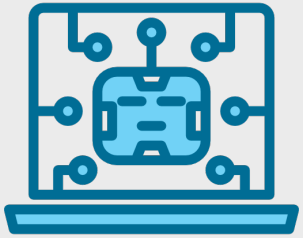


Intelligent Tutor System

Content

01

Introduction

Project Objectives

- The Intelligent Tutoring System project aims to provide personalized and adaptive learning materials to students.
- The objectives include enhancing student engagement, improving learning outcomes, and catering to individual learning preferences.
- This system aims to leverage OpenAI models, to generate customized feedback, guidance, and resources for each student.
- By analyzing student's progress, the system provides tailored recommendations for improvement and further learning.
- Our goal is to create a user-friendly, cloud-based platform that supports various languages and formats, ensuring a comprehensive learning experience for all students.

02

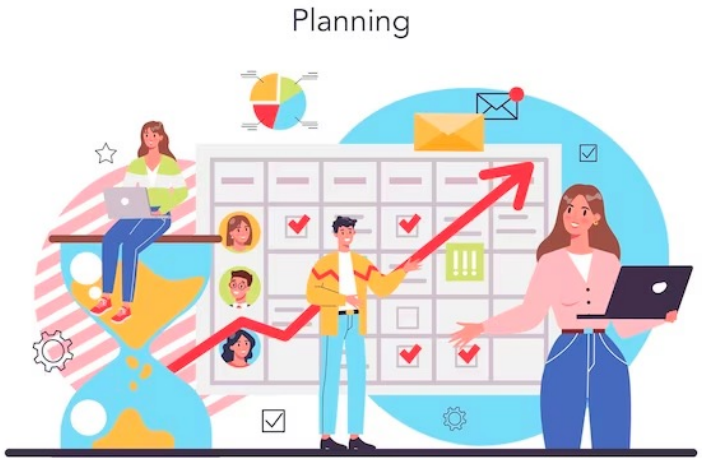
Current progress

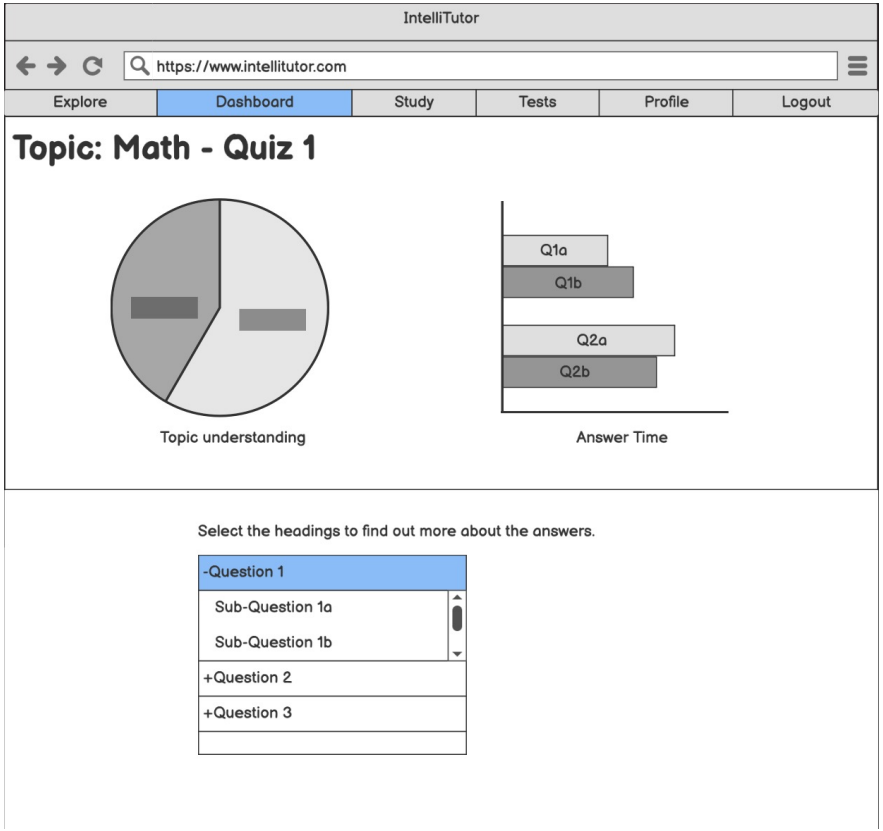
- Meeting with Microsoft mentors to establish a plan and gauge the scope of the project.
- Developed a broad project plan.
- Establishing a the User Login page and configuring it for seamless functionality.
- Implementing Cosmos DB and trying to integrated it with the backend to facilitate efficient data storage and retrieval for user login and signup.
- Designed raw wireframes to work on enhancing the user interface of the we application.
- Actively engaging in the development of a robust ML model.
- Explored and familiarized with the features of OpenAI's API.
- Carefully selected relevant categories to ensure accurate algorithm classification.
- Currently in progress with data collection using OpenAI's API to support the project.

