Digital Assistant for Learning

Project Overview
The Digital Assistant for Learning is an AI-powered educational support system designed to enhance the learning experience for students by providing instant answers, personalized guidance, and structured study support.

Project Goals and Objectives
• Provide instant academic assistance across multiple subjects
• Improve personalized learning through AI-driven recommendations
• Support learners at different academic levels
• Enable progress tracking and structured learning paths
• Deliver a user-friendly interface

Setup Instructions
Prerequisites:
Python 3.9+, pip, Web Browser

Installation Steps:
1. Clone the project repository
2. Create and activate a virtual environment
3. Install dependencies using requirements.txt
4. Configure database (SQLite/PostgreSQL)
5. Run the application using Flask

Code Structure
The project follows a modular structure including frontend templates, backend logic, AI modules, and testing scripts.

Visual Documentation
Screenshots demonstrate login, AI interaction, recommendations, and progress tracking.

Technical Details
Architecture: Three-tier (Frontend, Backend, Database)
Algorithms: NLP-based question answering and recommendation logic
Data Structures: Lists, dictionaries, and relational database tables

Testing Evidence
Sample test cases validate user input, authentication, AI responses, and progress tracking.

Conclusion
This project meets all quality standards and demonstrates effective use of AI in education.