionTitle title="Gut Health" icon="?" />
509:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
510:
511:
             {Object.entries(lifestyleConditions.gutHealth).map(([key, data]) => (
512:
               <DataCard
513:
                 key={key}
514:
                 title={key
515:
                   .replace(/([A-Z])/g, " $1")
516:
                   .replace(/^./, (str) => str.toUpperCase())}
517:
518:
                 >
519:
                   <strong>Status:</strong>{" "}
520:
                   <Badge className={getStatusColor(data.status)}>
521:
                     {data.status}
522:
                   </Badge>
523:
                 524:
               </DataCard>
525:
             ))}
526:
           </div>
527:
           <SubSectionTitle title="Hormone System" icon="?" />
528:
529:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
530:
             {Object.entries(lifestyleConditions.hormoneSystem).map(
531:
               ([key, data]) => (
532:
                 <DataCard
                   key={key}
533:
                   title={key
534:
535:
                     .replace(/([A-Z])/g, " $1")
536:
                     .replace(/^./, (str) => str.toUpperCase())}
537:
538:
539:
                     <strong>Status:</strong>{" "}
540:
                     <Badge className={getStatusColor(data.status)}>
541:
                       {data.status}
542:
                     </Badge>
543:
                   544:
                 </DataCard>
545:
               )
546:
            ) }
547:
           </div>
           <Separator className="my-12" />
548:
549:
550:
           {/* Metabolic Core */}
551:
           <SectionTitle title="Metabolic Core" icon="?" />
552:
           <div className="space-y-8 mb-8">
553:
             {Object.entries(metabolicCore).map(([key, data]) => (
554:
               <Card
555:
                 key={key}
                 className="border-2 border-purple-200 bg-purple-50/50 shadow-sm"
556:
557:
558:
                 <CardHeader className="pb-2">
                   <CardTitle className="text-lg font-semibold text-purple-800 flex items-center justify-between
559:
560:
                     {key
561:
                       .replace(/([A-Z])/g, " $1")
562:
                       .replace(/^./, (str) => str.toUpperCase())}
563:
                     <Badge className={getImpactColor(data.impact)}>
564:
                       {data.impact}
565:
                     </Badge>
                   </CardTitle>
566:
567:
                 </CardHeader>
568:
                 <CardContent className="text-sm text-gray-700 space-y-2">
569:
570:
                     <strong>Genes:</strong> {data.genes.join(", ")}
571:
                   572:
                   >
```

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573:
                     <strong>Your Genotype:</strong>{" "}
574:
                     <span className="font-mono">{data.genotype}</span>
575:
                   576:
                   >
                    <strong>Advice:</strong> {data.advice}
577:
578:
                   579:
                </CardContent>
580:
              </Card>
581:
            ))}
           </div>
582:
           <Separator className="my-12" />
583:
584:
585:
           {/* Digestive Health */}
           <SectionTitle title="Digestive Health" icon="?" />
586:
587:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
588:
             {Object.entries(digestiveHealth).map(([key, data]) => (
589:
              <DataCard
590:
                key={key}
591:
                title={key
592:
                  .replace(/([A-Z])/g, " $1")
593:
                   .replace(/^./, (str) => str.toUpperCase())}
594:
595:
596:
                   <strong>Level:</strong> {data.level}
597:
598:
                <q>>
599:
                  <strong>Description:</strong> {data.description}
600:
                601:
              </DataCard>
602:
            ))}
603:
           </div>
604:
           <Separator className="my-12" />
605:
           {/* Genes & Addiction */}
606:
           <SectionTitle title="Genes & Addiction" icon="?" />
607:
608:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
609:
             {Object.entries(genesAndAddiction).map(([key, data]) => (
610:
              <DataCard
611:
                key={key}
612:
                title={key
613:
                   .replace(/([A-Z])/g, " $1")
614:
                   .replace(/^./, (str) => str.toUpperCase())}
615:
616:
                >
617:
                  <strong>Tendency:</strong> {data.tendency}
618:
619:
                 >
620:
                   <strong>Description:</strong> {data.description}
621:
                622:
               </DataCard>
623:
            ))}
624:
           </div>
625:
           <Separator className="my-12" />
626:
627:
           {/* Sleep & Rest */}
           <SectionTitle title="Sleep & Rest" icon="?" />
628:
629:
           <div className="grid md:grid-cols-2 gap-6 mb-8">
             {\tt Object.entries(sleepAndRest).map(([key, data]) => (}
630:
631:
               <DataCard
632:
                key={key}
633:
                title={key
634:
                  .replace(/([A-Z])/g, " $1")
635:
                   .replace(/^./, (str) => str.toUpperCase())}
636:
637:
                >
638:
                  <strong>Impact:</strong> {data.impact}
639:
                640:
                  <strong>Intervention:</strong> {data.intervention}
641:
642:
                643:
              </DataCard>
644:
            ))}
645:
           </div>
```

```
646:
          <Separator className="mv-12" />
647:
648:
          {/* Allergies & Sensitivity */}
649:
          <SectionTitle title="Allergies & Sensitivity" icon="?" />
          <div className="grid md:grid-cols-2 gap-6 mb-8">
650:
651:
            {Object.entries(allergiesAndSensitivity)
652:
              .filter(([key]) => key !== "generalAdvice")
653:
              .map(([key, data]) => (
               <DataCard
654:
655:
                 key={key}
656:
                 title={key
                   .replace(/([A-Z])/g, " $1")
657:
658:
                   .replace(/^./, (str) => str.toUpperCase())}
659:
660:
                 <q>>
661:
                   <strong>Tendency:</strong> {(data as AllergyData).tendency}
662:
                 663:
               </DataCard>
             ))}
664:
665:
          </div>
          <DataCard title="General Advice" className="mt-8">
666:
667:
            {allergiesAndSensitivity.generalAdvice}
668:
          </DataCard>
669:
          <Separator className="my-12" />
670:
671:
          {/* Preventive Health */}
672:
          <SectionTitle title="Preventive Health" icon="?" />
          <SubSectionTitle title="Diagnostic Tests" icon="?" />
673:
674:
          <div className="grid md:grid-cols-2 gap-6 mb-8">
675:
            <DataCard title="Half-Yearly Tests">
              676:
677:
               {preventiveHealth.diagnosticTests.halfYearly.map((test, index) => (
678:
                 {test}
               ))}
679:
680:
             </111>
681:
            </DataCard>
682:
            <DataCard title="Yearly Tests">
683:
             684:
               {preventiveHealth.diagnosticTests.yearly.map((test, index) => (
685:
                 {test}
686:
               ))}
687:
             688:
            </DataCard>
689:
          </div>
690:
691:
          <SubSectionTitle title="Nutritional Supplements" icon="?" />
692:
          <DataCard title="Recommended Supplements">
693:
            694:
              {preventiveHealth.nutritionalSupplements.map((supplement, index) => (
695:
               key={index}>
                 \{ \verb"supplement.supplement"\} \{ \verb""" \}
696:
                 {supplement.needed ? "(Needed)" : "(Optional)"}
697:
698:
               699:
             ))}
700:
            701:
          </DataCard>
702:
          <Separator className="my-12" />
703:
704:
          {/* Family Genetic Impact */}
          <SectionTitle title="Family Genetic Impact" icon="???????" />
705:
706:
          <div className="space-y-8 mb-8">
707:
            {familyGeneticImpact.length === 0 && (
708:
              709:
               No family genetic impacts recorded.
710:
              711:
            ) }
            {familyGeneticImpact.map((impact, index) => (
712:
713:
             <Card
714:
               key={index}
715:
               className="border-2 border-blue-200 bg-blue-50/50 shadow-sm"
716:
717:
               <CardHeader className="pb-2">
718:
                 <CardTitle className="text-lg font-semibold text-blue-800">
```

```
719:
                   Genetic Impact #{index + 1}
720:
                  </CardTitle>
721:
                </CardHeader>
722:
                <CardContent className="text-sm text-gray-700 space-y-2">
723:
724:
                   <strong>Gene:</strong> {impact.gene}
725:
                  726:
                  >
727:
                   <strong>Normal/Common Alleles:</strong> {impact.normalAlleles}
728:
                  729:
                  >
                   <strong>Your Result:</strong>{" "}
730:
731:
                    <span className="font-mono">{impact.yourResult}</span>
732:
                  733:
734:
                   <strong>Health Impact:</strong> {impact.healthImpact}
735:
                  736:
                </CardContent>
737:
              </Card>
738:
            ))}
739:
          </div>
740:
          <Separator className="my-12" />
741:
742:
         {/* Gene Test Results */}
743:
          <SectionTitle title="Gene Test Results" icon="?" />
744:
          <div className="space-y-8 mb-8">
745:
            {geneTestResults.length === 0 && (
              746:
747:
               No gene test results recorded.
748:
              749:
            ) }
750:
            {geneTestResults.map((result, index) => (
751:
              <Card
752:
               key={index}
                className="border-2 border-indigo-200 bg-indigo-50/50 shadow-sm"
753:
754:
755:
                <CardHeader className="pb-2">
756:
                 <CardTitle className="text-lg font-semibold text-indigo-800">
757:
                   Gene: {result.geneName}
                  </CardTitle>
758:
759:
                </CardHeader>
760:
                <CardContent className="text-sm text-gray-700 space-y-2">
761:
                   <strong>Variation:</strong>{" "}
762:
763:
                   <span className="font-mono">{result.variation}</span>
764:
                  765:
                  <q>>
766:
                   <strong>Result:</strong>{" "}
767:
                   <span className="font-mono">{result.result}</span>
768:
769:
                </CardContent>
770:
              </Card>
771:
            ))}
772:
          </div>
773:
          <Separator className="my-12" />
774:
775:
         {/* Summaries */}
          <SectionTitle title="Summaries for Experts" icon="?" />
776:
777:
          <div className="space-y-8 mb-8">
            <DataCard title="Nutrigenomics Summary">
778:
779:
             {summaries.nutrigenomicsSummary}
780:
            <DataCard title="Exercise Genomics Summary">
781:
782:
              {summaries.exerciseGenomicsSummary}
           </DataCard>
783:
784:
          </div>
785:
786:
          {/* Report Footer */}
787:
          <footer className="text-center mt-12 py-6 text-gray-600 text-sm border-t border-gray-200">
788:
            <q>>
789:
              © {new Date().getFullYear()} {settings.companyName}. All rights
790:
              reserved.
791:
```

■ 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) => {
      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:
20:
     const getScoreLevel = (score: number) => {
21:
      if (score >= data.settings.highThreshold) return "High";
22:
       if (score >= 4) return "Medium";
       return "Low";
23:
    };
24:
25:
26:
     return (
       <div className={`space-y-8 ${mode === "pdf" ? "print:space-y-4" : ""}`}>
27:
         {/* Page 1: Cover Page */}
29:
         <div className="bg-white p-8 rounded-lg shadow-sm page-break">
30:
31:
            className="text-center py-16 rounded-lg text-white"
32:
            style={{ backgroundColor: data.settings.headerColor }}
34:
            <h1 className="text-4xl font-bold mb-4">{data.settings.title}</h1>
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">
38:
                {data.patientInfo.name}
39:
              </h2>
40:
              Sample Code: {data.patientInfo.sampleCode}
41:
42:
43:
              44:
               Report Date: {data.patientInfo.reportDate}
45:
              46:
47:
                {data.patientInfo.disclaimer}
48:
              49:
             </div>
         </div>
50:
51:
52:
         {/* Page 3: Welcome Letter */}
         <div className="bg-white p-8 rounded-lg shadow-sm page-break">
53:
54:
           <h2
            className="text-2x1 font-bold mb-6"
55:
56:
            style={{ color: data.settings.headerColor }}
57:
58:
            ? Welcome to Your Genomics Journey
59:
60:
           <div className="prose max-w-none">
61:
             62:
              {data.content.introduction}
63:
```

```
<div className="bg-blue-50 p-6 rounded-lg">
 64:
 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:
           {/* Page 4-8: Diet Analysis */}
 73:
 74:
           <div className="bg-white p-8 rounded-lg shadow-sm page-break">
 75:
            <h2
 76:
              className="text-2xl font-bold mb-6"
 77:
              style={{ color: data.settings.headerColor }}
 78:
 79:
              ?? DIET ANALYSIS
 :08
             </h2>
 81:
             {/* Macronutrients Section */}
 82:
            <div className="mb-8">
 84:
               <h3 className="text-xl font-semibold mb-4">Macronutrients</h3>
 85:
               <div className="grid md:grid-cols-3 gap-4">
 86:
                 {Object.entries(data.dietAnalysis.macronutrients).map(
 87:
                   ([key, item]) => (
                     <Card key={key}>
 88:
                       <CardHeader className="pb-3">
 89:
 90:
                         <CardTitle className="text-sm">
 91:
                           {key
 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">
 98:
                          <span className="text-2xl font-bold">
 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>
108:
                         <Progress value={item.score * 10} className="mb-3" />
109:
                         110:
                          {item.recommendation}
111:
                         112:
                       </CardContent>
113:
                     </Card>
114:
                  )
                ) }
115:
116:
               </div>
117:
            </div>
118:
             {/* Food Sensitivities Section */}
119:
120:
             <div className="mb-8">
121:
               <h3 className="text-xl font-semibold mb-4">Food Sensitivities</h3>
122:
               <div className="grid md:grid-cols-2 lg:grid-cols-3 gap-4">
123:
                 {Object.entries(data.dietAnalysis.foodSensitivities).map(
124:
                   ([key, item]) => (
125:
                     <Card key={key}>
                       <CardHeader className="pb-3">
126:
127:
                         <CardTitle className="text-sm">
128:
                           {key
129:
                             .replace(/([A-Z])/g, " $1")
                             .replace(/^{*}./, (str) => str.toUpperCase()) \}
130:
131:
                         </CardTitle>
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:
                            {item.level || getScoreLevel(item.score)}
140:
141:
                          </Badge>
142:
                        </div>
143:
                        <Progress value={item.score * 10} className="mb-3" />
144:
                        145:
                          {item.recommendation}
                        146:
                      </CardContent>
147:
148:
                    </Card>
149:
                ) }
150:
151:
              </div>
152:
            </div>
          </div>
153:
154:
          {/* Page 9-15: Nutrition Data */}
155:
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:
              ? NUTRITION ANALYSIS
161:
162:
            </h2>
163:
            { \ \ }/* \ {\ \ } Vitamins Section */{ \ \ }
164:
165:
            <div className="mb-8">
166:
              <h3 className="text-xl font-semibold mb-4">Vitamins</h3>
              <div className="grid md:grid-cols-2 lg:grid-cols-4 gap-4">
167:
168:
                {Object.entries(data.nutritionData.vitamins).map(([key, item]) => (
169:
                  <Card key={key}>
                    <CardHeader className="pb-3">
170:
                      <CardTitle className="text-sm">
171:
172:
                        {key
173:
                          .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:
                        <Badge
181:
                          style={{ backgroundColor: getScoreColor(item.score) }}
182:
                          className="text-white text-xs"
183:
184:
                          {item.level || getScoreLevel(item.score)}
185:
                        </Badge>
186:
                      </div>
187:
                      <Progress value={item.score * 10} className="mb-2" />
188:
                      189:
                        {item.healthImpact}
190:
                      191:
                      {item.recommendation}
                    </CardContent>
192:
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>
              <div className="grid md:grid-cols-2 lg:grid-cols-4 gap-4">
201:
202:
                {Object.entries(data.nutritionData.elements).map(([key, item]) => (
203:
                  <Card key={key}>
204:
                    <CardHeader className="pb-3">
205:
                      <CardTitle className="text-sm capitalize">{key}</CardTitle>
206:
                    </CardHeader>
207:
208:
                      <div className="flex items-center justify-between mb-2">
209:
                        <span className="text-lg font-bold">{item.score}/10</span>
```

```
210:
                        <Badge
211:
                          style={{ backgroundColor: getScoreColor(item.score) }}
212:
                          className="text-white text-xs"
213:
                          {item.level || getScoreLevel(item.score)}
214:
215:
                        </Badge>
216:
                      </div>
217:
                      <Progress value={item.score * 10} className="mb-2" />
218:
                      219:
                        {item.healthImpact}
220:
                      {item.recommendation}
221:
222:
                    </CardContent>
222:
                  </Card>
224:
                ))}
225:
              </div>
            </div>
226:
227:
          </div>
228:
229:
          {/* Page 16-22: Sports & Fitness */}
230:
          <div className="bg-white p-8 rounded-lg shadow-sm page-break">
231:
232:
              className="text-2xl font-bold mb-6"
233:
              style={{ color: data.settings.headerColor }}
234:
235:
              2222 SPORTS & FITNESS
236:
            </h2>
237:
            {/* Exercise Type Section */}
238:
239:
            <div className="mb-8">
              <h3 className="text-xl font-semibold mb-4">
240:
241:
                Exercise Type Suitability
242:
              </h3>
              <div className="grid md:grid-cols-2 gap-4">
244:
                {Object.entries(data.sportsAndFitness.exerciseType).map(
245:
                  ([key, item]) => (
246:
                    <Card key={key}>
247:
                      <CardHeader className="pb-3">
248:
                        <CardTitle className="text-sm">
249:
250:
                            .replace(/([A-Z])/g, " $1")
251:
                            .replace(/^./, (str) => str.toUpperCase())}
252:
                        </CardTitle>
253:
                      </CardHeader>
254:
                      <CardContent>
255:
                        <div className="flex items-center justify-between mb-2">
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>
264:
                        <Progress value={item.score * 10} className="mb-3" />
                        {item.description}
265:
266:
267:
                    </Card>
268:
                ) }
269:
270:
              </div>
271:
            </div>
272:
273:
            {/* Performance Section */}
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">
277:
                {Object.entries(data.sportsAndFitness.performance).map(
278:
                  ([key, item]) => (
279:
                    <Card key={key}>
280:
                      <CardHeader className="pb-3">
281:
                        <CardTitle className="text-sm">
282:
                          {kev
```

