

Problem statement: Learn Smarter: AI in Education

Subtitle: Build tools that transform how India learns and grows.

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Brief Introduction:

Education in India often emphasizes exams over exploration, leaving students from classes 1 to 10 without the right personalized guidance for discovering their interests, strengths, and long-term career paths. This gap leads to confusion, stress, and missed opportunities in later stages of learning. Our proposed solution, is a student-friendly web application designed to bridge this gap. It uses AI-powered quizzes, smart profiling, and recommendation engines to build a personalized learning roadmap. Students can explore their skills, receive curated resources, and get guidance for higher studies, entrance exams, colleges, and future job opportunities, all while keeping learning enjoyable with built-in activity breaks. By combining AI/ML models, Django backend, and a simple frontend, the platform delivers accessible, scalable, and future-ready guidance to young learners.

Our Solution Roadmap:

Our project, is a web-based application designed for students in 1st to 10th classes to discover their strengths, build personalized study profiles, and plan their future learning paths with the help of AI.

The platform follows a step-by-step roadmap:

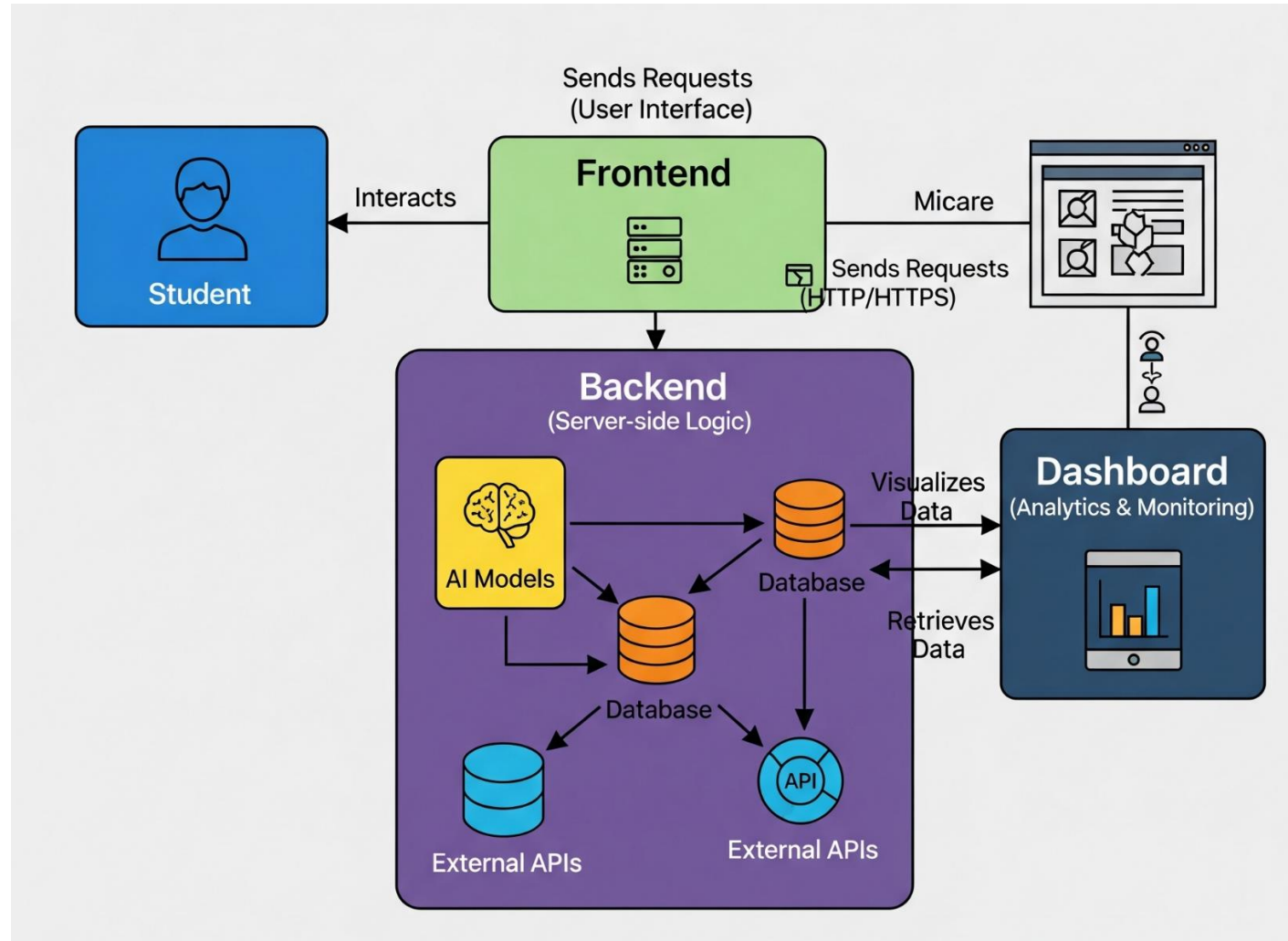
- Login & Onboarding → secure access.
- Interest & Skill Quiz → fun way to assess abilities.
- Profile Creation → study habits, permissions, and goals.
- Learning Plan → customized roadmap for current studies and future goals.
- Resources & Course Guides → AI-powered recommendations.
- Higher Studies, Exams & Career Guidance → personalized suggestions for streams, entrance exams, colleges, and jobs.
- Enjoy Gap → encouraging balance between academics and hobbies.

