

app/page.tsx

```
"use client";

import { useState, useEffect, useCallback } from "react";
import { useRouter } from "next/navigation";
import Image from "next/image";
import {
  Handshake,
  Users,
  LineChart,
  GraduationCap,
  Lightbulb,
  BookOpen,
  Menu,
  X,
  ArrowRight,
} from "lucide-react";
import { useAuth } from "@/context/AuthContext";

// Define type interfaces for better TypeScript support
interface CardData {
  title: string;
  desc: string;
  icon: IconKey;
}

interface FeatureData {
  title: string;
  desc: string;
  img: string;
  additionalClasses: string;
  gradientClass: string;
}

const Home = () => {

  const { state, dispatch } = useAuth();
  const user = state.user;
  const router = useRouter();
  const [mobileMenuOpen, setMobileMenuOpen] = useState(false);
  const [scrolled, setScrolled] = useState(false);

  // Handle scroll effect for header
  useEffect(() => {
    const handleScroll = () => {
      setScrolled(window.scrollY > 10);
    };
    window.addEventListener("scroll", handleScroll);
    return () => window.removeEventListener("scroll", handleScroll);
  }, []);

  // Close mobile menu when window is resized to desktop width
  useEffect(() => {
    const handleResize = () => {
      if (window.innerWidth >= 768 && mobileMenuOpen) {
        setMobileMenuOpen(false);
      }
    };
    window.addEventListener("resize", handleResize);
    return () => window.removeEventListener("resize", handleResize);
  }, [mobileMenuOpen]);
```

```

// Handle scroll effect for header
useEffect(() => {
  const handleScroll = () => {
    setScrolled(window.scrollY > 10);
  };
  window.addEventListener("scroll", handleScroll);
  return () => window.removeEventListener("scroll", handleScroll);
}, []);

// Handle smooth scrolling for anchor links
const scrollToSection = useCallback((e: React.MouseEvent<HTMLAnchorElement>, id: string) => {
  e.preventDefault();
  setMobileMenuOpen(false);
  const element = document.getElementById(id);
  if (element) {
    const offsetTop = element.getBoundingClientRect().top + window.pageYOffset;
    window.scrollTo({
      top: offsetTop - 80, // Account for header height
      behavior: "smooth",
    });
  }
}, []);

const brandColor = "rgba(255, 32, 78, 1)";

const iconMap = {
  handshake: Handshake,
  users: Users,
  lineChart: LineChart,
  graduationCap: GraduationCap,
};

type IconKey = keyof typeof iconMap;

const cards: CardData[] = [
  {
    title: "AI-Personalized Courses",
    desc: "Smart content tailored to your learning speed and style.",
    icon: "handshake",
  },
  {
    title: "Interactive Learning",
    desc: "Live coding, quizzes, discussions & real-world projects.",
    icon: "users",
  },
  {
    title: "Progress Insights",
    desc: "Visual dashboards that track growth & mastery level.",
    icon: "lineChart",
  },
  {
    title: "Certifications",
    desc: "Earn certificates validated by AI skill assessments.",
    icon: "graduationCap",
  },
];

const features: FeatureData[] = [
  {
    title: "Upskilling Made Easy",
    desc: "Learn trending skills with AI guidance.",
    img: "/upskilling.png",
    additionalClasses: "md:border-r md:border-b",
    gradientClass: "hover:bg-gradient-to-bl from-slate-50 via-white to-white",
  },