```
.replace(/([A-Z])/g, " $1")
283:
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>
300:
                    </Card>
301:
                  )
302:
                ) }
303:
              </div>
304:
            </div>
305:
306:
            {/* Injury Management Section */}
307:
            <div className="mb-8">
              <h3 className="text-xl font-semibold mb-4">Injury Risk Management</h3>
308:
              <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}>
                      <CardHeader className="pb-3">
313:
314:
                        <CardTitle className="text-sm">
315:
                            .replace(/([A-Z])/g, " $1")
316:
317:
                            .replace(/^./, (str) => str.toUpperCase())}
318:
                        </CardTitle>
319:
                      </CardHeader>
320:
                      <CardContent>
321:
                        <div className="flex items-center justify-between mb-2">
                          <span className="text-lg font-bold">{item.score}/10</span>
322:
323:
324:
                            style={{ backgroundColor: getScoreColor(item.score) }}
                            className="text-white text-xs"
326:
327:
                            {item.level || getScoreLevel(item.score)}
328:
                          </Badge>
329:
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:
          340:
341:
          {/* This is a comprehensive start - I'll need to continue with all remaining sections to reach 56 pag
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:
352:
          `}</style>
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"
 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>,
      React.ComponentPropsWithoutRef<typeof AccordionPrimitive.Item>
14: >(({ className, ...props }, ref) => (
15: <AccordionPrimitive.Item
16:
       ref={ref}
17:
       className={cn("border-b", className)}
        {...props}
18:
19: />
 20: ))
 21: AccordionItem.displayName = "AccordionItem"
 22:
 23: const AccordionTrigger = React.forwardRef<
 24: React.ElementRef<typeof AccordionPrimitive.Trigger>,
 25: React.ComponentPropsWithoutRef<typeof AccordionPrimitive.Trigger>
 26: >(({ className, children, ...props }, ref) => (
     <AccordionPrimitive.Header className="flex">
 27:
 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" />
        </AccordionPrimitive.Trigger>
 39:
     </AccordionPrimitive.Header>
 40: ))
 41: AccordionTrigger.displayName = AccordionPrimitive.Trigger.displayName
 42:
 43: const AccordionContent = React.forwardRef<
 44: React.ElementRef<typeof AccordionPrimitive.Content>,
     React.ComponentPropsWithoutRef<typeof AccordionPrimitive.Content>
 46: >(({ className, children, ...props }, ref) => (
     <AccordionPrimitive.Content</pre>
 48:
       ref={ref}
       className="overflow-hidden text-sm transition-all data-[state=closed]:animate-accordion-up data-[state=
 49:
 50:
        {...props}
 51:
        <div className={cn("pb-4 pt-0", className)}>{children}</div>
     </AccordionPrimitive.Content>
53:
 54: ))
55:
56: AccordionContent.displayName = AccordionPrimitive.Content.displayName
 58: export { Accordion, AccordionItem, AccordionTrigger, AccordionContent }
```

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

```
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"
8:
9: const AlertDialog = AlertDialogPrimitive.Root
10:
11: const AlertDialogTrigger = AlertDialogPrimitive.Trigger
12:
13: const AlertDialogPortal = AlertDialogPrimitive.Portal
14:
15: const AlertDialogOverlay = React.forwardRef<</pre>
     React.ElementRef<typeof AlertDialogPrimitive.Overlay>,
17: React.ComponentPropsWithoutRef<typeof AlertDialogPrimitive.Overlay>
18: >(({ className, ...props }, ref) => (
19:
    <AlertDialogPrimitive.Overlay</pre>
20:
      className={cn(
21:
          "fixed inset-0 z-50 bg-black/80 data-[state=open]:animate-in data-[state=closed]:animate-out data-[s
22:
         className
      ) }
23:
24:
       \{\dotsprops\}
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(
39:
            "fixed left-[50%] top-[50%] z-50 grid w-full max-w-lg translate-x-[-50%] translate-y-[-50%] gap-4 b
40:
           className
         ) }
42:
         {...props}
43:
44:
     </AlertDialogPortal>
45: ))
46: AlertDialogContent.displayName = AlertDialogPrimitive.Content.displayName
47:
48: const AlertDialogHeader = ({
49: className,
     ...props
51: }: React.HTMLAttributes<HTMLDivElement>) => (
52:
     <div
53:
       className={cn(
        "flex flex-col space-y-2 text-center sm:text-left",
54:
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:
70:
       ) }
71:
       {...props}
```

```
72: />
 73: )
 74: AlertDialogFooter.displayName = "AlertDialogFooter"
 76: const AlertDialogTitle = React.forwardRef<
 77: React.ElementRef<typeof AlertDialogPrimitive.Title>,
 78: React.ComponentPropsWithoutRef<typeof AlertDialogPrimitive.Title>
 79: >(({ className, ...props }, ref) => (
      <AlertDialogPrimitive.Title</pre>
 :08
 81:
        ref={ref}
         className={cn("text-lg font-semibold", className)}
 82:
 83:
         {...props}
 84:
 85: ))
 86: AlertDialogTitle.displayName = AlertDialogPrimitive.Title.displayName
 88: const AlertDialogDescription = React.forwardRef<
      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
101: const AlertDialogAction = React.forwardRef<</pre>
102: React.ElementRef<typeof AlertDialogPrimitive.Action>,
103: React.ComponentPropsWithoutRef<typeof AlertDialogPrim
      React.ComponentPropsWithoutRef<typeof AlertDialogPrimitive.Action>
104: >(({ className, ...props }, ref) => (
105: <AlertDialogPrimitive.Action
106:
       ref={ref}
107:
        className={cn(buttonVariants(), className)}
108:
         {...props}
109: />
110: ))
111: AlertDialogAction.displayName = AlertDialogPrimitive.Action.displayName
112:
113: const AlertDialogCancel = React.forwardRef<</pre>
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
        ) }
124:
        {...props}
125:
      />
126: ))
127: AlertDialogCancel.displayName = AlertDialogPrimitive.Cancel.displayName
129: export {
130:
      AlertDialog,
     AlertDialogPortal,
131:
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: {
        variant: {
10:
11:
           default: "bg-background text-foreground",
12:
           destructive:
              "border-destructive/50 text-destructive dark:border-destructive [&>svg]:text-destructive",
13:
        },
14:
15:
      },
16:
      defaultVariants: {
        variant: "default",
17:
      },
19: }
20: )
21:
22: const Alert = React.forwardRef<
23: HTMLDivElement,
24: React.HTMLAttributes<HTMLDivElement> & VariantProps<typeof alertVariants>
25: >(({ className, variant, ...props }, ref) => (
26: <div
      ref={ref}
28:
      role="alert"
       className={cn(alertVariants({ variant }), className)}
29:
       {...props}
30:
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}
      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"
5:
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}
      className={cn(
14:
       "relative flex h-10 w-10 shrink-0 overflow-hidden rounded-full",
15:
16:
         className
      ) }
17:
18:
      \{\dots props\}
19:
    />
20: ))
21: Avatar.displayName = AvatarPrimitive.Root.displayName
22:
23: const AvatarImage = React.forwardRef<
24: React.ElementRef<typeof AvatarPrimitive.Image>,
     React.ComponentPropsWithoutRef<typeof AvatarPrimitive.Image>
26: >(({ className, ...props }, ref) => (
    <AvatarPrimitive.Image
28:
      ref={ref}
29:
       className={cn("aspect-square h-full w-full", className)}
30:
       {...props}
31: />
32: ))
33: AvatarImage.displayName = AvatarPrimitive.Image.displayName
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:
45:
       {...props}
46:
    />
47: ))
48: AvatarFallback.displayName = AvatarPrimitive.Fallback.displayName
49:
50: export { Avatar, AvatarImage, AvatarFallback }
```

■ 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
 8:
 9:
      variants: {
10:
       variant: {
11:
          default:
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",
```

```
outline: "text-foreground",
17:
18:
        },
19:
       },
20:
       defaultVariants: {
       variant: "default",
21:
22:
23: }
24: )
25:
26: export interface BadgeProps
27: extends React.HTMLAttributes<HTMLDivElement>,
28:
      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"
 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"
14:
15: const BreadcrumbList = React.forwardRef<</pre>
16: HTMLOListElement,
17: React.ComponentPropsWithoutRef<"ol">
 18: >(({ className, ...props }, ref) => (
19: <ol
      ref={ref}
 20:
 21:
       className={cn(
 22:
         "flex flex-wrap items-center gap-1.5 break-words text-sm text-muted-foreground sm:gap-2.5",
 23:
 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)}
 37:
       {...props}
 38:
     />
 39: ))
 40: BreadcrumbItem.displayName = "BreadcrumbItem"
 42: const BreadcrumbLink = React.forwardRef<
 43: HTMLAnchorElement,
 44:
     React.ComponentPropsWithoutRef<"a">> & {
 45:
      asChild?: boolean
 46: }
 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}
 55:
 56:
      )
 57: })
 58: BreadcrumbLink.displayName = "BreadcrumbLink"
 60: const BreadcrumbPage = React.forwardRef<
 61: HTMLSpanElement,
 62: React.ComponentPropsWithoutRef<"span">
 63: >(({ className, ...props }, ref) => (
 64: <span
 65:
       ref={ref}
       role="link"
 66:
        aria-disabled="true"
 67:
       aria-current="page"
 69:
       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">) => (
 80:
      <li
       role="presentation"
 81:
       aria-hidden="true"
 82:
       className = \{cn("[\&>svg]:w-3.5 [\&>svg]:h-3.5", className)\}
 83:
 84:
        {...props}
 85:
 86:
        {children ?? <ChevronRight />}
 87:
      88: )
 89: BreadcrumbSeparator.displayName = "BreadcrumbSeparator"
 90:
 91: const BreadcrumbEllipsis = ({
 92: className,
 93:
      ...props
 94: }: React.ComponentProps<"span">) => (
 95: <span
 96:
       role="presentation"
       aria-hidden="true"
 97:
 98:
        className={cn("flex h-9 w-9 items-center justify-center", className)}
 99:
        {...props}
100: >
101:
        <MoreHorizontal className="h-4 w-4" />
102:
         <span className="sr-only">More</span>
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"
 5: import { cn } from "@/lib/utils"
 6:
 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:
13:
           destructive:
14:
             "bg-destructive text-destructive-foreground hover:bg-destructive/90",
15:
           outline:
16:
             "border border-input bg-background hover:bg-accent hover:text-accent-foreground",
17:
           secondary:
             "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:
           sm: "h-9 rounded-md px-3",
24:
25:
           lg: "h-11 rounded-md px-8",
           icon: "h-10 w-10",
26:
27:
         },
28:
      },
29:
      defaultVariants: {
30:
        variant: "default",
         size: "default",
31:
32:
        },
33: }
34: )
35:
36: export interface ButtonProps
37: extends React.ButtonHTMLAttributes<HTMLButtonElement>,
38:
       VariantProps<typeof buttonVariants> {
39:
      asChild?: boolean
40: }
42: const Button = React.forwardRef<HTMLButtonElement, ButtonProps>(
43: ({ className, variant, size, asChild = false, ...props }, ref) => {
44:
       const Comp = asChild ? Slot : "button"
45:
      return (
46:
         <Comp
47:
           className={cn(buttonVariants({ variant, size, className }))}
48:
           ref={ref}
49:
           {...props}
50:
         />
51:
      )
52:
     }
53: )
54: Button.displayName = "Button"
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"
6:
7: import { cn } from "@/lib/utils"
8: import { buttonVariants } from "@/components/ui/button"
9:
10: export type CalendarProps = React.ComponentProps<typeof DayPicker>
```

```
11:
12: function Calendar({
13: className,
14:
     classNames,
    showOutsideDays = true,
15:
16:
     ...props
17: }: CalendarProps) {
18:
    return (
19:
       <DayPicker
         showOutsideDays={showOutsideDays}
20:
         className={cn("p-3", className)}
21:
22:
         classNames={{
           months: "flex flex-col sm:flex-row space-y-4 sm:space-x-4 sm:space-y-0",
23:
           month: "space-y-4",
24:
25:
           caption: "flex justify-center pt-1 relative items-center",
26:
           caption_label: "text-sm font-medium",
27:
           nav: "space-x-1 flex items-center",
28:
           nav_button: cn(
             buttonVariants({ variant: "outline" }),
29:
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",
           table: "w-full border-collapse space-y-1",
34:
           head_row: "flex",
35:
           head_cell:
36:
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:
            day: cn(
             buttonVariants({ variant: "ghost" }),
41:
42:
              "h-9 w-9 p-0 font-normal aria-selected:opacity-100"
43:
            ) .
           day_range_end: "day-range-end",
44:
45:
           day_selected:
46:
              "bg-primary text-primary-foreground hover:bg-primary hover:text-primary-foreground focus:bg-prima
47:
            day_today: "bg-accent text-accent-foreground",
48:
           day outside:
49:
              "day-outside text-muted-foreground aria-selected:bg-accent/50 aria-selected:text-muted-foreground
           day_disabled: "text-muted-foreground opacity-50",
50:
51:
            day_range_middle:
52:
              "aria-selected:bg-accent aria-selected:text-accent-foreground",
53:
            day_hidden: "invisible",
54:
            ...classNames,
55:
          }}
56:
          components={{
            IconLeft: ({ ...props }) => <ChevronLeft className="h-4 w-4" />,
57:
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<
 6: HTMLDivElement,
    React.HTMLAttributes<HTMLDivElement>
 8: >(({ className, ...props }, ref) => (
 9:
    <div
10:
      ref={ref}
11:
      className={cn(
12:
        "rounded-lg border bg-card text-card-foreground shadow-sm",
```

```
13:
         className
14:
      ) }
15:
      {...props}
16:
17: ))
18: Card.displayName = "Card"
19:
20: const CardHeader = React.forwardRef<</pre>
21: HTMLDivElement,
22: React.HTMLAttributes<HTMLDivElement>
23: >(({ className, ...props }, ref) => (
24:
     <div
      ref={ref}
25:
       className={cn("flex flex-col space-y-1.5 p-6", className)}
26:
      \{\dots props\}
27:
28: />
29: ))
30: CardHeader.displayName = "CardHeader"
31:
32: const CardTitle = React.forwardRef<</pre>
33: HTMLDivElement,
34:
     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"
47: const CardDescription = React.forwardRef<
48: HTMLDivElement,
49:
     React.HTMLAttributes<HTMLDivElement>
50: >(({ className, ...props }, ref) => (
51: <div
      ref={ref}
52:
53:
       className={cn("text-sm text-muted-foreground", className)}
      \{\dots props\}
54:
55: />
56: ))
57: CardDescription.displayName = "CardDescription"
58:
59: const CardContent = React.forwardRef<</pre>
60: HTMLDivElement,
61: 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<</pre>
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)}
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"
11:
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 = {
     carouselRef: ReturnType<typeof useEmblaCarousel>[0]
26: api: ReturnType<typeof useEmblaCarousel>[1]
27: scrollPrev: () => void
28: scrollNext: () => void
29: canScrollPrev: boolean
30: canScrollNext: boolean
     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 Erro
      throw new Error("useCarousel must be used within a <Carousel />")
40: }
42:
    return context
43: }
44:
45: const Carousel = React.forwardRef<
46: HTMLDivElement,
47:
     React.HTMLAttributes<HTMLDivElement> & CarouselProps
48: >(
49: (
      {
51:
        orientation = "horizontal",
52:
        opts,
53:
         setApi,
54:
         plugins,
55:
        className,
        children,
56:
57:
         ...props
      },
58:
59:
       ref
60: ) => {
      const [carouselRef, api] = useEmblaCarousel(
61:
62:
        {
63:
            ...opts,
64:
           axis: orientation === "horizontal" ? "x" : "y",
65:
         },
        plugins
66:
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:
 84:
        const scrollNext = React.useCallback(() => {
 85:
          api?.scrollNext()
 86:
         }, [api])
 87:
 88:
         const handleKeyDown = React.useCallback(
 89:
          (event: React.KeyboardEvent<HTMLDivElement>) => {
            if (event.key === "ArrowLeft") {
 90:
 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)
115:
         api.on("reInit", onSelect)
116:
          api.on("select", onSelect)
117:
118:
          return () => {
119:
            api?.off("select", onSelect)
120:
121:
         }, [api, onSelect])
122:
123:
       return (
124:
          <CarouselContext.Provider
125:
           value={{
126:
              carouselRef,
              api: api,
127:
128:
              opts,
129:
              orientation:
               orientation || (opts?.axis === "y" ? "vertical" : "horizontal"),
130:
131:
              scrollPrev,
132:
              scrollNext,
133:
              canScrollPrev,
134:
              canScrollNext,
135:
            }}
136:
137:
             <div
138:
             ref={ref}
              onKeyDownCapture={handleKeyDown}
139:
140:
              className={cn("relative", className)}
141:
              role="region"
142:
              aria-roledescription="carousel"
143:
              {...props}
144:
```

```
145:
              {children}
146:
            </div>
147:
          </CarouselContext.Provider>
148:
        )
149: }
150: )
151: Carousel.displayName = "Carousel"
152:
153: const CarouselContent = React.forwardRef<</pre>
154: HTMLDivElement.
155: React.HTMLAttributes<HTMLDivElement>
156: >(({ className, ...props }, ref) => {
      const { carouselRef, orientation } = useCarousel()
158:
159:
      return (
160:
       <div ref={carouselRef} className="overflow-hidden">
         <div
161:
162:
            ref={ref}
163:
            className={cn(
164:
              "flex",
165:
             orientation === "horizontal" ? "-ml-4" : "-mt-4 flex-col",
166:
              className
167:
            ) }
168:
            {...props}
169:
          />
        </div>
170:
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()
180:
181:
      return (
182:
       <div
183:
         ref={ref}
         role="group"
184:
185:
          aria-roledescription="slide"
186:
          className={cn(
          "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"
197: const CarouselPrevious = React.forwardRef<
198: HTMLButtonElement,
199: React.ComponentPro
      React.ComponentProps<typeof Button>
200: >((\{ className, variant = "outline", size = "icon", ...props \}, ref) => \{
201: const { orientation, scrollPrev, canScrollPrev } = useCarousel()
202:
203:
      return (
204:
        <Button
205:
          ref={ref}
206:
          variant={variant}
207:
          size={size}
208:
          className={cn(
            "absolute h-8 w-8 rounded-full",
209:
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:
         ) }
215:
          disabled={!canScrollPrev}
216:
          onClick={scrollPrev}
217:
          {...props}
```

```
218:
219:
          <ArrowLeft className="h-4 w-4" />
220:
          <span className="sr-only">Previous slide</span>
221:
        </Button>
222: )
223: })
224: CarouselPrevious.displayName = "CarouselPrevious"
225:
226: const CarouselNext = React.forwardRef<
227: HTMLButtonElement,
228: React.ComponentProps<typeof Button>
229: >(({ className, variant = "outline", size = "icon", ...props }, ref) => {
     const { orientation, scrollNext, canScrollNext } = useCarousel()
231:
232:
      return (
       <Button
233:
234:
        ref={ref}
235:
          variant={variant}
236:
          size={size}
237:
         className={cn(
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}
          onClick={scrollNext}
245:
246:
          \{\dots 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: CarouselC
      CarouselContent,
259: CarouselItem,
260: CarouselPrevious,
261: CarouselNext,
262: }
```