Powered by OpenAI APIs for natural language understanding, and built with Django (backend), SQLite (database), and HTML/CSS/JS (frontend), the system ensures personalized, scalable, and future-ready education guidance.

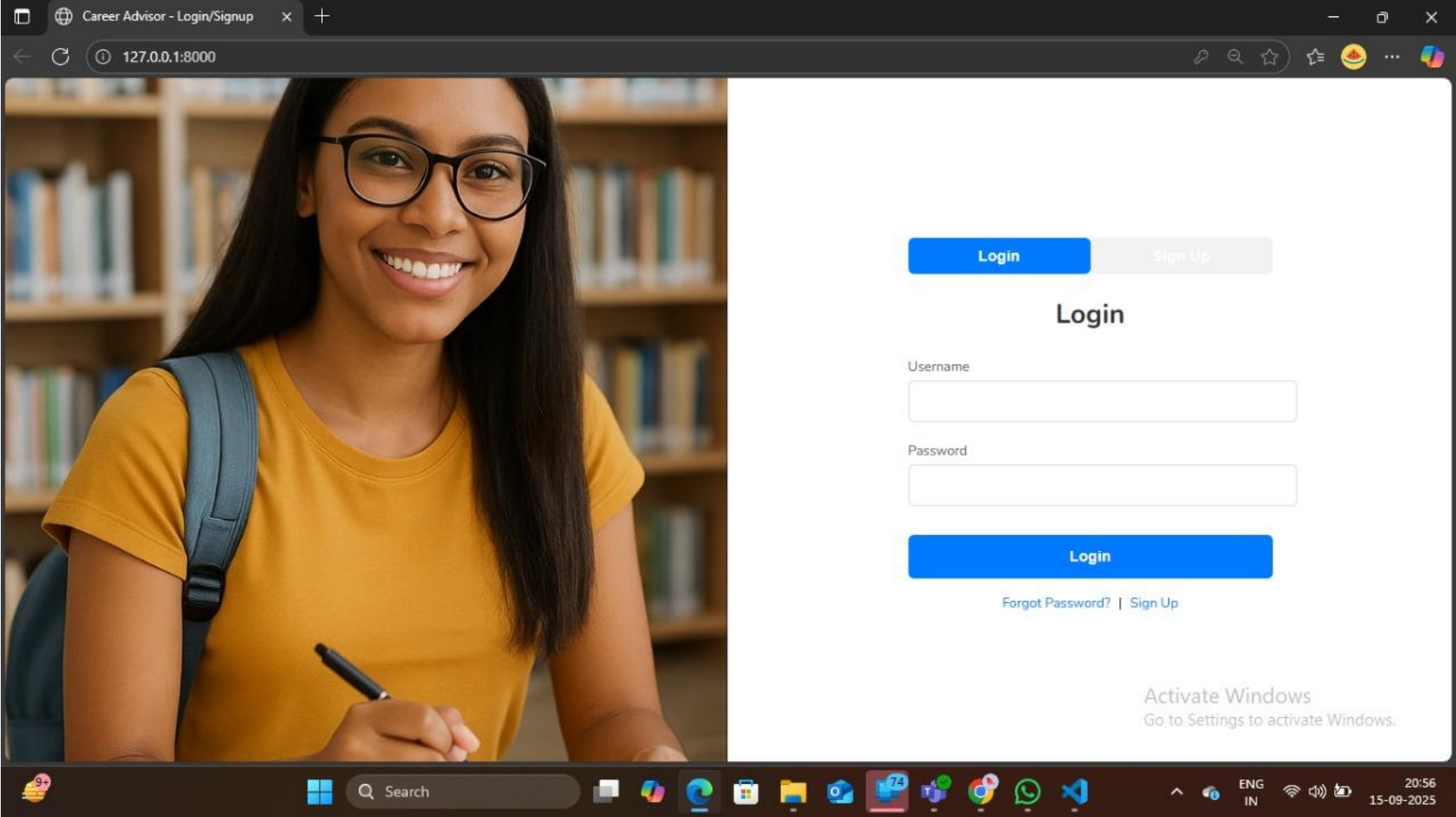
Core Features

- Personalized Learning Roadmap
Step-by-step path from interests → skills → studies → careers.
- AI-Powered Interest & Skill Quiz
Smart quizzes analyze student strengths and preferences.
- Dynamic Student Profile
Captures study habits, goals, and parental permissions.
- Resource & Course Guide
Curated study materials, courses, and growth activities.
- Higher Studies & Entrance Exam Guidance
Tailored recommendations for exams, subjects, and future study plans.
- College & Career Suggestions
AI recommends best colleges and high-potential career paths.
- Enjoy Gap (Fun Breaks)
Ensures stress-free, engaging, and balanced learning.
- Simple Web App for Classes 1–10
Child-friendly design for early-stage learners.