```

```

{
  title: "Earn Badges",
  desc: "Get rewarded with verifiable skill badges.",
  img: "/badges.png",
  additionalClasses: "md:border-r md:border-l md:border-b",
  gradientClass: "hover:bg-gradient-to-t from-slate-50 via-white to-white",
},
{
  title: "Daily Challenges",
  desc: "Sharpen your mind with daily tasks & mini-projects.",
  img: "/dailychallenges.png",
  additionalClasses: "md:border-l md:border-b",
  gradientClass: "hover:bg-gradient-to-br from-slate-50 via-white to-white",
},
{
  title: "AI-Powered Courses",
  desc: "Courses that adapt to your pace & goals.",
  img: "/courses.png",
  additionalClasses: "md:border-r md:border-t",
  gradientClass: "hover:bg-gradient-to-l from-slate-50 via-white to-white",
},
{
  title: "AI Writer",
  desc: "Write essays, reports & content with your AI assistant.",
  img: "/aiwriter.png",
  additionalClasses: "md:border-r md:border-t md:border-l",
  gradientClass: "hover:bg-gradient-to-r from-slate-50 via-white to-white",
},
{
  title: "Masterclasses",
  desc: "Attend live expert-led workshops.",
  img: "/masterclass.png",
  additionalClasses: "md:border-l md:border-t",
  gradientClass: "hover:bg-gradient-to-r from-slate-50 via-white to-white",
},
];

const statsData = [
  { value: "10K+", label: "Active Users" },
  { value: "300+", label: "Courses Offered" },
  { value: "25+", label: "Domains Covered" },
];

const navLinks = [
  { href: "#features", label: "Features" },
  { href: "#why-choose", label: "Why Choose Us" },
  { href: "#stats", label: "Stats" },
];

return (
  <div className="bg-white min-h-screen font-sans text-gray-900 overflow-x-hidden">
    { /* Header */ }
    <header
      className={`fixed top-0 left-0 w-full flex justify-between items-center px-4 md:px-6 py-4 shadow-sm z-50 transition-all duration-300
        ${isScrolled ? "backdrop-blur-md bg-white/90" : "backdrop-blur-sm bg-white/80"}
      `}
      aria-label="Site header"
    >
      <div className="flex items-center gap-3">
        <Image
          src="/logo.png"
          alt="TBAI Logo"
          width={40}
          height={40}
        />

```

```

        className="rounded shadow-md"
        priority
    />
    <h1 className="text-2xl font-bold text-[rgba(255,32,78,1)]">Techno Billion Ai</h1>
</div>

{/* Desktop Nav */}
<nav className="hidden md:flex items-center gap-8" aria-label="Main navigation">
    {navLinks.map((link, index) => (
        <a
            key={index}
            href={link.href}
            onClick={(e) => scrollToSection(e, link.href.substring(1))}
            className="text-gray-700 hover:text-[rgba(255,32,78,1)] transition-colors relative group"
        >
            {link.label}
            <span className="absolute left-0 bottom-0 w-0 h-0.5 bg-[rgba(255,32,78,1)] transition-all duration-300 group-hover:w-f
        </a>
    ))}
    {!user && <button
        onClick={() => router.push("/login")}
        className="cursor-pointer bg-[rgba(255,32,78,0.1)] text-[rgba(255,32,78,1)] px-4 py-2 rounded-full hover:bg-[rgba(255,32,78,0.2)]"
        aria-label="Login"
    >
        Login
    </button>}
    {user && <button
        onClick={() => router.push("/course")}
        className="cursor-pointer bg-[rgba(255,32,78,0.1)] text-[rgba(255,32,78,1)] px-4 py-2 rounded-full hover:bg-[rgba(255,32,78,0.2)]"
        aria-label="Login"
    >
        Dashboard
    </button>}
</nav>

{/* Mobile menu button */}
<div className="md:hidden flex items-center">
    <button
        onClick={() => setMobileMenuOpen(!mobileMenuOpen)}
        aria-expanded={mobileMenuOpen}
        aria-controls="mobile-menu"
        aria-label="Toggle menu"
        className="p-2 text-gray-700 focus:outline-none focus:ring-2 focus:ring-inset focus:ring-[rgba(255,32,78,0.3)]"
    >
        {mobileMenuOpen ? <X size={24} /> : <Menu size={24} />}
    </button>
</div>
</header>

{/* Mobile Navigation Menu */}
{mobileMenuOpen && (
    <div className="fixed inset-0 bg-white z-40 pt-24 px-6 md:hidden flex flex-col items-center gap-8 animate-fade-in-down">
        <a
            href="#features"
            className="text-lg text-gray-700 hover:text-[rgba(255,32,78,1)] transition-colors"
            onClick={() => setMobileMenuOpen(false)}
        >
            Features
        </a>
        <a
            href="#why-choose"
            className="text-lg text-gray-700 hover:text-[rgba(255,32,78,1)] transition-colors"
            onClick={() => setMobileMenuOpen(false)}
        >
            Why Choose Us