■ File: components\ui\chart.tsx

```
______
 1: "use client"
 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]: {
     label?: React.ReactNode
13:
14:
       icon?: React.ComponentType
15: } & (
     | { 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)
30:
     if (!context) {
      throw new Error("useChart must be used within a <ChartContainer />")
31:
32:
33:
34:
     return context
35: }
36:
37: const ChartContainer = React.forwardRef<</pre>
38: HTMLDivElement.
39: React.ComponentProps<"div"> & {
40:
     config: ChartConfig
41:
      children: React.ComponentProps<
         typeof RechartsPrimitive.ResponsiveContainer
42:
       >["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 (
50:
       <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:
           <ChartStyle id={chartId} config={config} />
60:
61:
           <RechartsPrimitive.ResponsiveContainer>
62:
             {children}
63:
           </RechartsPrimitive.ResponsiveContainer>
64:
         </div>
65:
        </ChartContext.Provider>
67: })
68: ChartContainer.displayName = "Chart"
69:
70: const ChartStyle = ({ id, confiq }: { id: string; confiq: ChartConfiq }) => {
     const colorConfig = Object.entries(config).filter(
72:
      ([_, config]) => config.theme || config.color
73:
74:
75:
    if (!colorConfig.length) {
     return null
76:
77:
     }
78:
     return (
79:
:08
      <style
81:
         dangerouslySetInnerHTML={{
           __html: Object.entries(THEMES)
82:
              .map(
83:
               ([theme, prefix]) => `
85: ${prefix} [data-chart=${id}] {
86: ${colorConfig
87:
     .map(([key, itemConfig]) => {
88:
      const color =
89:
         itemConfig.theme?.[theme as keyof typeof itemConfig.theme] ||
90:
         itemConfig.color
91:
       return color ? ` --color-${key}: ${color};`: null
    })
92:
     .join("\n")}
93:
94: }
95:
96:
              )
```

```
.join("\n"),
 97:
 98:
          }}
 99:
       />
100:
      )
101: }
102:
103: const ChartTooltip = RechartsPrimitive.Tooltip
104:
105: const ChartTooltipContent = React.forwardRef<</pre>
106: HTMLDivElement,
      React.ComponentProps<typeof RechartsPrimitive.Tooltip> &
108:
       React.ComponentProps<"div"> & {
          hideLabel?: boolean
109:
110:
          hideIndicator?: boolean
111:
          indicator?: "line" | "dot" | "dashed"
112:
         nameKey?: string
          labelKey?: string
113:
114:
        }
115: >(
116:
     (
117:
118:
          active,
          payload,
119:
120:
          className.
121:
          indicator = "dot",
122:
          hideLabel = false,
123:
          hideIndicator = false,
124:
          label,
          labelFormatter,
126:
          labelClassName,
127:
          formatter,
128:
          color,
129:
          nameKey,
130:
         labelKey,
       },
131:
132:
        ref
133:
      ) => {
134:
        const { config } = useChart()
135:
136:
        const tooltipLabel = React.useMemo(() => {
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:
146:
              147:
              : itemConfig?.label
148:
149:
          if (labelFormatter) {
150:
            return (
151:
              <div className={cn("font-medium", labelClassName)}>
                {labelFormatter(value, payload)}
152:
153:
              </div>
154:
            )
           }
155:
156:
          if (!value) {
157:
158:
            return null
159:
           }
160:
          return <div className={cn("font-medium", labelClassName)}>{value}</div>
161:
162:
        },[
163:
          label,
164:
          labelFormatter,
165:
          payload,
166:
          hideLabel,
167:
          labelClassName,
168:
          config,
169:
           labelKey,
```

```
170:
         ])
171:
172:
         if (!active | | !payload?.length) {
173:
          return null
174:
175:
176:
         const nestLabel = payload.length === 1 && indicator !== "dot"
177:
178:
         return (
179:
           <div
180:
181:
             className={cn(
182:
                "grid min-w-[8rem] items-start gap-1.5 rounded-lg border border-border/50 bg-background px-2.5 py
               className
183:
184:
             ) }
185:
186:
             {!nestLabel ? tooltipLabel : null}
187:
             <div className="grid gap-1.5">
               {payload.map((item, index) => {
188:
                 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
                     key={item.dataKey}
195:
196:
                     className={cn(
                        "flex w-full flex-wrap items-stretch gap-2 [&>svg]:h-2.5 [&>svg]:w-2.5 [&>svg]:text-muted
197:
                        indicator === "dot" && "items-center"
198:
199:
                     ) }
200:
201:
                      {formatter && item?.value !== undefined && item.name ? (
                        formatter(item.value, item.name, item, index, item.payload)
202:
                      ) : (
203:
204:
                        <>
205:
                          {itemConfig?.icon ? (
206:
                            <itemConfig.icon />
                          ) : (
207:
208:
                            !hideIndicator && (
209:
                              <div
210:
                                className={cn(
211:
                                  "shrink-0 rounded-[2px] border-[--color-border] bg-[--color-bg]",
212:
213:
                                    "h-2.5 w-2.5": indicator === "dot",
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(
231:
                              "flex flex-1 justify-between leading-none",
232:
                              nestLabel ? "items-end" : "items-center"
233:
                            ) }
234:
235:
                            <div className="grid gap-1.5">
236:
                              {nestLabel ? tooltipLabel : null}
237:
                              <span className="text-muted-foreground">
238:
                                {itemConfig?.label || item.name}
239:
                              </span>
240:
                            </div>
241:
                            {item.value && (
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:
               })}
             </div>
252:
253:
           </div>
254:
        )
255:
      }
256: )
257: ChartTooltipContent.displayName = "ChartTooltip"
258:
259: const ChartLegend = RechartsPrimitive.Legend
260:
261: const ChartLegendContent = React.forwardRef<</pre>
262: HTMLDivElement,
263: React.ComponentProps<"div"> &
        Pick<RechartsPrimitive.LegendProps, "payload" | "verticalAlign"> & {
264:
265:
          hideIcon?: boolean
266:
          nameKey?: string
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",
               verticalAlign === "top" ? "pb-3" : "pt-3",
284:
285:
               className
286:
             ) }
287:
288:
             {payload.map((item) => {
               const key = `${nameKey || item.dataKey || "value"}`
289:
290:
               const itemConfig = getPayloadConfigFromPayload(config, item, key)
291:
292:
               return (
293:
                 <div
                   key={item.value}
294:
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:
                   ) }
309:
                    {itemConfig?.label}
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: ) {
     if (typeof payload !== "object" || payload === null) {
325:
        return undefined
327:
328:
329:
      const payloadPayload =
        "payload" in payload &&
330:
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 (
344:
        payloadPayload &&
345:
       key in payloadPayload &&
        typeof payloadPayload[key as keyof typeof payloadPayload] === "string"
346:
347:
      ) {
348:
       configLabelKey = payloadPayload[
         key as keyof typeof payloadPayload
349:
350:
        ] as string
351:
      }
352:
353:
      return configLabelKey in config
354:
       ? config[configLabelKey]
355:
        : config[key as keyof typeof config]
356: }
357:
358: export {
359: ChartContainer,
360: ChartTooltip,
361: ChartTooltipC
      ChartTooltipContent,
362: ChartLegend,
363: ChartLegendContent,
364: ChartStyle,
365: }
```

■ File: components\ui\checkbox.tsx

```
______
 1: "use client"
 2:
 3: import * as React from "react"
 4: import * as CheckboxPrimitive from "@radix-ui/react-checkbox"
 5: import { Check } from "lucide-react'
 6:
 7: import { cn } from "@/lib/utils"
 8:
 9: const Checkbox = React.forwardRef<
10: React.ElementRef<typeof CheckboxPrimitive.Root>,
11: React.ComponentPropsWithoutRef<typeof CheckboxPrimitive.Root>
12: >(({ className, ...props }, ref) => (
13:
     <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:
21:
       <CheckboxPrimitive.Indicator</pre>
22:
        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
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"
11: const Command = React.forwardRef<</pre>
12: React.ElementRef<typeof CommandPrimitive>,
 13:
      React.ComponentPropsWithoutRef<typeof CommandPrimitive>
14: >(({ className, ...props }, ref) => (
     <CommandPrimitive
15:
      ref={ref}
16:
17:
       className={cn(
        "flex h-full w-full flex-col overflow-hidden rounded-md bg-popover text-popover-foreground",
18:
         className
 20:
       ) }
 21:
        {...props}
 22:
      />
 23: ))
 24: Command.displayName = CommandPrimitive.displayName
 25:
 26: const CommandDialog = ({ children, ...props }: DialogProps) => {
 27: return (
 28:
       <Dialog {...props}>
 29:
         <DialogContent className="overflow-hidden p-0 shadow-lg">
 30:
           <Command className="[&_[cmdk-group-heading]]:px-2 [&_[cmdk-group-heading]]:font-medium [&_[cmdk-group-heading]]</pre>
 31:
              {children}
           </Command>
 32:
 33:
         </DialogContent>
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="">
 43:
        <Search className="mr-2 h-4 w-4 shrink-0 opacity-50" />
 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}
 52:
      </div>
 53: ))
 54:
 55: CommandInput.displayName = CommandPrimitive.Input.displayName
 56:
 57: const CommandList = React.forwardRef<
      React.ElementRef<typeof CommandPrimitive.List>,
      React.ComponentPropsWithoutRef<typeof CommandPrimitive.List>
 60: >(({ className, ...props }, ref) => (
 61:
      <CommandPrimitive.List</pre>
 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
 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}
 76:
        className="py-6 text-center text-sm"
         {...props}
 77:
 78:
     />
 79: ))
 80:
 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
        ) }
 93:
        {...props}
 94:
      />
 95: ))
 96:
 97: CommandGroup.displayName = CommandPrimitive.Group.displayName
 98:
 99: const CommandSeparator = React.forwardRef<
100: React.ElementRef<typeof CommandPrimitive.Separator>,
101: React.ComponentPropsWithoutRef<typeof CommandPrimitive.Separator>
102: >(({ className, ...props }, ref) => (
      <CommandPrimitive.Separator
103:
        ref={ref}
104:
105:
         className={cn("-mx-1 h-px bg-border", className)}
106:
         {...props}
107:
      />
108: ))
109: CommandSeparator.displayName = CommandPrimitive.Separator.displayName
111: const CommandItem = React.forwardRef<</pre>
112: React.ElementRef<typeof CommandPrimitive.Item>,
      React.ComponentPropsWithoutRef<typeof CommandPrimitive.Item>
113:
```

```
114: >(({ className, ...props }, ref) => (
115: <CommandPrimitive.Item
116:
       ref={ref}
117:
       className={cn(
         "relative flex cursor-default gap-2 select-none items-center rounded-sm px-2 py-1.5 text-sm outline-n
118:
119:
          className
       ) }
120:
121:
       \{\dotsprops\}
     />
122:
123: ))
124:
125: CommandItem.displayName = CommandPrimitive.Item.displayName
126:
127: const CommandShortcut = ({
128: className,
129: ...props
130: }: React.HTMLAttributes<HTMLSpanElement>) => {
131:
     return (
132:
        <span
         className={cn(
134:
            "ml-auto text-xs tracking-widest text-muted-foreground",
135:
            className
         ) }
136:
         {...props}
137:
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
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>
 22: React.ElementRef<typeof ContextMenuPrimitive.SubTrigger>,
 23:
     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
 31:
           inset && "pl-8",
 32:
          className
 33:
        ) }
 34:
        {...props}
 35:
 36:
         {children}
 37:
         <ChevronRight className="ml-auto h-4 w-4" />
 38:
      </ContextMenuPrimitive.SubTrigger>
 39: ))
 40: ContextMenuSubTrigger.displayName = ContextMenuPrimitive.SubTrigger.displayName
 41:
 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
 56:
 57: const ContextMenuContent = React.forwardRef<
 58: React.ElementRef<typeof ContextMenuPrimitive.Content>,
 59:
      React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.Content>
 60: >(({ className, ...props }, ref) => (
 61:
     <ContextMenuPrimitive.Portal>
        <ContextMenuPrimitive.Content
 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
 73:
 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) => (
     <ContextMenuPrimitive.Item
 81:
       ref={ref}
 82:
       className={cn(
 83:
           "relative flex cursor-default select-none items-center rounded-sm px-2 py-1.5 text-sm outline-none fo
          inset && "pl-8",
 84:
 85:
          className
 86:
        ) }
 87:
         {...props}
      />
 88:
 89: ))
 90: ContextMenuItem.displayName = ContextMenuPrimitive.Item.displayName
 91:
 92: const ContextMenuCheckboxItem = React.forwardRef<
 93:
     React.ElementRef<typeof ContextMenuPrimitive.CheckboxItem>,
     React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.CheckboxItem>
 95: >(({ className, children, checked, ...props }, ref) => (
 96:
      <ContextMenuPrimitive.CheckboxItem
 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:
       <span className="absolute left-2 flex h-3.5 w-3.5 items-center justify-center">
105:
106:
          <ContextMenuPrimitive.ItemIndicator>
107:
            <Check className="h-4 w-4" />
108:
          </ContextMenuPrimitive.ItemIndicator>
109:
        </span>
         {children}
110:
111:
     </ContextMenuPrimitive.CheckboxItem>
112: ))
113: ContextMenuCheckboxItem.displayName =
114:
      ContextMenuPrimitive.CheckboxItem.displayName
115:
116: const ContextMenuRadioItem = React.forwardRef<</pre>
117: React.ElementRef<typeof ContextMenuPrimitive.RadioItem>,
      React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.RadioItem>
118:
119: >(({ className, children, ...props }, ref) => (
120:
      <ContextMenuPrimitive.RadioItem</pre>
       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:
          className
125:
        ) }
126:
        {...props}
127:
128:
        <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}
134: </ContextMenuPrimitive.RadioItem>
135: ))
136: ContextMenuRadioItem.displayName = ContextMenuPrimitive.RadioItem.displayName
137:
138: const ContextMenuLabel = React.forwardRef<
139: React.ElementRef<typeof ContextMenuPrimitive.Label>,
140: React.ComponentPropsWithoutRef<typeof ContextMenuPrimitive.Label> & {
141:
       inset?: boolean
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
155:
156: const ContextMenuSeparator = React.forwardRef<</pre>
157: React.ElementRef<typeof ContextMenuPrimitive.Separator>,
158: 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
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:
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,
191:
      ContextMenuLabel,
192:
      ContextMenuSeparator,
193: ContextMenuShortcut,
194: ContextMenuGroup,
195: ContextMenuPortal
196:
      ContextMenuSub,
197:
      ContextMenuSubContent,
198: ContextMenuSubTrigger,
199: ContextMenuRadioGroup,
200: }
```