03

Plans for coming wee

- To establish the skeleton structure of the project by deploying a HelloWorld for both the backend and UI components.
- Initiating the development of a prototype to showcase the core functionalities project.
- Continuing progress on refining the wireframes to enhance the user interface.
- Engaging in collecting data using OpenAI's API.
- Exploring to implement advanced AI capabilities to generate adaptive questio feedback.
- Designing a personalized dashboard for users, focusing on a user-centric expe




IntelliTutor
https://www.intellitutor.com
Explore
Dashboard
Study
Tests
Profile
Logout
Topic: Math - Quiz 1
Topic understanding
Q1a
Q1b
Q2a
Q2b
Answer Time
Select the headings to find out more about the answers.
-Question 1
Sub-Question 1a
Sub-Question 1b
+Question 2
+Question 3

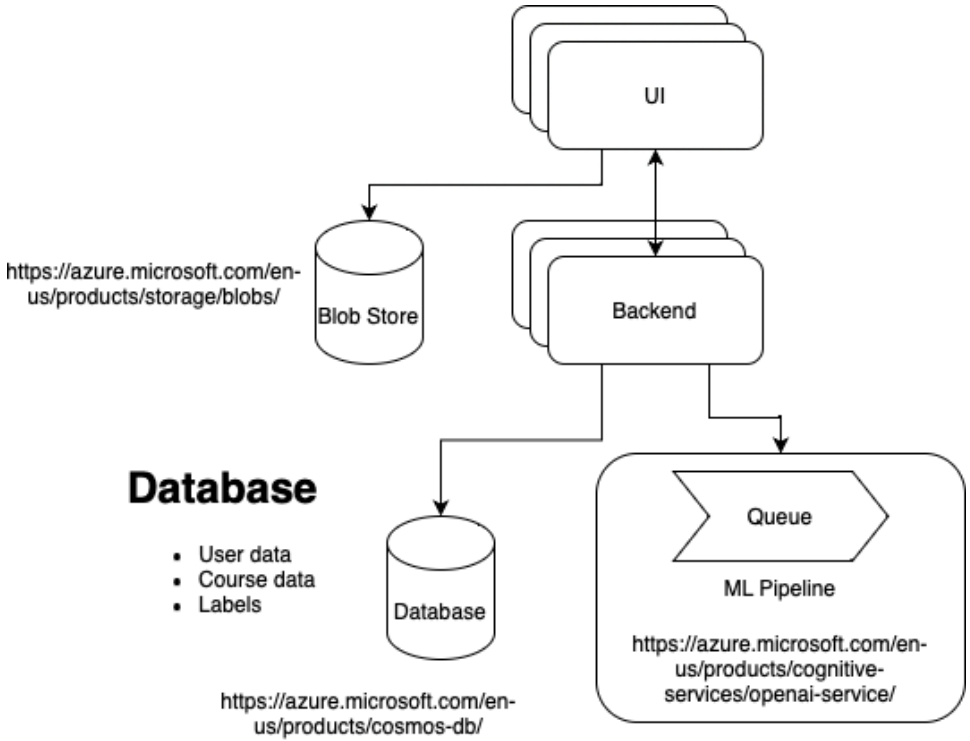
04

Key Aspects

- Simple microservice design
- State stored in the Database and Blob Store
  - UI & Backend horizontally scaled
- Use of queuing for the ML pipeline

Microsoft Azure supplies all of these services:

- Blob Storage
- Cosmos DB
- OpenAI Service



- **User registration and login:** Students can create accounts and log securely to access their personalized learning experience.
- **Progress tracking:** Students can track their learning outcomes, strengths, and weaknesses through intuitive visualisations.
- **Adaptive lessons:** The system presents interactive lessons tailored to individual students' learning goals and performance.
- **AI-generated feedback:** Our OpenAI model generates personalize feedback and guidance for each student based on their responses.

05

Brief review o roles and tasks

Roles	Dev1	Dev2
Front-end	Jayesh Bhatt	Sehba Nourein
Back-End	Rayyan	Ross Murphy
Cloud	Kartik Dhongadi	Sehba Nourein
Administration	Kartik Dhongadi	Rahul Kantode
Data Science & ML	Rahul Kantode	Rayyan
Integration	Ross Murphy	Jayesh Bhatt

Front-end	Back-end	Cloud/Admin	Data science/ ML
How to make web application	DB Schema.	Web-app deployment	Categories for subject of interest (For data collection)
No. of web pages	Connectivity of webapp to cosmoDB	Setup of cosmo-DB	Category of lectures, quizes and exercises (For data collection)
Design of each webpage	Which webpage will require which data from DB	Setup of cog service	OpenAI model implementation
Animations or (UI/UX)	Understanding behaviour of session object	Setup of Azure-ML platform.	Trigger OpenAI from webapp or Azure?

Done	In-progress	TBD

Thank you