```

```

    </a>
    <a
      href="#stats"
      className="text-lg text-gray-700 hover:text-[rgba(255,32,78,1)] transition-colors"
      onClick={() => setMobileMenuOpen(false)}
    >
      Stats
    </a>
  {!user && <button
    onClick={() => router.push("/login")}
    className="cursor-pointer bg-[rgba(255,32,78,0.1)] text-[rgba(255,32,78,1)] px-6 py-3 rounded-full hover:bg-[rgba(255,32,78,0.9)]"
  >
    Login
  </button>}
  {user && <button
    onClick={() => router.push("/course")}
    className="cursor-pointer bg-[rgba(255,32,78,0.1)] text-[rgba(255,32,78,1)] px-6 py-3 rounded-full hover:bg-[rgba(255,32,78,0.9)]"
  >
    Dashboard
  </button>}
</div>
)}

{/* Hero Section */}
<section className="pt-28 md:pt-40 pb-12 md:pb-20 px-4 md:px-6 bg-white" id="hero">
  <div className="max-w-7xl mx-auto grid md:grid-cols-2 gap-8 md:gap-16 items-center">
    <div className="space-y-6">
      <div className="inline-block px-3 py-1 bg-[rgba(255,32,78,0.1)] text-[rgba(255,32,78,1)] rounded-full text-sm font-medium">
        AI-Powered Learning Platform
      </div>
      <h2 className="text-4xl md:text-5xl font-bold text-[rgba(255,32,78,1)] leading-tight tracking-tight">
        Upskill with TBAI
      </h2>
      <p className="text-lg md:text-xl text-gray-700 font-medium leading-relaxed max-w-lg">
        Revolutionize your learning experience with cutting-edge,
        AI-powered courses designed to help you master real-world skills.
        Whether you're advancing your career or expanding your knowledge,
        TBAI is your partner in growth.
      </p>
      <div className="flex gap-4">
        <BookOpen className="w-8 h-8 text-[rgba(255,32,78,1)]" aria-hidden="true" />
        <Lightbulb className="w-8 h-8 text-gray-600" aria-hidden="true" />
        <GraduationCap className="w-8 h-8 text-gray-600" aria-hidden="true" />
      </div>
      <div className="pt-4 flex flex-wrap gap-4">
        <button
          onClick={() => router.push("/login")}
          className="cursor-pointer bg-[rgba(255,32,78,1)] text-white px-6 py-3 rounded-full hover:bg-[rgba(255,32,78,0.9)]"
        >
          Get Started Free
          <ArrowRight size={18} className="transition-transform group-hover:translate-x-1" />
        </button>
        <button
          onClick={() => document.getElementById('features')?.scrollIntoView({ behavior: 'smooth', block: 'start' })}
          className="cursor-pointer bg-white text-gray-800 border border-gray-200 px-6 py-3 rounded-full hover:bg-gray-50"
        >
          Learn More
        </button>
      </div>
    </div>
    <div className="relative mt-8 md:mt-0 flex justify-center md:justify-end">
      <div className="relative w-full max-w-md md:max-w-none">
        <div className="relative">
          <div className="absolute -top-4 -right-4 w-16 h-16 bg-[rgba(255,32,78,0.1)] rounded-full -z-10"></div>
          <div className="absolute -bottom-4 -left-4 w-24 h-24 bg-[rgba(255,32,78,0.1)] rounded-full -z-10"></div>
          <Image
            alt="Hero background image"
            data-bbox="101 32 955 966"
            className="w-full h-full object-cover"
            data-kind="parent" data-rs="2" />
        </div>
      </div>
    </div>
  </div>