■ File: components\ui\dialog.tsx

42:

className

```
______
 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
13: const DialogPortal = DialogPrimitive.Portal
14:
15: const DialogClose = DialogPrimitive.Close
16:
17: const DialogOverlay = React.forwardRef<</pre>
18: React.ElementRef<typeof DialogPrimitive.Overlay>,
      React.ComponentPropsWithoutRef<typeof DialogPrimitive.Overlay>
19:
20: >(({ className, ...props }, ref) => (
 21: <DialogPrimitive.Overlay
 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:
        {...props}
 28:
      />
 29: ))
30: DialogOverlay.displayName = DialogPrimitive.Overlay.displayName
 32: const DialogContent = React.forwardRef<</pre>
     React.ElementRef<typeof DialogPrimitive.Content>,
 33:
     React.ComponentPropsWithoutRef<typeof DialogPrimitive.Content>
 35: >(({ className, children, ...props }, ref) => (
36:
     <DialogPortal>
 37:
       <DialogOverlay />
38:
       <DialogPrimitive.Content</pre>
39:
        ref={ref}
 40:
        className={cn(
            "fixed left-[50%] top-[50%] z-50 grid w-full max-w-lg translate-x-[-50%] translate-y-[-50%] gap-4 b
 41:
```

```
43:
           ) }
 44:
          {...props}
 45:
 46:
           {children}
           <DialogPrimitive.Close className="absolute right-4 top-4 rounded-sm opacity-70 ring-offset-background</pre>
 47:
 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
 55:
 56: const DialogHeader = ({
 57: className,
 58:
       ...props
 59: }: React.HTMLAttributes<HTMLDivElement>) => (
 60:
        className={cn(
 61:
           "flex flex-col space-y-1.5 text-center sm:text-left",
 63:
           className
 64:
         ) }
         {...props}
 65:
 66: />
 67: )
 68: DialogHeader.displayName = "DialogHeader"
 69:
 70: const DialogFooter = ({
 71: className,
 72:
      ...props
 73: }: React.HTMLAttributes<HTMLDivElement>) => (
 74:
 75:
        className={cn(
           "flex flex-col-reverse sm:flex-row sm:justify-end sm:space-x-2",
 76:
 77:
           className
 78:
        ) }
 79:
         {...props}
 80:
 81: )
 82: DialogFooter.displayName = "DialogFooter"
 83:
 84: const DialogTitle = React.forwardRef<
 85: React.ElementRef<typeof DialogPrimitive.Title>,
 86: React.ComponentPropsWithoutRef<typeof DialogPrimitive.Title>
 87: >(({ className, ...props }, ref) => (
 88:
      <DialogPrimitive.Title</pre>
 89:
       ref={ref}
 90:
       className={cn(
 91:
          "text-lg font-semibold leading-none tracking-tight",
 92:
 93:
         ) }
 94:
         {...props}
 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) => (
103: <DialogPrimitive.Description
104:
       ref={ref}
105:
       className={cn("text-sm text-muted-foreground", className)}
106:
         {...props}
107:
     />
108: ))
109: DialogDescription.displayName = DialogPrimitive.Description.displayName
110:
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

61: }: React.HTMLAttributes<HTMLDivElement>) => (

```
______
 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: <DrawerPrimitive.Root
       shouldScaleBackground={shouldScaleBackground}
14:
       \{\ldotsprops\}
15:
16: )
17: Drawer.displayName = "Drawer"
18:
19: const DrawerTrigger = DrawerPrimitive.Trigger
20:
21: const DrawerPortal = DrawerPrimitive.Portal
 23: const DrawerClose = DrawerPrimitive.Close
 25: const DrawerOverlay = React.forwardRef<
 26: React.ElementRef<typeof DrawerPrimitive.Overlay>,
 27: React.ComponentPropsWithoutRef<typeof DrawerPrimitive.Overlay>
 28: >(({ className, ...props }, ref) => (
 29:
     <DrawerPrimitive.Overlay</pre>
30:
       ref={ref}
       className={cn("fixed inset-0 z-50 bg-black/80", className)}
 32:
       {...props}
 33:
      />
 34: ))
35: DrawerOverlay.displayName = DrawerPrimitive.Overlay.displayName
 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:
       <DrawerOverlay />
 43:
       <DrawerPrimitive.Content</pre>
 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
```

```
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:
 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</pre>
 85:
       ref={ref}
 86:
       className={cn(
        "text-lg font-semibold leading-none tracking-tight",
 87:
 88:
          className
       ) }
 89:
        {...props}
 91:
      />
 92: ))
 93: DrawerTitle.displayName = DrawerPrimitive.Title.displayName
 94:
 95: const DrawerDescription = React.forwardRef<
 96: React.ElementRef<typeof DrawerPrimitive.Description>,
      React.ComponentPropsWithoutRef<typeof DrawerPrimitive.Description>
 98: >(({ className, ...props }, ref) => (
 99: <DrawerPrimitive.Description
100:
       ref={ref}
        className={cn("text-sm text-muted-foreground", className)}
101:
102:
        {...props}
103: />
104: ))
105: DrawerDescription.displayName = DrawerPrimitive.Description.displayName
106:
107: export {
108: Drawer,
109: DrawerPortal,
110: DrawerOverlay,
111: DrawerTrigger,
      DrawerTrigger,
112: DrawerClose,
113: DrawerContent,
114: DrawerHeader,
115:
116:
      DrawerFooter,
      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"
6:
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
16:
17: const DropdownMenuSub = DropdownMenuPrimitive.Sub
18:
19: const DropdownMenuRadioGroup = DropdownMenuPrimitive.RadioGroup
20:
21: const DropdownMenuSubTrigger = React.forwardRef<</pre>
     React.ElementRef<typeof DropdownMenuPrimitive.SubTrigger>,
23:
     React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.SubTrigger> & {
        inset?: boolean
25:
26: >(({ className, inset, children, ...props }, ref) => (
27:
    <DropdownMenuPrimitive.SubTrigger</pre>
28:
       ref={ref}
29:
       className={cn(
          "flex cursor-default gap-2 select-none items-center rounded-sm px-2 py-1.5 text-sm outline-none focus
30:
31:
         inset && "pl-8",
32:
         className
33:
       ) }
34:
        {...props}
35:
       {children}
36:
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>,
45: React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.SubContent>
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 =
57:
     DropdownMenuPrimitive.SubContent.displayName
58:
59: const DropdownMenuContent = React.forwardRef<
60: React.ElementRef<typeof DropdownMenuPrimitive.Content>,
     React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.Content>
61:
62: >(({ className, sideOffset = 4, ...props }, ref) => (
    <DropdownMenuPrimitive.Portal>
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:
            className
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(
           "relative flex cursor-default select-none items-center gap-2 rounded-sm px-2 py-1.5 text-sm outline-n
 86:
 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>
 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:
           className
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
119: const DropdownMenuRadioItem = React.forwardRef<
120:
      React.ElementRef<typeof DropdownMenuPrimitive.RadioItem>,
      React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.RadioItem>
122: >(({ className, children, ...props }, ref) => (
123:
      <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">
          <DropdownMenuPrimitive.ItemIndicator>
132:
             <Circle className="h-2 w-2 fill-current" />
133:
           </DropdownMenuPrimitive.ItemIndicator>
134:
135:
         </span>
         {children}
137:
      </DropdownMenuPrimitive.RadioItem>
138: ))
139: DropdownMenuRadioItem.displayName = DropdownMenuPrimitive.RadioItem.displayName
140:
141: const DropdownMenuLabel = React.forwardRef<
142: React.ElementRef<typeof DropdownMenuPrimitive.Label>,
143:
      React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.Label> & {
144:
         inset?: boolean
145:
146: >(({ className, inset, ...props }, ref) => (
147:
      <DropdownMenuPrimitive.Label</pre>
148:
        ref={ref}
         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: \quad \texttt{React.ElementRef} < \texttt{typeof DropdownMenuPrimitive.Separator} > \texttt{,}
      React.ComponentPropsWithoutRef<typeof DropdownMenuPrimitive.Separator>
162: >(({ className, ...props }, ref) => (
163: <DropdownMenuPrimitive.Separator</pre>
164:
       ref={ref}
       className={cn("-mx-1 my-1 h-px bg-muted", className)}
165:
166:
         {...props}
167: />
168: ))
169: DropdownMenuSeparator.displayName = DropdownMenuPrimitive.Separator.displayName
170:
171: const DropdownMenuShortcut = ({
172: className.
173: ...props
174: }: React.HTMLAttributes<HTMLSpanElement>) => {
175:
      return (
176:
         <span
          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: DropdownMenuCheck
      DropdownMenuCheckboxItem,
190: DropdownMenuRadioItem,
191: DropdownMenuLabel,
192: DropdownMenuSeparator,
193:
      DropdownMenuShortcut,
194:
      DropdownMenuGroup,
195: DropdownMenuPortal,
196: DropdownMenuSub,
197: DropdownMenuSubContent,198: DropdownMenuSubTrigger,
      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<
21: TFieldValues extends FieldValues = FieldValues,
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 = <
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 }}>
        <Controller {...props} />
39:
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) {
52:
       throw new Error("useFormField should be used within <FormField>")
53:
54:
55:
     const { id } = itemContext
56:
57:
     return {
58:
      id.
      name: fieldContext.name,
59:
      formItemId: `${id}-form-item`,
60:
61:
       formDescriptionId: `${id}-form-item-description`,
      formMessageId: `${id}-form-item-message`,
62:
63:
       ...fieldState,
64: }
65: }
66:
67: type FormItemContextValue = {
68: id: string
69: }
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: return (
     <FormItemContext.Provider value={{ id }}>
82:
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<</pre>
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:
          {...props}
101:
       />
102:
103: })
104: FormLabel.displayName = "FormLabel"
105:
106: const FormControl = React.forwardRef<</pre>
107: React.ElementRef<typeof Slot>,
108: React.ComponentPropsWithoutRef<typeof Slot>
109: >(({ ...props }, ref) => {
110: const { error, formItemId, formDescriptionId, formMessageId } = useFormField()
111:
112:
      return (
113:
       <Slot
114:
         ref={ref}
115:
         id={formItemId}
116:
         aria-describedby={
117:
            !error
118:
              ? `${formDescriptionId}`
              : `${formDescriptionId} ${formMessageId}`
119:
         }
120:
121:
          aria-invalid={!!error}
         \{\dots props\}
122:
123:
124:
     )
125: })
126: FormControl.displayName = "FormControl"
128: const FormDescription = React.forwardRef<
129: HTMLParagraphElement,
130: React.HTMLAttributes<
      React.HTMLAttributes<HTMLParagraphElement>
131: >(({ className, ...props }, ref) => {
132: const { formDescriptionId } = useFormField()
133:
134:
      return (
135:
        <p
136:
         ref={ref}
137:
         id={formDescriptionId}
         className={cn("text-sm text-muted-foreground", className)}
138:
139:
          {...props}
140:
       />
141: )
142: })
143: FormDescription.displayName = "FormDescription"
144:
145: const FormMessage = React.forwardRef<
146: HTMLParagraphElement,
147: React.HTMLAttributes<HTMLParagraphElement>
148: >(({ className, children, ...props }, ref) => {
149: const { error, formMessageId } = useFormField()
150: const body = error ? String(error?.message) : children
151:
      if (!body) {
152:
153:
        return null
      }
154:
155:
156:
      return (
157:
       <p
         ref={ref}
158:
159:
         id={formMessageId}
160:
         className={cn("text-sm font-medium text-destructive", className)}
161:
         {...props}
162:
163:
          {body}
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"
 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>,
     React.ComponentPropsWithoutRef<typeof HoverCardPrimitive.Content>
14:
15: >(({ className, align = "center", sideOffset = 4, ...props }, ref) => (
16:
     <HoverCardPrimitive.Content</pre>
      ref={ref}
18:
      align={align}
19:
      sideOffset={sideOffset}
20:
       className={cn(
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
28:
 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"
 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(
16:
        "flex items-center gap-2 has-[:disabled]:opacity-50",
17:
         containerClassName
      ) }
18:
19:
       className={cn("disabled:cursor-not-allowed", className)}
20:
       {...props}
21:
     />
22: ))
23: InputOTP.displayName = "InputOTP"
25: const InputOTPGroup = React.forwardRef<</pre>
26: React.ElementRef<"div">,
27:
     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:
40:
     return (
41:
       <div
42:
        ref={ref}
43:
         className={cn(
           "relative flex h-10 w-10 items-center justify-center border-y border-r border-input text-sm transit
44:
45:
           isActive && "z-10 ring-2 ring-ring ring-offset-background",
46:
           className
47:
         ) }
48:
         {...props}
49:
50:
          {char}
          {hasFakeCaret && (
51:
          <div className="pointer-events-none absolute inset-0 flex items-center justify-center">
52:
             <div className="h-4 w-px animate-caret-blink bg-foreground duration-1000" />
53:
54:
           </div>
        ) }
55:
56:
        </div>
57: )
58: })
59: InputOTPSlot.displayName = "InputOTPSlot"
60:
61: const InputOTPSeparator = React.forwardRef<
62: React.ElementRef<"div">,
     React.ComponentPropsWithoutRef<"div">
64: >(({ ...props }, ref) => (
65: <div ref={ref} role="separator" {...props}>
66:
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(
11:
            "flex h-10 w-full rounded-md border border-input bg-background px-3 py-2 text-base ring-offset-ba
12:
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> &
       VariantProps<typeof labelVariants>
17: >(({ className, ...props }, ref) => (
18: <LabelPrimitive.Root</pre>
19:
      ref={ref}
20:
       className={cn(labelVariants(), className)}
       {...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"
 6:
 7: import { cn } from "@/lib/utils"
 8:
 9: const MenubarMenu = MenubarPrimitive.Menu
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</pre>
       ref={ref}
 24:
 25:
       className={cn(
 26:
          "flex h-10 items-center space-x-1 rounded-md border bg-background p-1",
 27:
         className
       ) }
 29:
        {...props}
 30:
      />
 31: ))
 32: Menubar.displayName = MenubarPrimitive.Root.displayName
 34: const MenubarTrigger = React.forwardRef<</pre>
     React.ElementRef<typeof MenubarPrimitive.Trigger>,
     React.ComponentPropsWithoutRef<typeof MenubarPrimitive.Trigger>
 37: >(({ className, ...props }, ref) => (
 38: <MenubarPrimitive.Trigger
 39:
      ref={ref}
        className={cn(
 40:
```

```
41:
           "flex cursor-default select-none items-center rounded-sm px-3 py-1.5 text-sm font-medium outline-none
 42:
 43:
        ) }
 44:
         {...props}
      />
 45:
 46: ))
 47: MenubarTrigger.displayName = MenubarPrimitive.Trigger.displayName
 48:
 49: const MenubarSubTrigger = React.forwardRef<
      React.ElementRef<typeof MenubarPrimitive.SubTrigger>,
      React.ComponentPropsWithoutRef<typeof MenubarPrimitive.SubTrigger> & {
 52:
         inset?: boolean
 53:
 54: >(({ className, inset, children, ...props }, ref) => (
 55:
      <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}
         <ChevronRight className="ml-auto h-4 w-4" />
 65:
 66:
      </MenubarPrimitive.SubTrigger>
 67: ))
 68: MenubarSubTrigger.displayName = MenubarPrimitive.SubTrigger.displayName
 70: const MenubarSubContent = React.forwardRef<
 71: React.ElementRef<typeof MenubarPrimitive.SubContent>,
 72:
       React.ComponentPropsWithoutRef<typeof MenubarPrimitive.SubContent>
 73: >(({ className, ...props }, ref) => (
     <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
 78:
           className
 79:
        ) }
 80:
         {...props}
 81:
 82: ))
 83: MenubarSubContent.displayName = MenubarPrimitive.SubContent.displayName
 84:
 85: const MenubarContent = React.forwardRef<</pre>
      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:
               className
102:
             ) }
103:
             {...props}
104:
105:
         </MenubarPrimitive.Portal>
106:
107: )
108: MenubarContent.displayName = MenubarPrimitive.Content.displayName
109:
110: const MenubarItem = React.forwardRef<
       React.ElementRef<typeof MenubarPrimitive.Item>,
111:
112:
      React.ComponentPropsWithoutRef<typeof MenubarPrimitive.Item> & {
113:
         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>,
      React.ComponentPropsWithoutRef<typeof MenubarPrimitive.CheckboxItem>
130:
131: >(({ className, children, checked, ...props }, ref) => (
132:
      <MenubarPrimitive.CheckboxItem</pre>
        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:
        ) }
        checked={checked}
138:
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" />
144:
          </MenubarPrimitive.ItemIndicator>
145:
         </span>
         {children}
146:
147:
      </MenubarPrimitive.CheckboxItem>
148: ))
149: MenubarCheckboxItem.displayName = MenubarPrimitive.CheckboxItem.displayName
150:
151: const MenubarRadioItem = React.forwardRef<
152: React.ElementRef<typeof MenubarPrimitive.RadioItem>,
153:
      React.ComponentPropsWithoutRef<typeof MenubarPrimitive.RadioItem>
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:
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</pre>
180:
       ref={ref}
181:
        className={cn(
182:
           "px-2 py-1.5 text-sm font-semibold",
          inset && "pl-8",
183:
184:
          className
185:
        ) }
186:
         {...props}
```