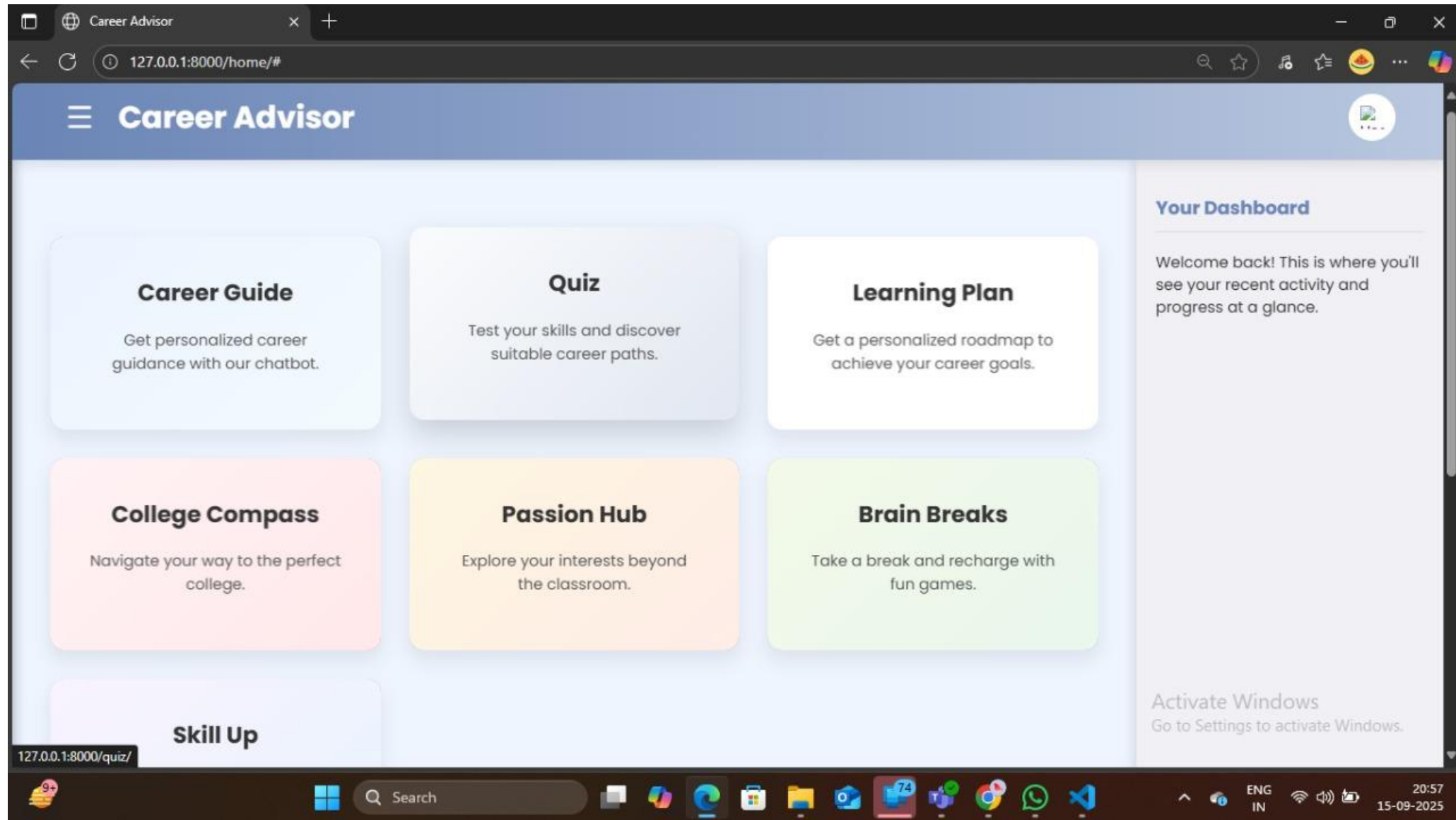
Architecture work flow



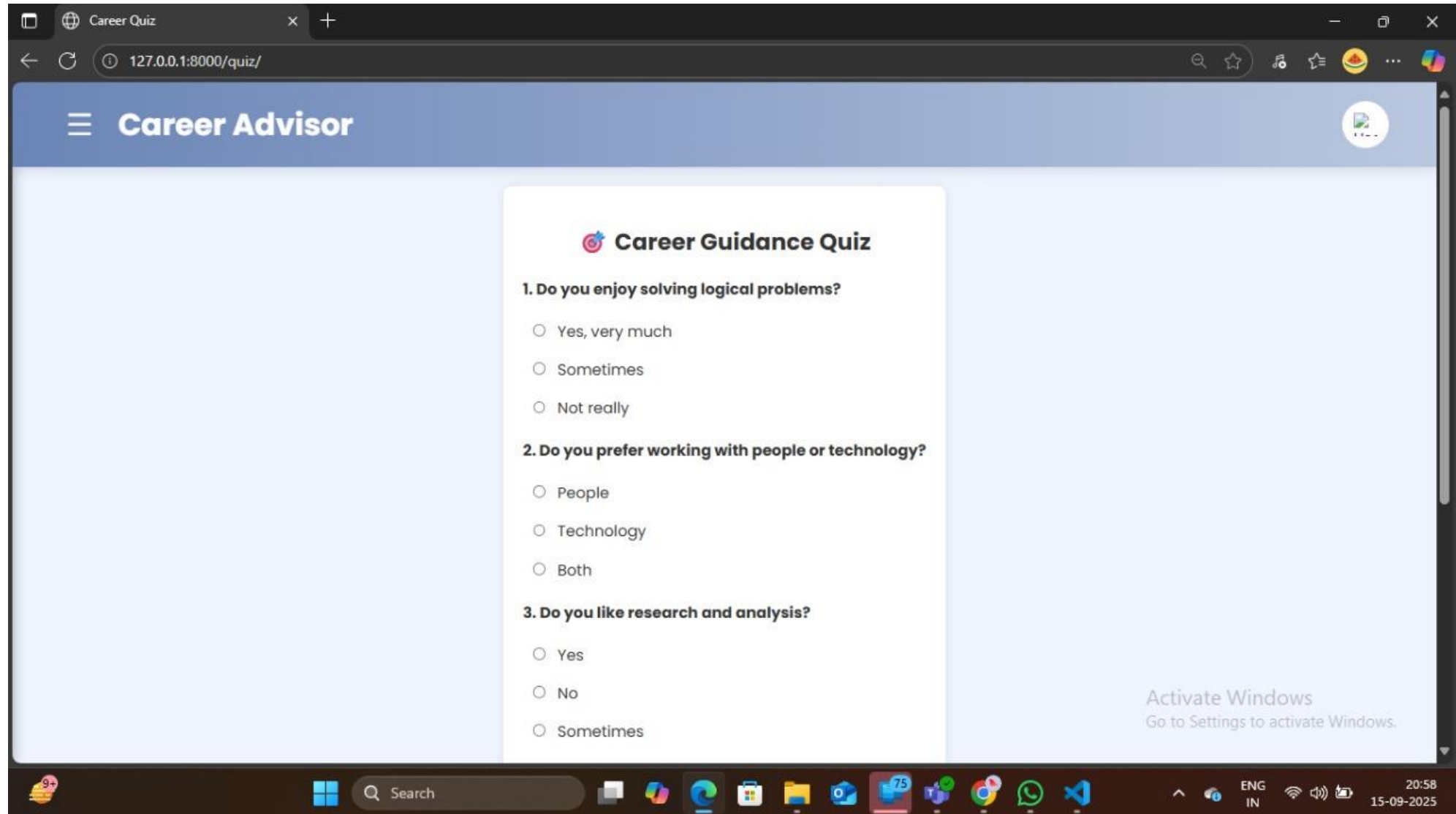
LOGIN PAGE



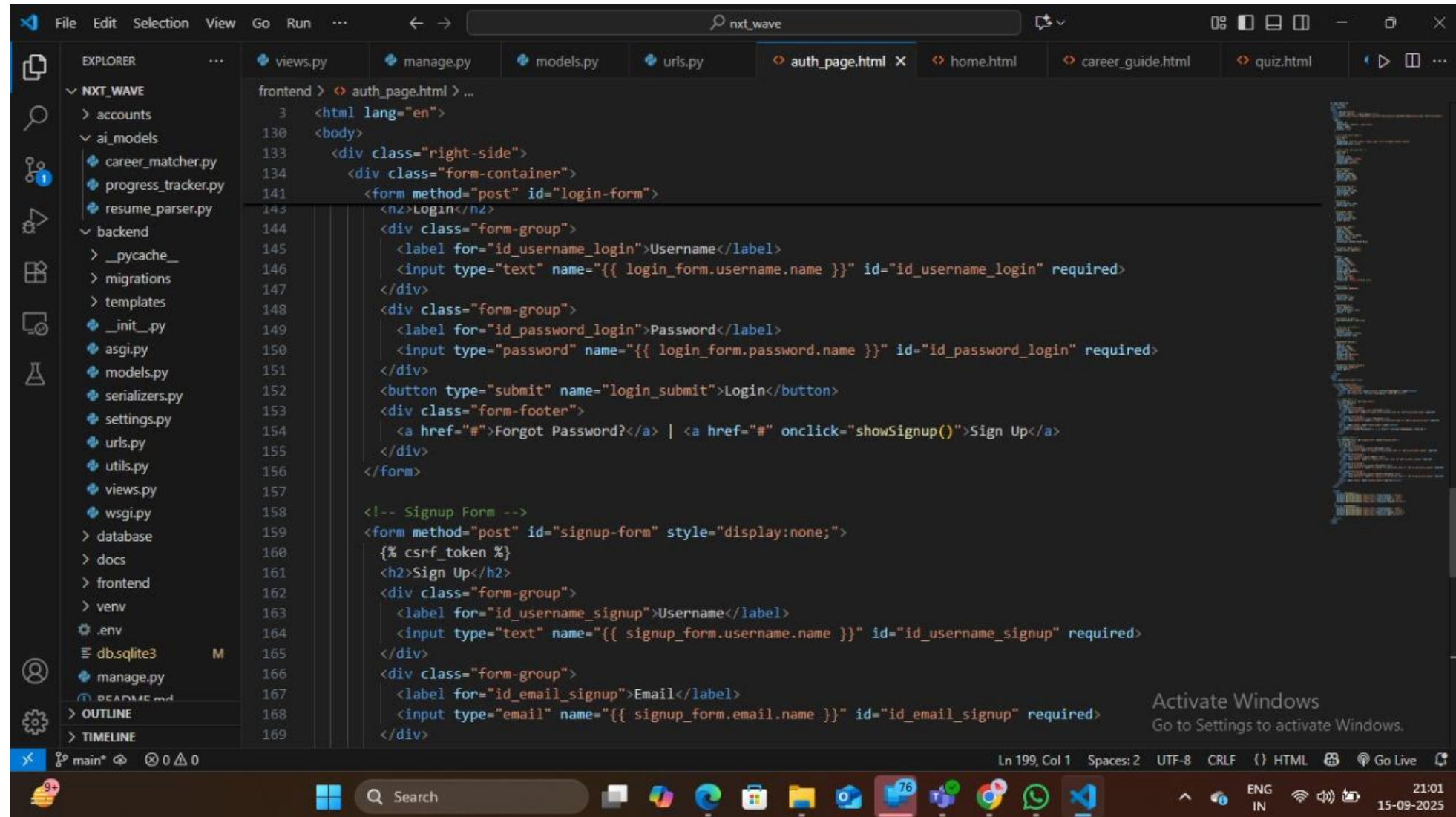
HOME PAGE



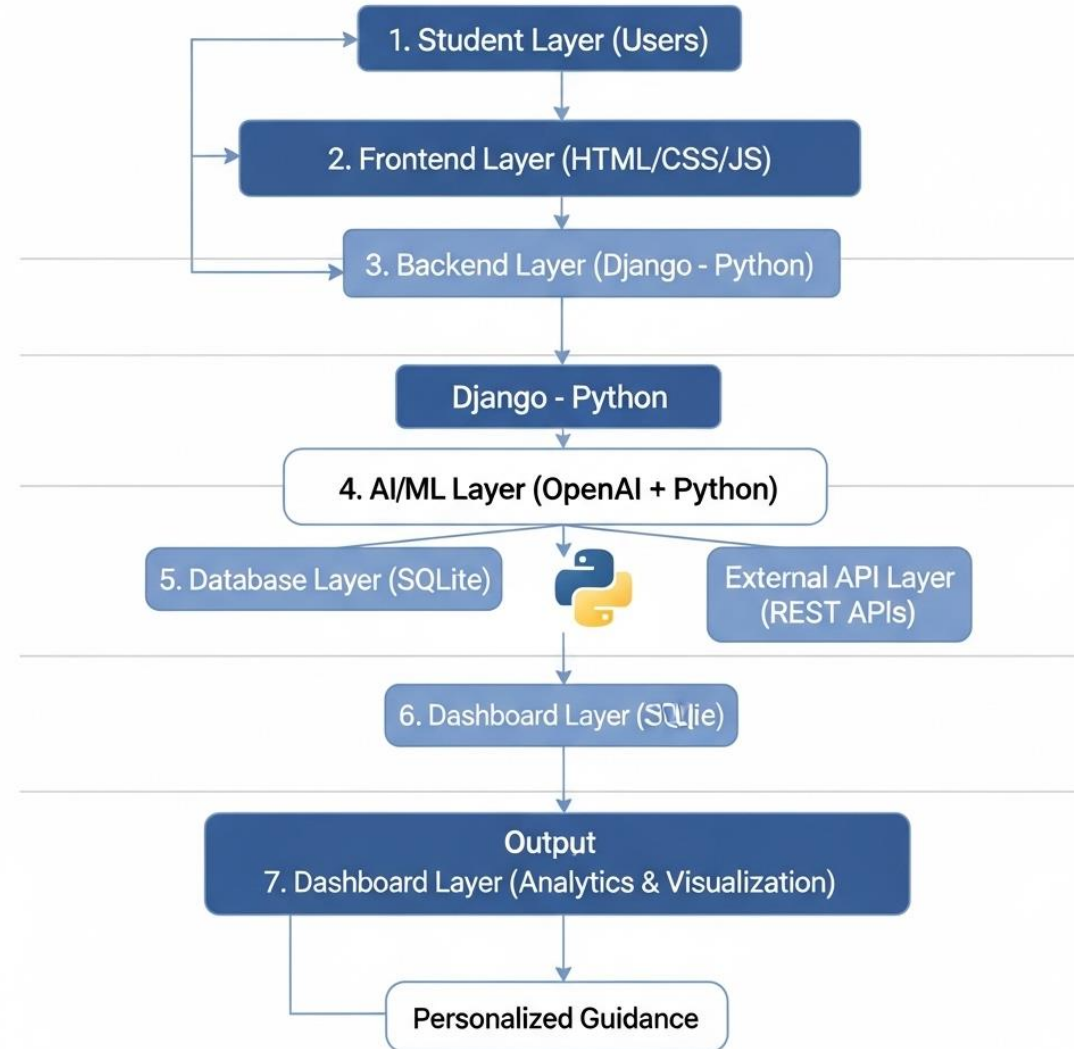
QUIZ PAGE



ENVIRONMENT OF CODE



ARCHIECTURE OF PROPOSED SYSTEM



Technology Stack:

- Powered by Django → Handles backend logic, routes, authentication, and connects everything together.
- Smartened with OpenAI → AI APIs + custom Python scripts provide recommendations, interest analysis, and career guidance.
- Styled with HTML/CSS/JS → Interactive, simple, and student-friendly web interface for quizzes, dashboards, and learning plans.
- Stored in SQLite → Lightweight, fast database for prototyping student profiles, quiz data, and recommendations.
- Connected via REST APIs → Seamless communication between frontend, backend, and AI modules.