```

```


</div>
<div className="hidden md:block absolute -bottom-8 right-8 bg-white p-4 rounded-lg shadow-lg">
  <div className="flex items-center gap-2">
    <div className="w-2 h-2 rounded-full bg-green-400"></div>
    <span className="text-sm font-medium">Live Learning in Progress</span>
  </div>
</div>
</div>
</div>
</div>
</section>

{/* Features Section */}
<section className="py-16 bg-white" id="features">
  <div className="max-w-7xl mx-auto px-4 md:px-6">
    <h3 className="text-3xl font-bold text-[rgba(255,32,78,1)] text-center mb-6">
      Key Features
    </h3>
    <p className="text-gray-700 text-center max-w-2xl mx-auto mb-12">
      Discover how our AI-powered platform transforms the way you learn and master new skills
    </p>

    <div className="grid grid-cols-1 sm:grid-cols-2 lg:grid-cols-4 gap-8 md:gap-6">
      {cards.map((card, index) => {
        const Icon = iconMap[card.icon];
        return (
          <div
            key={index}
            className="bg-white rounded-xl p-6 shadow-md border border-gray-100 hover:shadow-lg transition-all hover:translate-y-[-5px]">
            <div className="flex flex-col items-center text-center">
              <div className="p-3 bg-[rgba(255,32,78,0.1)] rounded-full mb-4 group-hover:bg-[rgba(255,32,78,0.2)] transition-colors">
                <Icon className="w-6 h-6 text-[rgba(255,32,78,1)]" aria-hidden="true" />
              </div>
              <h4 className="text-xl font-semibold text-gray-800 mb-2">
                {card.title}
              </h4>
              <p className="text-gray-600">{card.desc}</p>
            </div>
          </div>
        );
      })}
    </div>
  </div>

  </section>

  <div className="grid grid-cols-1 md:grid-cols-2 lg:grid-cols-3 gap-4 md:gap-0 max-w-6xl mx-auto">
```

```

    {features.map((feature, index) => (
      <div
        key={index}
        className={`bg-white backdrop-blur-lg border border-white/20 p-6 text-center transition-all hover:shadow-md ${feature
      >
        <div className="flex justify-center mb-4">
          <img
            src={feature.img}
            alt={feature.title}
            className="w-16 h-16 object-contain"
          />
        </div>
        <h4 className="text-xl font-semibold text-[rgba(255,32,78,1)] mb-2">
          {feature.title}
        </h4>
        <p className="text-gray-700 text-sm">{feature.desc}</p>
      </div>
    ))}
  </div>
</div>
</section>

{/* Stats Section */}
<section className="bg-white text-center py-16 md:py-20" id="stats">
  <div className="max-w-7xl mx-auto px-4 md:px-6">
    <h3 className="text-3xl font-bold text-[rgba(255,32,78,1)] mb-8">
      Our Reach
    </h3>
    <div className="grid grid-cols-1 md:grid-cols-3 gap-8">
      {statsData.map((stat, index) => (
        <div key={index} className="p-6 rounded-lg bg-white shadow-sm border border-gray-50">
          <div className="text-3xl md:text-4xl font-bold text-[rgba(255,32,78,1)] mb-2">
            {stat.value}
          </div>
          <div className="text-sm text-gray-700">{stat.label}</div>
        </div>
      ))}
    </div>
  </div>
</section>

{/* CTA Section */}
<section className="bg-gradient-to-r from-[rgba(255,32,78,0.05)] to-white py-16">
  <div className="max-w-4xl mx-auto text-center px-4 md:px-6">
    <h3 className="text-2xl md:text-3xl font-bold text-gray-800 mb-4">
      Ready to transform your learning journey?
    </h3>
    <p className="text-gray-700 mb-8 max-w-2xl mx-auto">
      Join thousands of learners who are accelerating their skills with our AI-powered platform
    </p>
    <button
      onClick={() => router.push("/login")}
      className="cursor-pointer bg-[rgba(255,32,78,1)] text-white px-6 py-3 rounded-full hover:bg-[rgba(255,32,78,0.9)] transi
    >
      Get Started Today
    </button>
  </div>
</section>

{/* Footer */}
<footer className="bg-gray-100 text-gray-600 py-12 border-t">
  <div className="max-w-7xl mx-auto px-4 md:px-6">
    <div className="grid grid-cols-1 md:grid-cols-4 gap-8 mb-8">
      <div>
        <div className="flex items-center gap-3 mb-4">