```
187:
     />
188: ))
189: MenubarLabel.displayName = MenubarPrimitive.Label.displayName
191: const MenubarSeparator = React.forwardRef<</pre>
192: React.ElementRef<typeof MenubarPrimitive.Separator>,
193: React.ComponentPropsWithoutRef<typeof MenubarPrimitive.Separator>
194: >(({ className, ...props }, ref) => (
      <MenubarPrimitive.Separator</pre>
196:
        ref={ref}
        className={cn("-mx-1 my-1 h-px bg-muted", className)}
197:
198:
       {...props}
199:
200: ))
201: MenubarSeparator.displayName = MenubarPrimitive.Separator.displayName
202:
203: const MenubarShortcut = ({
204: className,
205:
       ...props
206: }: React.HTMLAttributes<HTMLSpanElement>) => {
207: return (
208:
       <span
209:
          className={cn(
210:
            "ml-auto text-xs tracking-widest text-muted-foreground",
211:
212:
         ) }
213:
          {...props}
        />
214:
215: )
216: }
217: MenubarShortcut.displayname = "MenubarShortcut"
218:
219: export {
220: Menubar,
221: MenubarMenu,
222:
      MenubarTrigger,
223:
      MenubarContent,
224: MenubarItem,
225: MenubarSeparator,
226: MenubarLabel,
227: MenubarCheckbe
      MenubarCheckboxItem,
228: MenubarRadioGroup,
229: MenubarRadioItem,
230: MenubarPortal,
231:
232:
      MenubarSubContent,
      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>,
     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:
17:
       ) }
 18:
        {...props}
```

```
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>,
28:
     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:
          className
35:
       ) }
36:
        {...props}
37:
     />
38: ))
39: NavigationMenuList.displayName = NavigationMenuPrimitive.List.displayName
40:
41: const NavigationMenuItem = NavigationMenuPrimitive.Item
42:
43: const navigationMenuTriggerStyle = cva(
44: "group inline-flex h-10 w-max items-center justify-center rounded-md bg-background px-4 py-2 text-sm font
45: )
46:
47: const NavigationMenuTrigger = React.forwardRef<
48: React.ElementRef<typeof NavigationMenuPrimitive.Trigger>,
49:
     React.ComponentPropsWithoutRef<typeof NavigationMenuPrimitive.Trigger>
50: >(({ className, children, ...props }, ref) => (
51:
    <NavigationMenuPrimitive.Trigger</pre>
       ref={ref}
       className={cn(navigationMenuTriggerStyle(), "group", className)}
53:
54:
       {...props}
55:
56:
       {children}{" "}
57:
       <ChevronDown
         className="relative top-[1px] ml-1 h-3 w-3 transition duration-200 group-data-[state=open]:rotate-180
58:
59:
         aria-hidden="true"
60:
       />
61:
     </NavigationMenuPrimitive.Trigger>
62: ))
63: NavigationMenuTrigger.displayName = NavigationMenuPrimitive.Trigger.displayName
64:
65: const NavigationMenuContent = React.forwardRef<
66: React.ElementRef<typeof NavigationMenuPrimitive.Content>,
67:
     React.ComponentPropsWithoutRef<typeof NavigationMenuPrimitive.Content>
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:
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>,
    React.ComponentPropsWithoutRef<typeof NavigationMenuPrimitive.Viewport>
85: >(({ className, ...props }, ref) => (
     <div className={cn("absolute left-0 top-full flex justify-center")}>
86:
87:
        <NavigationMenuPrimitive.Viewport</pre>
88:
         className={cn(
89:
            "origin-top-center relative mt-1.5 h-[var(--radix-navigation-menu-viewport-height)] w-full overflow
90:
            className
91:
```

```
92:
          ref={ref}
 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:
        {...props}
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: NavigationMenuConte
      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"
      aria-label="pagination"
11:
       className={cn("mx-auto flex w-full justify-center", className)}
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:
     <l
 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.
     React.ComponentProps<"li">
 31:
```

```
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",
 46:
      ...props
 47: }: PaginationLinkProps) => (
 48:
      <a
 49:
       aria-current={isActive ? "page" : undefined}
 50:
       className={cn(
 51:
         buttonVariants({
           variant: isActive ? "outline" : "ghost",
 52:
 53:
            size,
 54:
          }),
 55:
         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"
        size="default"
 68:
 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,
 80:
      ...props
 81: }: React.ComponentProps<typeof PaginationLink>) => (
 82: <PaginationLink
       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">) => (
 98: <span
 99:
       aria-hidden
100:
        className={cn("flex h-9 w-9 items-center justify-center", className)}
101:
        {...props}
102:
        <MoreHorizontal className="h-4 w-4" />
103:
104:
        <span className="sr-only">More pages</span>
```

```
105: </span>
106: )
107: PaginationEllipsis.displayName = "PaginationEllipsis"
108:
109: export {
110: Pagination,
111: PaginationContent,
112: PaginationEllipsis,
113: PaginationItem,
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"
 5:
 6: import { cn } from "@/lib/utils"
 7:
 8: const Popover = PopoverPrimitive.Root
 9:
10: const PopoverTrigger = PopoverPrimitive.Trigger
12: const PopoverContent = React.forwardRef<</pre>
{\tt 13:} \qquad {\tt React.ElementRef < type of \ Popover Primitive. Content > ,}
 14:
     React.ComponentPropsWithoutRef<typeof PopoverPrimitive.Content>
15: >(({ className, align = "center", sideOffset = 4, ...props }, ref) => (
 16: <PopoverPrimitive.Portal>
17:
       <PopoverPrimitive.Content</pre>
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:
         \{\dotsprops\}
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"
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) => (
    <ProgressPrimitive.Root</pre>
13:
      ref={ref}
      className={cn(
14:
         "relative h-4 w-full overflow-hidden rounded-full bg-secondary",
15:
16:
         className
17:
       ) }
18:
       {...props}
19:
```

■ 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:
         \{\dots props\}
17:
         ref={ref}
18:
19: )
 20: })
 21: RadioGroup.displayName = RadioGroupPrimitive.Root.displayName
23: const RadioGroupItem = React.forwardRef<
 24: React.ElementRef<typeof RadioGroupPrimitive.Item>,
 25: React.ComponentPropsWithoutRef<typeof RadioGroupPrimitive.Item>
 26: >(({ className, ...props }, ref) => {
 27: return (
 28:
      <RadioGroupPrimitive.Item
 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:
         \{\dotsprops\}
 35:
 36:
         <RadioGroupPrimitive.Indicator className="flex items-center justify-center">
37:
           <Circle className="h-2.5 w-2.5 fill-current text-current" />
         </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
13:
      className={cn(
14:
          "flex h-full w-full data-[panel-group-direction=vertical]:flex-col",
15:
         className
16:
       ) }
17:
       {...props}
18:
     />
19: )
20:
21: const ResizablePanel = ResizablePrimitive.Panel
23: const ResizableHandle = ({
24: withHandle,
25: className,
     ...props
27: }: React.ComponentProps<typeof ResizablePrimitive.PanelResizeHandle> & {
     withHandle?: boolean
29: }) => (
30: <ResizablePrimitive.PanelResizeHandle
31:
      className={cn(
32:
          "relative flex w-px items-center justify-center bg-border after:absolute after:inset-y-0 after:left-1
33:
         className
34:
       ) }
35:
       {...props}
36:
37:
      {withHandle && (
         <div className="z-10 flex h-4 w-3 items-center justify-center rounded-sm border bg-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"
 7:
 8: const ScrollArea = React.forwardRef<
 9: React.ElementRef<typeof ScrollAreaPrimitive.Root>,
     React.ComponentPropsWithoutRef<typeof ScrollAreaPrimitive.Root>
 10:
11: >(({ className, children, ...props }, ref) => (
    <ScrollAreaPrimitive.Root</pre>
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
 25:
 26: const ScrollBar = React.forwardRef<
 27: React.ElementRef<typeof ScrollAreaPrimitive.ScrollAreaScrollbar>,
     React.ComponentPropsWithoutRef<typeof ScrollAreaPrimitive.ScrollAreaScrollbar>
 29: >(({ className, orientation = "vertical", ...props }, ref) => (
 30: <ScrollAreaPrimitive.ScrollAreaScrollbar
 31:
 32:
       orientation={orientation}
 33:
        className={cn(
```

```
34:
         "flex touch-none select-none transition-colors",
35:
         orientation === "vertical" &&
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:
       {...props}
42:
       <ScrollAreaPrimitive.ScrollAreaThumb className="relative flex-1 rounded-full bg-border" />
43:
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"
 6:
 7: import { cn } from "@/lib/utils"
 8:
 9: const Select = SelectPrimitive.Root
10:
11: const SelectGroup = SelectPrimitive.Group
12:
13: const SelectValue = SelectPrimitive.Value
15: const SelectTrigger = React.forwardRef<</pre>
     React.ElementRef<typeof SelectPrimitive.Trigger>,
16:
17:
     React.ComponentPropsWithoutRef<typeof SelectPrimitive.Trigger>
18: >(({ className, children, ...props }, ref) => (
19:
     <SelectPrimitive.Trigger
 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
         className
 24:
       ) }
 25:
       \{\dotsprops\}
 26:
 27:
        {children}
 28:
       <SelectPrimitive.Icon asChild>
         <ChevronDown className="h-4 w-4 opacity-50" />
 29:
 30:
        </SelectPrimitive.Icon>
31: </SelectPrimitive.Trigger>
 32: ))
 33: SelectTrigger.displayName = SelectPrimitive.Trigger.displayName
 34:
 35: const SelectScrollUpButton = React.forwardRef<</pre>
 36: React.ElementRef<typeof SelectPrimitive.ScrollUpButton>,
 37: React.ComponentPropsWithoutRef<typeof SelectPrimitive.ScrollUpButton>
 38: >(({ className, ...props }, ref) => (
 39:
     <SelectPrimitive.ScrollUpButton
 40:
       ref={ref}
 41:
       className={cn(
 42:
         "flex cursor-default items-center justify-center py-1",
 43:
          className
 44:
        ) }
 45:
        {...props}
 46: >
 47:
        <ChevronUp className="h-4 w-4" />
 48:
      </SelectPrimitive.ScrollUpButton>
 49: ))
50: SelectScrollUpButton.displayName = SelectPrimitive.ScrollUpButton.displayName
 52: const SelectScrollDownButton = React.forwardRef<
     React.ElementRef<typeof SelectPrimitive.ScrollDownButton>,
```

```
React.ComponentPropsWithoutRef<typeof SelectPrimitive.ScrollDownButton>
 55: >(({ className, ...props }, ref) => (
 56:
       <SelectPrimitive.ScrollDownButton</pre>
 57:
        ref={ref}
 58:
         className={cn(
 59:
           "flex cursor-default items-center justify-center py-1",
 60:
           className
 61:
         ) }
 62:
         {...props}
 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<
      React.ElementRef<typeof SelectPrimitive.Content>,
      React.ComponentPropsWithoutRef<typeof SelectPrimitive.Content>
 73: >(({ className, children, position = "popper", ...props }, ref) => (
 74:
       <SelectPrimitive.Portal>
 75:
        <SelectPrimitive.Content
 76:
          ref={ref}
 77:
          className={cn(
             "relative z-50 max-h-96 min-w-[8rem] overflow-hidden rounded-md border bg-popover text-popover-fore
 78:
 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:
 83:
          position={position}
 84:
           {...props}
 85:
 86:
           <SelectScrollUpButton />
 87:
           <SelectPrimitive.Viewport
 88:
            className={cn(
 89:
               "p-1",
 90:
               position === "popper" &&
 91:
                 "h-[var(--radix-select-trigger-height)] w-full min-w-[var(--radix-select-trigger-width)]"
 92:
             ) }
 93:
 94:
             {children}
 95:
           </SelectPrimitive.Viewport>
           <SelectScrollDownButton />
 97:
         </SelectPrimitive.Content>
 98:
      </SelectPrimitive.Portal>
 99: ))
100: SelectContent.displayName = SelectPrimitive.Content.displayName
101:
102: const SelectLabel = React.forwardRef<
      React.ElementRef<typeof SelectPrimitive.Label>,
104:
      React.ComponentPropsWithoutRef<typeof SelectPrimitive.Label>
105: >(({ className, ...props }, ref) => (
106: <SelectPrimitive.Label
107:
       ref={ref}
108:
         className={cn("py-1.5 pl-8 pr-2 text-sm font-semibold", className)}
109:
         {...props}
110:
111: ))
112: SelectLabel.displayName = SelectPrimitive.Label.displayName
113:
114: const SelectItem = React.forwardRef<</pre>
115: React.ElementRef<typeof SelectPrimitive.Item>,
      React.ComponentPropsWithoutRef<typeof SelectPrimitive.Item>
116:
117: >(({ className, children, ...props }, ref) => (
118:
      <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:
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<</pre>
138: React.ElementRef<typeof SelectPrimitive.Separator>,
139:
      React.ComponentPropsWithoutRef<typeof SelectPrimitive.Separator>
140: >(({ className, ...props }, ref) => (
141: <SelectPrimitive.Separator
       ref={ref}
142:
       className={cn("-mx-1 my-1 h-px bg-muted", className)}
143:
144:
        {...props}
145: />
146: ))
147: SelectSeparator.displayName = SelectPrimitive.Separator.displayName
148:
149: export {
150: Select.
151: SelectGroup,
152: SelectValue,
153:
      SelectTrigger,
154: SelectContent,
155: SelectLabel,
156: SelectItem,
157: SelectSeparator,
158: SelectScrollUpBu
      SelectScrollUpButton,
159: SelectScrollDownButton,
160: }
```

<SelectPrimitive.ItemIndicator>

■ 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:
      { className, orientation = "horizontal", decorative = true, ...props },
14:
       ref
15:
     ) => (
16:
      <SeparatorPrimitive.Root</pre>
17:
        ref={ref}
18:
        decorative={decorative}
19:
        orientation={orientation}
        className={cn(
 20:
           "shrink-0 bg-border",
21:
          orientation === "horizontal" ? "h-[1px] w-full" : "h-full w-[1px]",
22:
 23:
 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"
8: import { cn } from "@/lib/utils"
9:
10: const Sheet = SheetPrimitive.Root
11:
12: const SheetTrigger = SheetPrimitive.Trigger
13:
14: const SheetClose = SheetPrimitive.Close
15:
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
      className={cn(
23:
         "fixed inset-0 z-50 bg-black/80 data-[state=open]:animate-in data-[state=closed]:animate-out data-[s
24:
25:
         className
26:
       ) }
27:
       {...props}
28:
      ref={ref}
29:
     />
30: ))
31: SheetOverlay.displayName = SheetPrimitive.Overlay.displayName
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: {
38:
           top: "inset-x-0 top-0 border-b data-[state=closed]:slide-out-to-top data-[state=open]:slide-in-from
39:
             "inset-x-0 bottom-0 border-t data-[state=closed]:slide-out-to-bottom data-[state=open]:slide-in-f
40:
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:
           riaht:
43:
              "inset-y-0 right-0 h-full w-3/4 border-1 data-[state=closed]:slide-out-to-right data-[state=open
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<
    React.ElementRef<typeof SheetPrimitive.Content>,
58:
     SheetContentProps
59: >(({ side = "right", className, children, ...props }, ref) => (
60: <SheetPortal>
61:
       <SheetOverlay />
62:
       <SheetPrimitive.Content
63:
         ref={ref}
64:
         className={cn(sheetVariants({ side }), className)}
65:
         {...props}
66:
67:
         {children}
         <SheetPrimitive.Close className="absolute right-4 top-4 rounded-sm opacity-70 ring-offset-background</pre>
68:
69:
           <X className="h-4 w-4" />
70:
           <span className="sr-only">Close</span>
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:
      <div
 82:
        className={cn(
 83:
          "flex flex-col space-y-2 text-center sm:text-left",
 84:
          className
 25:
        ) }
 86:
       \{\dotsprops\}
 87: />
 88: )
 89: SheetHeader.displayName = "SheetHeader"
 90:
 91: const SheetFooter = ({
 92: className,
 93:
      ...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:
        {...props}
101:
     />
102: )
103: SheetFooter.displayName = "SheetFooter"
104:
105: const SheetTitle = React.forwardRef<</pre>
106: React.ElementRef<typeof SheetPrimitive.Title>,
      React.ComponentPropsWithoutRef<typeof SheetPrimitive.Title>
108: >(({ className, ...props }, ref) => (
109: <SheetPrimitive.Title
110:
       ref={ref}
111:
       className={cn("text-lg font-semibold text-foreground", className)}
112:
        {...props}
113: />
114: ))
115: SheetTitle.displayName = SheetPrimitive.Title.displayName
116:
117: const SheetDescription = React.forwardRef<
118: React.ElementRef<typeof SheetPrimitive.Description>,
119: React.ComponentPropsWithoutRef<typeof SheetPrimitive.Description>
120: >(({ className, ...props }, ref) => (
121:
      <SheetPrimitive.Description</pre>
122:
       ref={ref}
       className={cn("text-sm text-muted-foreground", className)}
124:
       {...props}
125:
      />
126: ))
127: SheetDescription.displayName = SheetPrimitive.Description.displayName
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: setOpen: (open: boolean) => void
33: openMobile: boolean
34:
     setOpenMobile: (open: boolean) => void
35: isMobile: boolean
36: toggleSidebar: () => void
37: }
38:
39: const SidebarContext = React.createContext<SidebarContext | null>(null)
41: function useSidebar() {
42: const context = React.useContext(SidebarContext)
43:
     if (!context) {
44:
       throw new Error("useSidebar must be used within a SidebarProvider.")
45:
46:
47:
     return context
48: }
49:
50: const SidebarProvider = React.forwardRef<
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,
        children,
65:
66:
         ...props
       },
67:
68:
       ref
69: ) => {
70:
      const isMobile = useIsMobile()
71:
        const [openMobile, setOpenMobile] = React.useState(false)
```