Together, this stack ensures a scalable backend, a smart AI core, and a simple yet interactive frontend. It is lightweight for prototypes but can easily scale to cloud & Docker in the future. Designed to keep the system modular, student-friendly, and AI-ready.

Estimated Real-World Launch Cost:

- Hosting & Infrastructure
 - Cloud server (AWS, GCP, Azure) → ₹10,000 – ₹20,000 / month
 - Load balancing, backups, scaling → ~₹5,000 – ₹10,000
- Database
 - Managed DB (PostgreSQL/MySQL) → ₹3,000 – ₹8,000 / month
 - Storage for student data, analytics.
- AI/ML (OpenAI + Custom Models)
 - OpenAI API (frequent usage by students) → ₹30,000 – ₹50,000 / month
 - Custom model hosting (GPU/CPU servers if needed).
- Domain & Security 🛡
 - Domain + SSL + Authentication services → ~₹5,000 – ₹10,000 / year
- UI/UX & Frontend Development
 - Professional-grade responsive design → ₹50,000 – ₹1,00,000 (one-time)
- Backend & API Development ⚙
 - Scaling Django + integrations → ₹80,000 – ₹1,50,000 (one-time)
- Maintenance & Updates ☐
 - Monthly bug fixes, monitoring, feature updates → ₹15,000 – ₹30,000 / month

Total Estimated Launch Cost (Initial)

₹ ₹3.5 Lakh – ₹5 Lakh (one-time setup)

Monthly Running Cost (After Launch)

₹ ₹50,000 – ₹80,000 / month.

Prototype Submission – 1

What We Completed

- Environment Setup ⚙
 - Django backend, frontend structure, database (SQLite).
- Frontend Development 🌐
 - Login, Dashboard UI, Quiz & Profile pages completed.
- API Keys Integration 🔑
 - OpenAI API connected for basic study/career suggestions.

In Progress

- Backend Development (40% Completed) ◻
 - Student profile management, roadmap generation, and career matching logic under development.

Outcome of Prototype – 1

- Working demo of student login → quiz → basic study suggestion roadmap.
- Established foundation for complete career guidance system in next stage.

(NOTE:WE ARE REMOVING OUR API KEY IN OUR SUBMISSION)

Prototype Submission – 2

- Planned Completion
- Backend Development
 - Finish career roadmap generation, interest-based matching, and student progress tracking.
- AI/ML Integration
 - Use OpenAI + custom Python scripts for personalized learning plans, higher study suggestions, and job recommendations.
- Database Expansion
 - Store student progress, exam data, resources, and career paths in structured form.
- Advanced Frontend Features
 - Interactive dashboard with roadmap, career guidance, and entrance exam recommendations.
- External API Integration
 - Add courses, colleges, and job portals for real-time recommendations.

How We Can Earn Money

- Premium Model
 - Free access to basic guidance (login, quiz, profile, simple roadmap).
 - Paid subscription for advanced features like personalized AI study plan, entrance exam prep, and college/job recommendations.
- Subscription Plans
 - Monthly / Yearly plans for students & parents.
 - Affordable pricing (₹199–₹499/month).
- Affiliate Partnerships
 - Tie-ups with online course platforms (Byju's, Unacademy, Coursera).
 - Earn commission when students purchase recommended courses.
- School Partnerships
 - Offer platform as a B2B solution to schools.
 - Schools pay for student accounts → integrated into curriculum.
- Premium Add-ons
 - Detailed career counselling sessions (AI + human mentors).
 - Entrance exam practice modules.
- Revenue Potential
 - With 1,000 students @ ₹299/month, revenue = ₹2.9 Lakhs / month.
 - Scaling to schools & edtech partnerships → sustainable business model.

Future Scope:

➤ Adaptive Learning Plans

Dynamic roadmap that updates as student improves → personalized growth.

➤ Regional Language Support

Support for multiple Indian languages to reach rural students.

➤ Mobile App Launch

Android/iOS app for accessibility beyond the web version.

➤ Integration with Govt. Schemes

Link with scholarships & government exams to help student get real opportunities.

➤ AI + Human Mentorship

Blend of smart AI recommendations + expert career counselors.

➤ Expansion to 11th–12th & College Students

Cover career streams, competitive exams, and skill development.

★ Vision

To become India's #1 AI-Powered Student Career & Learning Companion — guiding from school → higher education → career success.