EduTutor AI: Personalized Learning with Generative AI and LMS Integration

EduTutor AI is an AI-powered personalized education platform designed to revolutionize the learning experience for students and streamline assessment for educators. Leveraging the capabilities of IBM Watsonx and Granite foundation models, the platform offers dynamic quiz generation, intelligent student evaluation, real-time feedback, and seamless integration with Google Classroom.

Key Features:

- AI-Driven Quiz Generation

- Real-Time Feedback

- Diagnostic Testing

- Adaptive Quizzing

- Educator Insights Dashboard

- Google Classroom Integration

Scenarios:

1. Personalized Learning Experience

2. Educator Dashboard & Performance Insights

3. Diagnostic Testing and Adaptive Quizzing

4. Google Classroom Integration

Technical Stack:

- Foundation Models: IBM Watsonx, Granite 3.3-2b Instruct

- Data: Pinecone Vector DB

- LMS Integration: Google Classroom API

- UI: Streamlit or FastAPI

- Backend: Python, REST API

API Endpoints:

- POST /register

- GET /diagnostic-test

- POST /submit-quiz

- GET /generate-quiz?topic=xyz

- GET /dashboard

- GET /sync-classroom

Investor Pitch:

EduTutor AI provides personalized learning at scale with seamless LMS integration and real-time feedback.

Ideal for K-12, coaching centers, online educators, and colleges.

GitHub Deployment Summary:

- Clone, install requirements, run FastAPI server

- Optional Streamlit interface

- Ready for Colab or Render deployment