```
72:
 73:
         // This is the internal state of the sidebar.
 74:
         \ensuremath{//} We use openProp and setOpenProp for control from outside the component.
 75:
         const [_open, _setOpen] = React.useState(defaultOpen)
 76:
         const open = openProp ?? _open
 77:
         const setOpen = React.useCallback(
 78:
           (value: boolean | ((value: boolean) => boolean)) => {
 79:
             const openState = typeof value === "function" ? value(open) : value
 :08
             if (setOpenProp) {
 81:
               setOpenProp(openState)
 82:
             } else {
               _setOpen(openState)
 83:
 84:
 25:
             // 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
 95:
             ? setOpenMobile((open) => !open)
 96:
             : setOpen((open) => !open)
 97:
         }, [isMobile, setOpen, setOpenMobile])
 98:
         // Adds a keyboard shortcut to toggle the sidebar.
 99:
100:
         React.useEffect(() => {
101:
           const handleKeyDown = (event: KeyboardEvent) => {
102:
             if (
103:
               event.key === SIDEBAR_KEYBOARD_SHORTCUT &&
104:
               (event.metaKey || event.ctrlKey)
105:
             ) {
               event.preventDefault()
106:
107:
               toggleSidebar()
             }
108:
109:
110:
111:
           window.addEventListener("keydown", handleKeyDown)
112:
           return () => window.removeEventListener("keydown", handleKeyDown)
113:
         }, [toggleSidebar])
114:
115:
         // We add a state so that we can do data-state="expanded" or "collapsed".
116:
         // This makes it easier to style the sidebar with Tailwind classes.
117:
         const state = open ? "expanded" : "collapsed"
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(
144:
                    "group/sidebar-wrapper flex min-h-svh w-full has-[[data-variant=inset]]:bg-sidebar",
```

```
145:
                  className
146:
                ) }
147:
                ref={ref}
148:
                {...props}
149:
150:
                {children}
151:
              </div>
152:
            </TooltipProvider>
153:
          </SidebarContext.Provider>
154:
155: }
156: )
157: SidebarProvider.displayName = "SidebarProvider"
158:
159: const Sidebar = React.forwardRef<
160: HTMLDivElement,
161: React.ComponentProps<"div"> & {
162:
        side?: "left" | "right"
        variant?: "sidebar" | "floating" | "inset"
163:
164:
       collapsible?: "offcanvas" | "icon" | "none"
165: }
166: >(
167:
168:
169:
         side = "left",
          variant = "sidebar",
170:
171:
          collapsible = "offcanvas",
172:
          className,
173:
         children,
174:
          ...props
175:
       },
176:
        ref
177:
     ) => {
178:
       const { isMobile, state, openMobile, setOpenMobile } = useSidebar()
179:
180:
       if (collapsible === "none") {
181:
          return (
182:
            <div
183:
              className={cn(
                "flex h-full w-[--sidebar-width] flex-col bq-sidebar text-sidebar-foreground",
184:
185:
186:
              ) }
187:
              ref={ref}
188:
              {...props}
189:
190:
               {children}
191:
             </div>
192:
         )
193:
        }
194:
195:
       if (isMobile) {
196:
         return (
197:
            <Sheet open={openMobile} onOpenChange={setOpenMobile} {...props}>
198:
              <SheetContent
199:
                data-sidebar="sidebar"
                data-mobile="true"
200:
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:
                <div className="flex h-full w-full flex-col">{children}</div>
209:
210:
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}
220:
             data-collapsible={state === "collapsed" ? collapsible : ""}
221:
             data-variant={variant}
222:
            data-side={side}
223:
224:
            {/* This is what handles the sidebar gap on desktop */}
225:
            <div
226:
              className={cn(
                 "duration-200 relative h-svh w-[--sidebar-width] bg-transparent transition-[width] ease-linear"
227:
228:
                 "group-data-[collapsible=offcanvas]:w-0",
229:
                 "group-data-[side=right]:rotate-180",
230:
                 variant === "floating" || variant === "inset"
231:
                   ? "group-data-[collapsible=icon]:w-[calc(var(--sidebar-width-icon)_+_theme(spacing.4))]"
232:
                   : "group-data-[collapsible=icon]:w-[--sidebar-width-icon]"
233:
              ) }
234:
             />
235:
             <div
236:
              className={cn(
237:
                 "duration-200 fixed inset-y-0 z-10 hidden h-svh w-[--sidebar-width] transition-[left,right,widt
238:
                 side === "left"
239:
                   ? "left-0 group-data-[collapsible=offcanvas]:left-[calc(var(--sidebar-width)*-1)]"
240:
                   : "right-0 group-data-[collapsible=offcanvas]:right-[calc(var(--sidebar-width)*-1)]",
                 // Adjust the padding for floating and inset variants.
241:
                variant === "floating" || variant === "inset"
242:
243:
                   ? "p-2 group-data-[collapsible=icon]:w-[calc(var(--sidebar-width-icon)_+_theme(spacing.4)_+2p
244:
                   : "group-data-[collapsible=icon]:w-[--sidebar-width-icon] group-data-[side=left]:border-r gro
245:
                 className
246:
               ) }
247:
               {...props}
248:
            >
249:
               <div
250:
                data-sidebar="sidebar"
                 className="flex h-full w-full flex-col bg-sidebar group-data-[variant=floating]:rounded-lg grou
251:
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) => {
266:
      const { toggleSidebar } = useSidebar()
267:
268:
      return (
269:
       <Button
270:
         ref={ref}
271:
          data-sidebar="trigger"
272:
          variant="ghost"
          size="icon"
273:
274:
          className={cn("h-7 w-7", className)}
275:
         onClick={(event) => {
276:
            onClick?.(event)
277:
             toggleSidebar()
278:
          }}
279:
          {...props}
280:
281:
           <PanelLeft />
282:
           <span className="sr-only">Toggle Sidebar</span>
283:
         </Button>
284:
      )
285: })
286: SidebarTrigger.displayName = "SidebarTrigger"
288: const SidebarRail = React.forwardRef<
289: HTMLButtonElement.
290:
      React.ComponentProps<"button">
```

```
291: >(({ className, ...props }, ref) => {
      const { toggleSidebar } = useSidebar()
293:
294:
      return (
295:
        <button
296:
          ref={ref}
297:
           data-sidebar="rail"
298:
           aria-label="Toggle Sidebar"
299:
           tabIndex={-1}
300:
           onClick={toggleSidebar}
           title="Toggle Sidebar"
302:
           className={cn(
303:
             "absolute inset-y-0 z-20 hidden w-4 -translate-x-1/2 transition-all ease-linear after:absolute afte
304:
             "[[data-side=left]_&]:cursor-w-resize [[data-side=right]_&]:cursor-e-resize",
             "[[data-side=left][data-state=collapsed]_&]:cursor-e-resize [[data-side=right][data-state=collapsed
305:
306:
             "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:
           ) }
           {...props}
311:
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(
            "relative flex min-h-svh flex-1 flex-col bg-background",
325:
326:
             "peer-data-[variant=inset]:min-h-[calc(100svh-theme(spacing.4))] md:peer-data-[variant=inset]:m-2 m
327:
             className
328:
           ) }
329:
           {...props}
330:
         />
331:
332: })
333: SidebarInset.displayName = "SidebarInset"
334:
335: const SidebarInput = React.forwardRef<
      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(
344:
             "h-8 w-full bg-background shadow-none focus-visible:ring-2 focus-visible:ring-sidebar-ring",
345:
             className
           ) }
346:
347:
           {...props}
348:
         />
349:
       )
350: })
351: SidebarInput.displayName = "SidebarInput"
353: const SidebarHeader = React.forwardRef<
      HTMLDivElement,
      React.ComponentProps<"div">
355:
356: >(({ className, ...props }, ref) => {
357:
     return (
358:
        <div
359:
           ref={ref}
          data-sidebar="header"
360:
361:
          className={cn("flex flex-col gap-2 p-2", className)}
362:
           {...props}
363:
```

```
364:
365: })
366: SidebarHeader.displayName = "SidebarHeader"
368: const SidebarFooter = React.forwardRef<
369: HTMLDivElement,
370: React.ComponentProps<"div">
371: >(({ className, ...props }, ref) => {
372:
      return (
373:
        <div
374:
          ref={ref}
          data-sidebar="footer"
375:
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>,
      React.ComponentProps<typeof Separator>
385:
386: >(({ className, ...props }, ref) => {
387: return (
388:
       <Separator
389:
         ref={ref}
390:
          data-sidebar="separator"
391:
          className={cn("mx-2 w-auto bg-sidebar-border", className)}
392:
          {...props}
393:
       />
394:
      )
395: })
396: SidebarSeparator.displayName = "SidebarSeparator"
398: const SidebarContent = React.forwardRef<</pre>
399: HTMLDivElement,
400: React.Component
      React.ComponentProps<"div">
401: >(({ className, ...props }, ref) => {
402: return (
403:
       <div
404:
          ref={ref}
          data-sidebar="content"
405:
          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"
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"
          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) => {
435:
      const Comp = asChild ? Slot : "div"
436:
```

```
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:
           ) }
446:
           {...props}
447:
448:
      )
449: })
450: SidebarGroupLabel.displayName = "SidebarGroupLabel"
451:
452: const SidebarGroupAction = React.forwardRef<
453: HTMLButtonElement,
      React.ComponentProps<"button"> & { asChild?: boolean }
455: >(({ className, asChild = false, ...props }, ref) => {}
456: const Comp = asChild ? Slot : "button"
457:
458:
      return (
459:
        <Comp
460:
          ref={ref}
          data-sidebar="group-action"
461:
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
468:
          ) }
469:
          {...props}
470:
471:
     )
472: })
473: SidebarGroupAction.displayName = "SidebarGroupAction"
475: const SidebarGroupContent = React.forwardRef<
476: HTMLDivElement,
477: React.Component
      React.ComponentProps<"div">
478: >(({ className, ...props }, ref) => (
479: <div
480:
       ref={ref}
481:
        data-sidebar="group-content"
482:
        className={cn("w-full text-sm", className)}
483:
         {...props}
484:
     />
485: ))
486: SidebarGroupContent.displayName = "SidebarGroupContent"
487:
488: const SidebarMenu = React.forwardRef<
489: HTMLUListElement,
490:
      React.ComponentProps<"ul">
491: >(({ className, ...props }, ref) => (
492:
     ul
       ref={ref}
493:
494:
        data-sidebar="menu"
        className={cn("flex w-full min-w-0 flex-col gap-1", className)}
496:
         {...props}
497: />
498: ))
499: SidebarMenu.displayName = "SidebarMenu"
500:
501: const SidebarMenuItem = React.forwardRef<
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"
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: {
            default: "hover:bg-sidebar-accent hover:text-sidebar-accent-foreground",
519:
520:
521:
              "bg-background shadow-[0_0_0_1px_hsl(var(--sidebar-border))] hover:bg-sidebar-accent hover:text-s
522:
          },
523:
          size: {
524:
            default: "h-8 text-sm",
525:
            sm: "h-7 text-xs",
526:
            lg: "h-12 text-sm group-data-[collapsible=icon]:!p-0",
527:
          },
       },
528:
529:
        defaultVariants: {
530:
         variant: "default",
531:
          size: "default",
532:
533: }
534: )
535:
536: const SidebarMenuButton = React.forwardRef<
537: HTMLButtonElement,
538: React.ComponentProps<"button"> & {
539:
       asChild?: boolean
540:
        isActive?: boolean
541:
        tooltip?: string | React.ComponentProps<typeof TooltipContent>
542: } & VariantProps<typeof sidebarMenuButtonVariants>
543: >(
544:
     (
545:
       {
546:
          asChild = false,
547:
          isActive = false,
548:
         variant = "default",
549:
          size = "default",
          tooltip,
550:
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}
            className={cn(sidebarMenuButtonVariants({ variant, size }), className)}
565:
566:
             {...props}
          />
567:
568:
        )
569:
570:
        if (!tooltip) {
571:
          return button
572:
        }
573:
        if (typeof tooltip === "string") {
574:
575:
         tooltip = {
576:
            children: tooltip,
577:
          }
        }
578:
579:
580:
        return (
581:
          <Tooltip>
582:
             <TooltipTrigger asChild>{button}</TooltipTrigger>
```

```
<TooltipContent
583:
584:
              side="right"
585:
               align="center"
               hidden={state !== "collapsed" || isMobile}
586:
587:
               {...tooltip}
588:
             />
589:
           </Tooltip>
590:
        )
591:
      }
592: )
593: SidebarMenuButton.displayName = "SidebarMenuButton"
594:
595: const SidebarMenuAction = React.forwardRef<</pre>
596: HTMLButtonElement,
597:
      React.ComponentProps<"button"> & {
598:
        asChild?: boolean
599:
        showOnHover?: boolean
600:
601: >(({ className, asChild = false, showOnHover = false, ...props }, ref) => {}
      const Comp = asChild ? Slot : "button"
603:
604:
      return (
605:
        <Comp
          ref={ref}
606:
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.
611:
             "after:absolute after:-inset-2 after:md:hidden",
612:
             "peer-data-[size=sm]/menu-button:top-1",
613:
             "peer-data-[size=default]/menu-button:top-1.5",
614:
             "peer-data-[size=lg]/menu-button:top-2.5",
             "group-data-[collapsible=icon]:hidden",
615:
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"
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(
           "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
636:
           "peer-data-[size=sm]/menu-button:top-1",
637:
           "peer-data-[size=default]/menu-button:top-1.5",
638:
           "peer-data-[size=lg]/menu-button:top-2.5",
           "group-data-[collapsible=icon]:hidden",
639:
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) => {
653: // Random width between 50 to 90%.
654:
      const width = React.useMemo(() => {
        return `${Math.floor(Math.random() * 40) + 50}%`
655:
```

```
},[])
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:
664:
           {showIcon && (
665:
666:
            <Skeleton
              className="size-4 rounded-md"
667:
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:
                 "--skeleton-width": width,
676:
677:
               } as React.CSSProperties
            }
678:
679:
           />
680:
         </div>
681:
      )
682: })
683: SidebarMenuSkeleton.displayName = "SidebarMenuSkeleton"
685: const SidebarMenuSub = React.forwardRef<
686: HTMLUListElement,
687: React.ComponentPro
      React.ComponentProps<"ul">
688: >(({ className, ...props }, ref) => (
689: <ul
       ref={ref}
690:
691:
        data-sidebar="menu-sub"
692:
        className={cn(
693:
          "mx-3.5 flex min-w-0 translate-x-px flex-col gap-1 border-l border-sidebar-border px-2.5 py-0.5",
694:
          "group-data-[collapsible=icon]:hidden",
695:
          className
696:
        ) }
697:
        {...props}
698: />
699: ))
700: SidebarMenuSub.displayName = "SidebarMenuSub"
701:
702: const SidebarMenuSubItem = React.forwardRef<
703: HTMLLIElement,
704: React.ComponentProps<"li">
705: >(({ ...props }, ref) => )
706: SidebarMenuSubItem.displayName = "SidebarMenuSubItem"
708: const SidebarMenuSubButton = React.forwardRef<
709: HTMLAnchorElement,
710:
      React.ComponentProps<"a">> & {
       asChild?: boolean
711:
        size?: "sm" | "md"
712:
713:
        isActive?: boolean
715: >(({ asChild = false, size = "md", isActive, className, ...props }, ref) => {
716: const Comp = asChild ? Slot : "a"
717:
718:
      return (
719:
        <Comp
          ref={ref}
720:
721:
          data-sidebar="menu-sub-button"
722:
          data-size={size}
723:
          data-active={isActive}
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",
727:
            size === "sm" && "text-xs",
728:
            size === "md" && "text-sm",
```

```
729:
             "group-data-[collapsible=icon]:hidden",
730:
             className
731:
          ) }
732:
          {...props}
733:
        />
734: )
735: })
736: SidebarMenuSubButton.displayName = "SidebarMenuSubButton"
737:
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:
 9:
       className={cn("animate-pulse rounded-md bg-muted", className)}
10:
       {...props}
11:
      />
12: )
13: }
14:
15: export { Skeleton }
```

■ File: components\ui\slider.tsx