```

```

    <Image
      src="/logo.png"
      alt="TBAI Logo"
      width={32}
      height={32}
      className="rounded shadow-sm"
    />
    <h3 className="text-xl font-bold text-[rgba(255,32,78,1)]">Techno Billion Ai</h3>
  </div>
  <p className="text-sm">
    Revolutionizing learning through AI technology.
  </p>
</div>

<div>
  <h4 className="font-semibold mb-4">Product</h4>
  <ul className="space-y-2 text-sm">
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">Courses</a></li>
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">Certifications</a></li>
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">AI Writer</a></li>
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">Masterclasses</a></li>
  </ul>
</div>

<div>
  <h4 className="font-semibold mb-4">Company</h4>
  <ul className="space-y-2 text-sm">
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">About</a></li>
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">Careers</a></li>
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">Blog</a></li>
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">Contact</a></li>
  </ul>
</div>

<div>
  <h4 className="font-semibold mb-4">Legal</h4>
  <ul className="space-y-2 text-sm">
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">Terms</a></li>
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">Privacy</a></li>
    <li><a href="#" className="hover:text-[rgba(255,32,78,1)] transition-colors">Cookies</a></li>
  </ul>
</div>
</div>

<div className="pt-8 mt-8 border-t border-gray-200 text-center text-sm">
  <p>
    &copy; {new Date().getFullYear()} Techno Billion AI. All rights
    reserved.
  </p>
</div>
</div>
</footer>
</div>
);
};

export default Home;

```

types/types.ts

```

export interface Course {
  uid: string;

```



```

course_id: string;
course_name: string;
student_uid: string[];
faculty_uid: string[];
batch: number;
course_duration_hrs: number;
level: string;
rating: number;
isPaid: boolean;
course_trailer: string;
amount: number;
course_desc: string;
course_banner: string[];
syllabus: string[];
start_date: string;
category_id: string;
enrollment_deadline: string;
enrollment_count: number;
dept_code: string[];
module: Module[];
}

```

```

export type User = {
  userName: string;
  userDept: string;
  userPhn: string;
  userGender: string;
  using: string;
  userEmail: string;
  batchStart: number;
  batchEnd: number;
  studentId: string;
  roll: string;
  dept_code: string;
  interest: string[];
  cgpa: string;
  token: string;
};

```

```

export interface Module {
  uid: string;
  lecture_id: string;
  video_ids: string[];
  quiz_ids: string[];
  title: string;
  desc: string;
  learning_sources: string[];
  lecture_order: number;
  course_id: string;
  Quiz: Quiz[];
  videos: Video[];
}

```

```

export interface Quiz {
  uid: string;
  quiz_id: string;
  quiz_name: string;
  lecture_id: string;
  questions: Question[];
}

```

```

export interface Question {
  uid: string;
  ques_id: string;
  question: string;
  options: string[];
}

```

```
options: string[];  
answer: number[];  
quiz_id: string;  
}  
  
export interface Video {  
  uid: string;  
  video_id: string;  
  name: string;  
  desc: string;  
  faculty: string[];  
  lecture_id: string;  
  duration: number;  
  video_order: number;  
  video_url: string;  
}
```

context/AuthContext.ts

```

"use client";

import { User } from "@types/types";
import React, { createContext, useReducer, useEffect, useContext } from "react";

type AuthState = {
  user: User | null;
};

type AuthAction =
  | { type: "LOGIN"; payload: User }
  | { type: "LOGOUT" }
  | { type: "UPDATE_USER"; payload: Partial<User> };

const initialState: AuthState = {
  user: null,
};

const AuthContext = createContext<{
  state: AuthState;
  dispatch: React.Dispatch<AuthAction>;
}>({ state: initialState, dispatch: () => null });

const reducer = (state: AuthState, action: AuthAction): AuthState => {
  switch (action.type) {
    case "LOGIN":
      localStorage.setItem("user", JSON.stringify(action.payload));
      return { user: action.payload };
    case "LOGOUT":
      localStorage.removeItem("user");
      return { user: null };
    case "UPDATE_USER":
      const updatedUser = { ...state.user!, ...action.payload };
      localStorage.setItem("user", JSON.stringify(updatedUser));
      return { user: updatedUser };
    default:
      return state;
  }
};

export const AuthProvider = ({ children }: { children: React.ReactNode }) => {
  const [state, dispatch] = useReducer(reducer, initialState);

  useEffect(() => {
    const storedUser = localStorage.getItem("user");
    if (storedUser) {
      dispatch({ type: "LOGIN", payload: JSON.parse(storedUser) });
    }
  }, []);

  return (
    <AuthContext.Provider value={{ state, dispatch }}>
      {children}
    </AuthContext.Provider>
  );
};

export const useAuth = () => useContext(AuthContext);

```