```
______
 1: "use client"
 2:
 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>,
10: React.ComponentPropsWithoutRef<typeof SliderPrimitive.Root>
11: >(({ className, ...props }, ref) => (
12:
    <SliderPrimitive.Root
13:
      ref={ref}
```

```
className={cn(
14:
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">
21:
         <SliderPrimitive.Range className="absolute h-full bg-primary" />
22:
        </SliderPrimitive.Track>
        <SliderPrimitive.Thumb className="block h-5 w-5 rounded-full border-2 border-primary bg-background ring
23:
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"
 5:
 6: type ToasterProps = React.ComponentProps<typeof Sonner>
 7:
 8: const Toaster = ({ ...props }: ToasterProps) => {
 9: const { theme = "system" } = useTheme()
10:
11:
     return (
       <Sonner
12:
         theme={theme as ToasterProps["theme"]}
13:
14:
         className="toaster group"
         toastOptions={{
15:
16:
           classNames: {
17:
             toast:
18:
               "group toast group-[.toaster]:bq-background group-[.toaster]:text-foreground group-[.toaster]:b
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(
           "pointer-events-none block h-5 w-5 rounded-full bg-background shadow-lg ring-0 transition-transform
22:
23:
        ) }
24:
       />
25:
    </SwitchPrimitives.Root>
26: ))
27: Switch.displayName = SwitchPrimitives.Root.displayName
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}
         className={cn("w-full caption-bottom text-sm", className)}
13:
         \{\dots 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"
 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"
 38:
39: const TableFooter = React.forwardRef<</pre>
 40: HTMLTableSectionElement,
41: React.HTMLAttributes<HTMLTableSectionElement>
 42: >(({ className, ...props }, ref) => (
43: <tfoot
 44:
      ref={ref}
 45:
      className={cn(
 46:
        "border-t bg-muted/50 font-medium [&>tr]:last:border-b-0",
 47:
       ) }
 48:
 49:
        {...props}
50:
      />
 51: ))
52: TableFooter.displayName = "TableFooter"
 54: const TableRow = React.forwardRef<
 55: HTMLTableRowElement,
 56:
     React.HTMLAttributes<HTMLTableRowElement>
```

```
57: >(({ className, ...props }, ref) => (
 59:
       ref={ref}
 60:
        className={cn(
          "border-b transition-colors hover:bg-muted/50 data-[state=selected]:bg-muted",
 61:
 62:
          className
        ) }
 63:
 64:
       \{\dotsprops\}
 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}
        className={cn(
 75:
 76:
          "h-12 px-4 text-left align-middle font-medium text-muted-foreground [&:has([role=checkbox])]:pr-0",
 77:
 78:
         ) }
         {...props}
 79:
 80: />
 81: ))
 82: TableHead.displayName = "TableHead"
 83:
 84: const TableCell = React.forwardRef<
 85: HTMLTableCellElement,
 86: React.TdHTMLAttributes<HTMLTableCellElement>
 87: >(({ className, ...props }, ref) => (
 88:
      <td
 89:
        ref={ref}
 90:
       className={cn("p-4 align-middle [&:has([role=checkbox])]:pr-0", className)}
 91:
       \{\dotsprops\}
 92:
      />
 93: ))
 94: TableCell.displayName = "TableCell"
 95:
 96: const TableCaption = React.forwardRef<
 97: HTMLTableCaptionElement,
 98: React.HTMLAttributes<HTMLTableCaptionElement>
 99: >(({ className, ...props }, ref) => (
100: <caption
101:
       ref={ref}
       className={cn("mt-4 text-sm text-muted-foreground", className)}
{    props}
102:
103:
         {...props}
104: />
105: ))
106: TableCaption.displayName = "TableCaption"
107:
108: export {
TableHeader,
109: Table,
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
15:
      ref={ref}
16:
      className={cn(
         "inline-flex h-10 items-center justify-center rounded-md bg-muted p-1 text-muted-foreground",
17:
18:
         className
19:
       ) }
20:
       {...props}
    />
21:
22: ))
23: TabsList.displayName = TabsPrimitive.List.displayName
24:
25: const TabsTrigger = React.forwardRef<</pre>
26: React.ElementRef<typeof TabsPrimitive.Trigger>,
27: React.ComponentPropsWithoutRef<typeof TabsPrimitive.Trigger>
28: >(({ className, ...props }, ref) => (
29:
     <TabsPrimitive.Trigger
30:
      ref={ref}
       className={cn(
31:
         "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
55: export { Tabs, TabsList, TabsTrigger, TabsContent }
```

■ File: components\ui\textarea.tsx

20:

```
______
 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
12:
13:
          className
14:
        ) }
15:
        ref={ref}
         {...props}
16:
17:
18: );
19: });
```

```
21: Textarea.displayName = "Textarea";
22:
23: export { Textarea };
```

■ 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 { X } from "lucide-react"
   7:
   8: import { cn } from "@/lib/utils"
   9:
 10: const ToastProvider = ToastPrimitives.Provider
 11:
 12: const ToastViewport = React.forwardRef<</pre>
 13: React.ElementRef<typeof ToastPrimitives.Viewport>,
           React.ComponentPropsWithoutRef<typeof ToastPrimitives.Viewport>
 14:
 15: >(({ className, ...props }, ref) => (
 16: <ToastPrimitives.Viewport</pre>
 17:
             ref={ref}
 18:
              className={cn(
 19:
                    "fixed top-0 z-[100] flex max-h-screen w-full flex-col-reverse p-4 sm:bottom-0 sm:right-0 sm:top-auto
 20:
                    className,
  21:
                ) }
  22:
                {...props}
  23:
            />
  24: ))
  25: ToastViewport.displayName = ToastPrimitives.Viewport.displayName
  27: const toastVariants = cva(
  28:
            "group pointer-events-auto relative flex w-full items-center justify-between space-x-4 overflow-hidden ro
  29:
  30:
                variants: {
 31:
                   variant: {
  32:
                        default: "border bg-background text-foreground",
  33:
                        destructive: "destructive group border-destructive bg-destructive text-destructive-foreground",
                       success: "border-green-500 bg-green-500 text-white", // Added success variant
 34:
                       warning: "border-yellow-500 bg-yellow-500 text-white", // Added warning variant
 36:
                   },
  37:
                },
  38:
                defaultVariants: {
 39:
                   variant: "default",
  40:
  41:
          },
  42: )
 43:
  44: const Toast = React.forwardRef<
  45: React.ElementRef<typeof ToastPrimitives.Root>,
           React.ComponentPropsWithoutRef<typeof ToastPrimitives.Root> & VariantProps<typeof toastVariants>
  47: >(({ className, variant, ...props }, ref) => {
          return < ToastPrimitives. Root ref = \{ref\} className = \{cn(toastVariants(\{ variant \}), className)\} \{ \dots props \} / \{ variant \} \} = \{ref\} | variant \} = \{ref\} | variant
  48:
  49: })
  50: Toast.displayName = ToastPrimitives.Root.displayName
  51:
  52: const ToastAction = React.forwardRef<
  53: React.ElementRef<typeof ToastPrimitives.Action>,
  54: React.ComponentPropsWithoutRef<typeof ToastPrimitives.Action>
  55: >(({ className, ...props }, ref) => (
            <ToastPrimitives.Action
  56:
 57:
               ref={ref}
  58:
              className={cn(
 59:
                    "inline-flex h-8 shrink-0 items-center justify-center rounded-md border bg-transparent px-3 text-sm f
  60:
                    className,
 61:
                ) }
 62:
                {...props}
  63:
            />
  64: ))
  65: ToastAction.displayName = ToastPrimitives.Action.displayName
```

```
66:
 67: const ToastClose = React.forwardRef<
 68: React.ElementRef<typeof ToastPrimitives.Close>,
      React.ComponentPropsWithoutRef<typeof ToastPrimitives.Close>
 70: >(({ className, ...props }, ref) => (
 71: <ToastPrimitives.Close
 72:
       ref={ref}
 73:
       className={cn(
 74:
           "absolute right-1 top-1 rounded-md p-1 text-foreground/50 opacity-0 transition-opacity hover:text-for
 75:
        ) }
 76:
        toast-close=""
 77:
 78:
        {...props}
 79:
 :08
        <X className="h-4 w-4" />
 81:
      </ToastPrimitives.Close>
 82: ))
 83: ToastClose.displayName = ToastPrimitives.Close.displayName
 84:
 85: const ToastTitle = React.forwardRef<</pre>
 86: React.ElementRef<typeof ToastPrimitives.Title>,
      React.ComponentPropsWithoutRef<typeof ToastPrimitives.Title>
 88: >(({ className, ...props }, ref) => (
 89: <ToastPrimitives.Title ref={ref} className={cn("text-sm font-semibold", className)} {...props} />
 90: ))
 91: ToastTitle.displayName = ToastPrimitives.Title.displayName
 92:
 93: const ToastDescription = React.forwardRef<
 94: React.ElementRef<typeof ToastPrimitives.Description>,
 95: React.ComponentPropsWithoutRef<typeof ToastPrimitives.Description>
 96: >(({ className, ...props }, ref) => (
 97: <ToastPrimitives.Description ref={ref} className={cn("text-sm opacity-90", className)} {...props} />
 98: ))
 99: ToastDescription.displayName = ToastPrimitives.Description.displayName
100:
101: type ToastProps = React.ComponentPropsWithoutRef<typeof Toast>
102:
103: type ToastActionElement = React.ReactElement<typeof ToastAction>
104:
105: export {
106: type ToastProps,
107: type ToastActionElement,
108: ToastProvider,
109: ToastViewport,
110:
      Toast,
111:
      ToastTitle,
112: ToastDescription,
113: ToastClose,
114:
     ToastAction,
115: }
```

■ File: components\ui\toaster.tsx

```
= 1 iic. components unitodater tax
```

```
1: "use client"
2:
3: import { Toast, ToastClose, ToastDescription, ToastProvider, ToastTitle, ToastViewport } from "@/components"
4: import { useToast } from "@/components/ui/use-toast"
5:
6: export function Toaster() {
7: const { toasts } = useToast()
8:
9:
     return (
10:
      <ToastProvider>
11:
         {toasts.map(({ id, title, description, action, ...props }) => (
12:
            <Toast key={id} {...props}>
13:
             <div className="grid gap-1">
                {title && <ToastTitle>{title}</ToastTitle>}
14:
15:
                {description && <ToastDescription>{description}</ToastDescription>}
              </div>
16:
              {action}
17:
18:
              <ToastClose />
```

■ 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"
 7: import { cn } from "@/lib/utils"
 8: import { toggleVariants } from "@/components/ui/toggle"
 9:
10: const ToggleGroupContext = React.createContext<</pre>
11: VariantProps<typeof toggleVariants>
12: >({
13: size: "default",
 14: variant: "default",
15: })
16:
17: const ToggleGroup = React.forwardRef<</pre>
18: 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}
       className={cn("flex items-center justify-center gap-1", className)}
 24:
 25:
        {...props}
 26: >
       <ToggleGroupContext.Provider value={{ variant, size }}>
 27:
 28:
         {children}
 29:
        </ToggleGroupContext.Provider>
 30: </ToggleGroupPrimitive.Root>
31: ))
 32:
 33: ToggleGroup.displayName = ToggleGroupPrimitive.Root.displayName
 35: const ToggleGroupItem = React.forwardRef<
 36: React.ElementRef<typeof ToggleGroupPrimitive.Item>,
 37: React.ComponentPropsWithoutRef<typeof ToggleGroupPrimitive.Item> &
 38:
       VariantProps<typeof toggleVariants>
 39: >(({ className, children, variant, size, ...props }, ref) => {
 40: const context = React.useContext(ToggleGroupContext)
 42: return (
      <ToggleGroupPrimitive.Item
 43:
 44:
         ref={ref}
         className={cn(
 45:
 46:
           toggleVariants({
 47:
             variant: context.variant || variant,
 48:
              size: context.size | | size,
            }),
 49:
 50:
            className
 51:
         ) }
 52:
         {...props}
53:
54:
          {children}
 55:
        </ToggleGroupPrimitive.Item>
56:
      )
 57: })
58:
59: ToggleGroupItem.displayName = ToggleGroupPrimitive.Item.displayName
 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"
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",
          outline:
15:
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",
           lg: "h-11 px-5 min-w-11",
21:
       },
22:
23:
      },
      defaultVariants: {
24:
       variant: "default",
25:
         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}
38:
       className={cn(toggleVariants({ variant, size, className }))}
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"
 6: import { cn } from "@/lib/utils"
 8: const TooltipProvider = TooltipPrimitive.Provider
 9:
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</pre>
 19:
      ref={ref}
 20:
      sideOffset={sideOffset}
 21:
       className={cn(
```

■ 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<br/>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)
14:
      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"
 4:
 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: }
 23:
 24: type Actions = {
 25: addToast: (toast: Toast) => void
     updateToast: (id: string, toast: Partial<Toast>) => void
 26:
 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) => {
 39:
        set((state) => ({
          toasts: state.toasts.map((t) => (t.id === id ? { ...t, ...toast } : t)),
 40:
 41:
        }))
 42:
 43:
      dismissToast: (id) => {
 44:
         set((state) => ({
          toasts: state.toasts.map((t) => (t.id === id || id === undefined ? { ...t, open: false } : t)),
 45:
 46:
         }))
 47:
      },
 48:
      removeToast: (id) => {
 49:
        set((state) => ({
 50:
         toasts: state.toasts.filter((t) => t.id !== id),
 51:
        }))
 52:
      },
 53: }))
 54:
 55: let count = 0
 56:
 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:
      toastStore.getState().addToast({
 70:
 71:
        id,
 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:
 92:
           state.toasts.forEach((t) => {
 93:
             if (t.open === false) {
               // We use a timeout to allow the toast to animate out before being removed
 94:
 95:
               setTimeout(() => removeToast(t.id), 400)
 96:
             }
          })
 97:
 98:
         })
 99:
         return () => unsub()
100:
      }, [removeToast])
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() {
 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 = () => {
        setIsMobile(window.innerWidth < MOBILE_BREAKPOINT)</pre>
11:
12:
13:
      mql.addEventListener("change", onChange)
14:
      setIsMobile(window.innerWidth < MOBILE_BREAKPOINT)</pre>
      return () => mql.removeEventListener("change", onChange)
15:
16:
     },[])
17:
18:
    return !!isMobile
19: }
```

■ File: hooks\use-toast.ts

```
______
 1: "use client"
 2:
 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:
     | {
         type: ActionType["ADD_TOAST"]
39:
 40:
          toast: ToasterToast
41:
     | {
42:
          type: ActionType["UPDATE_TOAST"]
43:
 44:
         toast: Partial<ToasterToast>
 45:
 46:
     | {
 47:
          type: ActionType["DISMISS_TOAST"]
```

```
48:
          toastId?: ToasterToast["id"]
 49:
 50:
     | {
 51:
          type: ActionType["REMOVE_TOAST"]
 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:
      const timeout = setTimeout(() => {
 66:
 67:
      toastTimeouts.delete(toastId)
 68:
       dispatch({
        type: "REMOVE_TOAST",
 69:
 70:
          toastId: toastId,
 71:
       })
 72: }, TOAST_REMOVE_DELAY)
 73:
 74:
      toastTimeouts.set(toastId, timeout)
 75: }
 77: export const reducer = (state: State, action: Action): State => {
 78: switch (action.type) {
 79:
       case "ADD_TOAST":
 80:
         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:
        case "DISMISS_TOAST": {
 93:
 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)
         } else {
100:
           state.toasts.forEach((toast) => {
101:
102:
              addToRemoveQueue(toast.id)
103:
            })
104:
         }
105:
106:
          return {
107:
            ...state,
108:
            toasts: state.toasts.map((t) =>
109:
              t.id === toastId || toastId === undefined
               ? {
110:
111:
                    ...t,
                    open: false,
112:
113:
                  }
114:
                : t
115:
            ),
         }
116:
117:
       }
118:
       case "REMOVE_TOAST":
        if (action.toastId === undefined) {
119:
120:
            return {
```

```
121:
              ...state.
122:
             toasts: [],
123:
           }
         }
124:
125:
          return {
126:
           ...state,
127:
           toasts: state.toasts.filter((t) => t.id !== action.toastId),
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)
      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) =>
       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:
         id,
         open: true,
160:
161:
         onOpenChange: (open) => {
162:
          if (!open) dismiss()
163:
         },
       },
164:
165:
      })
166:
167:
      return {
168:
     id: id,
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)
        return () => {
179:
          const index = listeners.indexOf(setState)
180:
         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: {
      "name": "my-v0-project",
 2:
 3:
     "version": "0.1.0",
 4:
      "private": true,
     "scripts": {
 5:
       "build": "next build",
 6:
 7:
       "dev": "next dev",
 8:
        "lint": "next lint",
 9:
        "start": "next start"
10:
11:
     "dependencies": {
12:
       "@hello-pangea/dnd": "latest",
        "@hookform/resolvers": "^3.9.1",
13:
14:
        "@radix-ui/react-accordion": "1.2.2",
        "@radix-ui/react-alert-dialog": "1.1.4",
15:
        "@radix-ui/react-aspect-ratio": "1.1.1",
17:
        "@radix-ui/react-avatar": "1.1.2",
18:
        "@radix-ui/react-checkbox": "1.1.3",
19:
        "@radix-ui/react-collapsible": "1.1.2",
 20:
        "@radix-ui/react-context-menu": "2.2.4",
 21:
        "@radix-ui/react-dialog": "1.1.4",
 22:
        "@radix-ui/react-dropdown-menu": "2.1.4",
 23:
        "@radix-ui/react-hover-card": "1.1.4",
24:
        "@radix-ui/react-label": "2.1.1",
        "@radix-ui/react-menubar": "1.1.4",
 25:
        "@radix-ui/react-navigation-menu": "1.2.3",
 26:
 27:
        "@radix-ui/react-popover": "1.1.4",
 28:
        "@radix-ui/react-progress": "1.1.1",
        "@radix-ui/react-radio-group": "1.2.2",
 29:
 30:
        "@radix-ui/react-scroll-area": "1.2.2",
        "@radix-ui/react-select": "2.1.4",
 31:
 32:
        "@radix-ui/react-separator": "1.1.1",
        "@radix-ui/react-slider": "1.2.2",
 33:
        "@radix-ui/react-slot": "1.1.1",
 34:
 35:
        "@radix-ui/react-switch": "1.1.2",
 36:
        "@radix-ui/react-tabs": "1.1.2",
 37:
        "@radix-ui/react-toast": "latest",
        "@radix-ui/react-toggle": "1.1.1",
38:
 39:
        "@radix-ui/react-toggle-group": "1.1.1",
        "@radix-ui/react-tooltip": "1.1.6",
 40:
        "autoprefixer": "^10.4.20",
 41:
        "class-variance-authority": "^0.7.1",
42:
43:
        "clsx": "^2.1.1",
 44:
        "cmdk": "1.0.4",
 45:
        "date-fns": "4.1.0",
 46:
        "embla-carousel-react": "8.5.1",
```

```
"fs": "latest",
47:
        "immer": "latest",
48:
        "input-otp": "1.4.1",
49:
50:
        "lucide-react": "^0.454.0",
        "next": "15.2.4",
51:
        "next-themes": "latest",
52:
53:
        "path": "latest",
54:
        "react": "^19",
55:
        "react-day-picker": "8.10.1",
        "react-dom": "^19",
56:
57:
        "react-hook-form": "^7.54.1",
       "react-resizable-panels": "^2.1.7",
58:
        "recharts": "2.15.0",
59:
        "sonner": "^1.7.1",
60:
61:
        "tailwind-merge": "^2.5.5",
62:
        "tailwindcss-animate": "^1.0.7",
        "use-sync-external-store": "latest",
63:
        "uuid": "latest",
64:
       "vaul": "^0.9.6",
65:
66:
        "zod": "^3.24.1",
       "zustand": "latest"
67:
     },
68:
69:
      "devDependencies": {
70:
       "@types/node": "^22",
        "@types/react": "^19",
71:
        "@types/react-dom": "^19",
72:
73:
        "postcss": "^8.5",
        "tailwindcss": "^3.4.17",
74:
        "typescript": "^5"
75:
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 = {
 6: darkMode: ["class"],
 7:
     content: [
      "./pages/**/*.{js,ts,jsx,tsx,mdx}",
 8:
 9:
      "./components/**/*.{js,ts,jsx,tsx,mdx}",
      "./app/**/*.{js,ts,jsx,tsx,mdx}",
10:
      "*.{js,ts,jsx,tsx,mdx}"
11:
12: ],
13: theme: {
14: ■extend: {
15: ■■colors: {
16: Background: 'hsl(var(--background))',
17: TESforeground: 'hsl(var(--foreground))',
18:
    ■■■card: {
19:
    ■■■■DEFAULT: 'hsl(var(--card))',
21: ■■■},
22:
    DEEpopover: {
     ■■■■DEFAULT: 'hsl(var(--popover))',
23:
25: ■■■},
26: ■■■primary: {
27:
     ■■■■DEFAULT: 'hsl(var(--primary))',
28:
    ■■■foreground: 'hsl(var(--primary-foreground))'
    ■■■},
29:
30: ■■■secondary: {
    ■■■■DEFAULT: 'hsl(var(--secondary))',
31:
32:
     foreground: 'hsl(var(--secondary-foreground))'
33:
     ■■■},
34: ■■■muted: {
35:
    DEFAULT: 'hsl(var(--muted))',
36:
     ■■■foreground: 'hsl(var(--muted-foreground))'
37:
     ■■■},
```

```
38: ■■■accent: {
39: DEFAULT: 'hsl(var(--accent))',
40:
    ■■■■foreground: '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))',
48: ■■ring: 'hsl(var(--ring))',
49:
    ■■■chart: {
    ■■■'1': 'hsl(var(--chart-1))',
50:
54:
    ■■■'5': 'hsl(var(--chart-5))'
55:
    ■■■},
56: ■■■sidebar: {
57: DEFAULT: 'hsl(var(--sidebar-background))',
58:
    foreground: 'hsl(var(--sidebar-foreground))',
    ■■■primary: 'hsl(var(--sidebar-primary))',
59:
60: ■■■■'primary-foreground': 'hsl(var(--sidebar-primary-foreground))',
62: decent-foreground': 'hsl(var(--sidebar-accent-foreground))',
63:
    ■■■border: 'hsl(var(--sidebar-border))',
64:
     ■■■ ring: 'hsl(var(--sidebar-ring))
65: ■■■}
66: ■■},
67: ■■borderRadius: {
    ■■■lg: 'var(--radius)',
68:
69:
    ■■■md: 'calc(var(--radius) - 2px)',
70: TEEsm: 'calc(var(--radius) - 4px)'
71: ■■},
72:
    ■■keyframes: {
73:
     ■■■'accordion-down': {
    IIIIfrom: {
74:
75: ■■■■height: '0'
    ■■■■},
76:
77:
    ■■■■to: {
78:
    ■■■■height: 'var(--radix-accordion-content-height)'
79: ■■■■}
80: ■■■},
81:
    ■■■'accordion-up': {
82:
     Ifrom: {
83:
    ■■■■height: 'var(--radix-accordion-content-height)'
84: ■■■■},
85: ■■■to: {
86: ■■■■■
87: ■■■■}
    height: '0'
88: ■■■}
89: ■■},
90: ■■animation: {
91:
    ■■■'accordion-down': 'accordion-down 0.2s ease-out',
92:
    ■■■'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": {
3: "lib": ["dom", "dom.iterable", "esnext"],
4: "allowJs": true,
5: "target": "ES6",
6: "skipLibCheck": true,
7: "strict": true,
```

```
8:
       "noEmit": true,
9:
       "esModuleInterop": true,
       "module": "esnext",
10:
11:
       "moduleResolution": "bundler",
       "resolveJsonModule": true,
12:
       "isolatedModules": true,
13:
       "jsx": "preserve",
14:
15:
       "incremental": true,
16:
       "plugins": [
17:
        {
18:
           "name": "next"
19:
        }
20:
       ],
       "paths": {
21:
         "@/*": ["./*"]
22:
23:
24:
    },
     "include": ["next-env.d.ts", "**/*.ts", "**/*.tsx", ".next/types/**/*.ts"],
25:
26: "exclude": ["node_modules"]
```

■ File: types\report-types.ts

```
______
 1: export interface PatientInfo {
 2: name: string;
 3: gender: string;
 4: birthDate: string;
 5: sampleCode: string;
 6: sampleDate: string;
7: reportDate: string;
 8: reportAuth: string;
 9: genomicAnalytics: string;
10: checkedBy: string;
 11:
     scientificContent: string;
12: disclaimer: string;
13: signature1: string;
14: signature2: string;
15: }
16:
17: export interface ReportContent {
18: introduction: string;
19: genomicsExplanation: string;
20: genesHealthImpact: string;
21: fundamentalsPRS: string;
 22: utilityDoctors: string;
 23: microarrayExplanation: string;
 24:
     microarrayData: string;
25: }
26:
 27: export interface ReportSettings {
 28: title: string;
29: subtitle: string;
30: companyName: stri
     companyName: string;
31: headerColor: string;
 32: accentColor: string;
33: fonts: {
     primary: string;
 34:
 35:
       secondary: string;
 36:
       mono: string;
 37: };
 38: }
 39:
 40: // NEW: Interface for dynamically defined diet analysis fields
 41: export interface DynamicDietFieldDefinition {
 42:
     _uuid: string; // For DND library internal use
 43:
      id: string; // Unique identifier for the field (e.g., "carbohydrate_sensitivity")
 44: label: string; // Display name (e.g., "Carbohydrate Sensitivity")
 45: category: string; // Category (e.g., "Macronutrients", "Food Sensitivities")
 46: min: number; // Min score for the field
      max: number; // Max score for the field
 47:
 48:
     highRecommendation: string; // Recommendation for high score
```

```
49: normalRecommendation: string; // Recommendation for normal score
 50: lowRecommendation: string; // Recommendation for low score
 51: }
 52:
 53: // NEW: Interface for a patient's specific result for a dynamic diet field
 54: export interface PatientDietAnalysisResult {
 55: fieldId: string; // References DynamicDietFieldDefinition.id
 56:
      score: number;
      level: string; // e.g., "HIGH", "NORMAL", "LOW", "SUITABLE"
 57:
 58: recommendation: string; // Patient-specific recommendation
 59: }
 60:
 61: // OLD DietAnalysis interface is removed.
 62: // The data it contained will now be managed via DynamicDietFieldDefinition and PatientDietAnalysisResult.
 64: export interface NutrientData {
 65: score: number;
 66:
      healthImpact: string;
 67: intakeLevel: string;
 68: source: string;
 69: }
 70:
 71: export interface NutritionData {
 72: vitamins: {
       vitaminA: NutrientData;
 73:
 74:
       vitaminB12: NutrientData;
 75:
        vitaminB2: NutrientData;
        vitaminB6: NutrientData;
 76:
       vitaminB9: NutrientData;
 77:
 78:
       vitaminC: NutrientData;
 79:
        vitaminD: NutrientData;
 80:
        vitaminE: NutrientData;
 81: };
 82: fattyAcids: {
 83:
       omegaFattyAcids: NutrientData;
 84:
      };
 85:
      elements: {
 86:
       calcium: NutrientData;
 87:
       iodine: NutrientData;
       iron: NutrientData;
 88:
 89:
        magnesium: NutrientData;
 90:
        phosphorus: NutrientData;
       selenium: NutrientData;
 91:
 92:
       zinc: NutrientData;
 93:
     };
 94:
      complexNutrients: {
 95:
      antiInflammatory: NutrientData;
 96:
        antioxidants: NutrientData;
 97:
     };
 98: }
99:
100: export interface ExerciseData {
101: level: string;
102:
     description: string;
103: }
104:
105: export interface SportsAndFitness {
106: exerciseType: {
      endurancePotential: ExerciseData;
107:
108:
        powerPotential: ExerciseData;
       strengthProfile: ExerciseData;
109:
110:
        exerciseTime: ExerciseData;
     };
111:
112:
      performance: {
113:
       enduranceCapacity: ExerciseData;
114:
       fatigueResistance: ExerciseData;
115:
       bloodFlow: ExerciseData;
       oxygenEfficiency: ExerciseData;
116:
117:
        waterLoss: ExerciseData;
       lactateClearing: ExerciseData;
118:
119:
       recoveryEfficiency: ExerciseData;
120:
        bodyComposition: ExerciseData;
121:
        injuryRisk: ExerciseData;
```

```
122:
        achillesTendonInjury: ExerciseData;
        ligamentInjury: ExerciseData;
123:
124:
        rupture: ExerciseData;
125:
        muscleCramps: ExerciseData;
     };
126:
127: }
128:
129: export interface HealthConditionStatus {
130:
      status: "strength" | "improvement";
131: }
133: export interface LifestyleConditions {
134:
      heartVascularHealth: {
135:
        hypertension: HealthConditionStatus;
136:
        leftVentricularHypertrophy: HealthConditionStatus;
137:
        atherosclerosis: HealthConditionStatus;
138:
        familialHypercholesterolemia: HealthConditionStatus;
139:
        cardiomyopathy: HealthConditionStatus;
        cholesterolImbalance: HealthConditionStatus;
140:
141:
        stroke: HealthConditionStatus;
142:
     };
143:
      diabesity: {
144:
        obesity: HealthConditionStatus;
145:
        diabetesType2: HealthConditionStatus;
146:
147:
      liverHealth: {
148:
        nafld: HealthConditionStatus;
149:
        liverCirrhosis: HealthConditionStatus;
150:
     };
151:
      boneHealth: {
      osteoporosis: HealthConditionStatus;
152:
153:
        osteoarthritis: HealthConditionStatus;
154:
155:
      gutHealth: {
       irritableBowelSyndrome: HealthConditionStatus;
156:
157:
        celiacDisease: HealthConditionStatus;
158:
      };
159:
      hormoneSystem: {
160:
       hypothyroidism: HealthConditionStatus;
161:
      };
162: }
163:
164: export interface MetabolicGeneData {
165: genes: string[];
166:
      genotype: string;
     impact: string;
167:
168: advice: string;
169: }
170:
171: export interface MetabolicCore {
172: methylation: MetabolicGeneData;
173: inflammation: MetabolicGeneData;
174: oxidativeStress: MetabolicGeneData;
175:
      detoxification: MetabolicGeneData;
176:
      vitaminDMetabolism: MetabolicGeneData;
     lipidMetabolism: MetabolicGeneData;
177:
178: insulinResistance: MetabolicGeneData;
179: circadianRhythm: MetabolicGeneData;
180:
      exerciseResponsiveness: MetabolicGeneData;
181:
      snackingTendency: MetabolicGeneData;
182: oestrogenElimination: MetabolicGeneData;
183: powerVsEndurance: MetabolicGeneData;
      injuryRecovery: MetabolicGeneData;
184:
185:
      fluidLossTendency: MetabolicGeneData;
186:
      vo2Max: MetabolicGeneData;
187: }
188:
189: export interface DigestiveHealthData {
190:
     level: string;
191:
      description: string;
192: }
193:
194: export interface DigestiveHealth {
```

```
gutHealth: DigestiveHealthData;
195:
196: glutenIntolerance: DigestiveHealthData;
197: celiacDiseaseTendency: DigestiveHealthData;
       impactOnBonesJoints: DigestiveHealthData;
198:
199: lactoseIntolerance: DigestiveHealthData;
200: probioticsRequirement: DigestiveHealthData;
201: }
202:
203: export interface AddictionData {
204: tendency: string;
205: description: string;
206: }
207:
208: export interface GenesAndAddiction {
209: alcoholAddiction: AddictionData;
210: smokingAddiction: AddictionData;
211: snackingHabits: AddictionData;
212:
      altruism: AddictionData;
213: }
214:
215: export interface SleepData {
216:
      impact: string;
217:
      intervention: string;
218: }
219:
220: export interface SleepAndRest {
221: sleepCycle: SleepData;
222: sleepApnea: SleepData;
223: sleepDepth: SleepData;
224: stressSensitivity: SleepData;
225: }
226:
227: export interface AllergyData {
228: tendency: string;
229: }
230:
231: export interface AllergiesAndSensitivity {
232: dustAllergy: AllergyData;
233: pesticideSensitivity: AllergyData;
234: smokeSensitivity: AllergyData;
235: automobileSmokeSensitivity: Al
      automobileSmokeSensitivity: AllergyData;
236: generalAdvice: string;
237: }
238:
239: export interface GeneTestResult {
240: geneName: string;
241: variation: string;
242: result: string;
243: }
244:
245: export interface MetabolicSummary {
246: strengths: string[];
247: weaknesses: string[];
248: }
249:
250: export interface PreventiveHealth {
251: diagnosticTests: {
252:
       halfYearly: string[];
        yearly: string[];
253:
254:
255: nutritionalSupplements: Array<{
256:
       supplement: string;
257:
        needed: boolean;
     } > ;
258:
259: }
260:
261: export interface FamilyGeneticImpact {
262: gene: string;
263:
      normalAlleles: string;
264: yourResult: string;
265: healthImpact: string;
266: }
267:
```

```
268: export interface ReportSummaries {
269: nutrigenomicsSummary: string;
270:
      exerciseGenomicsSummary: string;
271: }
272:
273: export interface ComprehensiveReportData {
274: patientInfo: PatientInfo;
275: content: ReportContent;
276:
      settings: ReportSettings;
277: dynamicDietFieldDefinitions: DynamicDietFieldDefinition[];
278: patientDietAnalysisResults: PatientDietAnalysisResult[];
279: nutritionData: NutritionData;
280: sportsAndFitness: SportsAndFitness;
281: lifestyleConditions: LifestyleConditions;
282: metabolicCore: MetabolicCore;
283: digestiveHealth: DigestiveHealth;
284: genesAndAddiction: GenesAndAddiction;
285:
       sleepAndRest: SleepAndRest;
286: allergiesAndSensitivity: AllergiesAndSensitivity;
287: geneTestResults: GeneTestResult[];
288: metabolicSummary: MetabolicSummary;
289: preventiveHealth: PreventiveHealth;
290: familyGeneticImpact: FamilyGeneticImpact[];
291: summaries: ReportSummaries;
292: }
```