



CourseCompanion

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Our Solution

- With no previous work on this project, this is the first semester that this software solution was developed. Our tech stack includes Node.js, ChatGPT API, CSS, HTML, and JS.
- Current contributions include the connection between the server and ChatGPT's API, the design and implementation of the student UI view, and the integration of the class response prompts based on the corresponding syllabus.
 - Potential future contributions may include adding a view that allows the instructor to upload any documents in addition to the syllabus. An important feature that should also be implemented is linking a student's Canvas login to student view of CourseCompanion.

Problem Statement

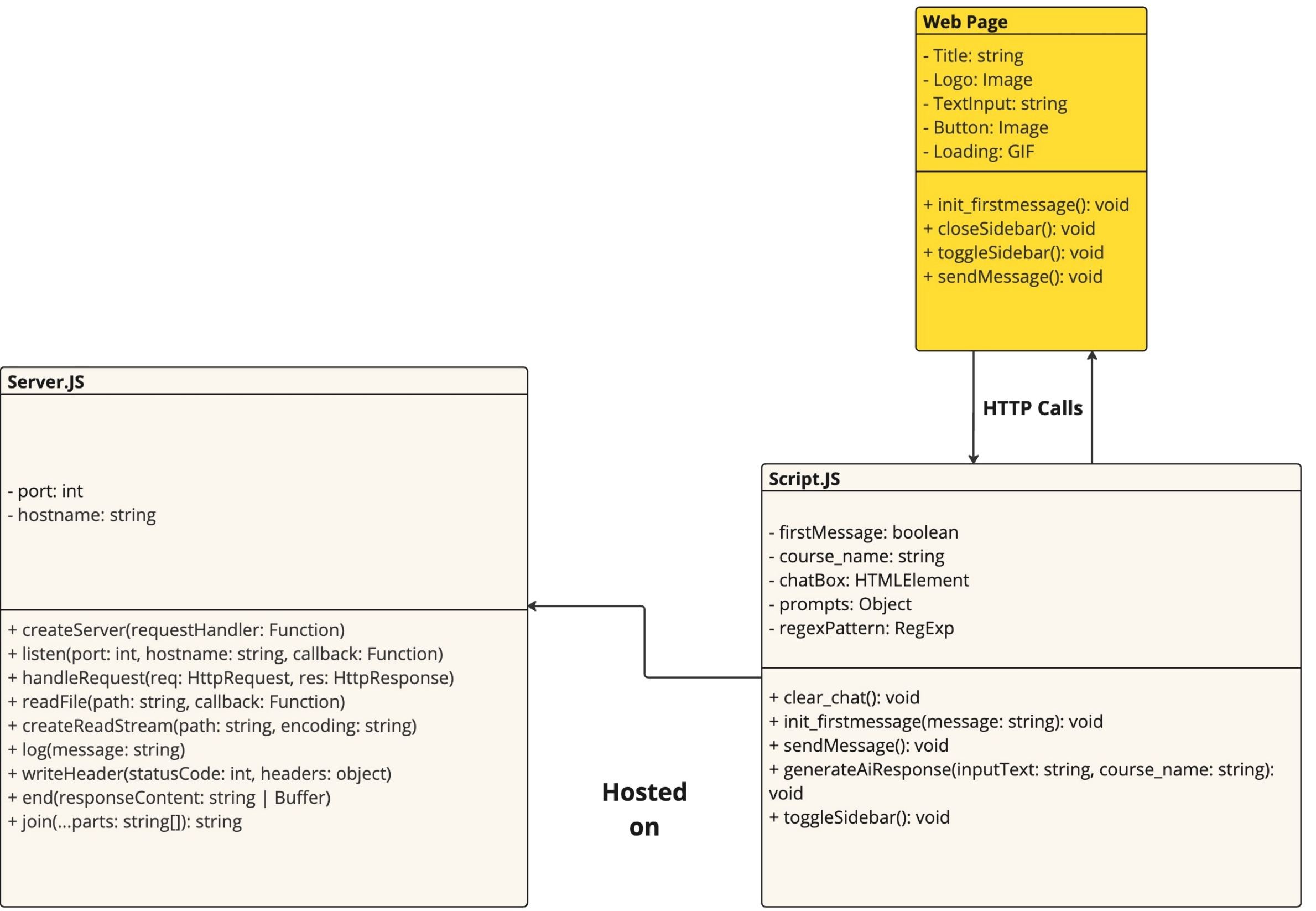
In response to the recurring issue of students repeatedly asking professors the same questions about course details, we identified a pattern: students often seek reassurance from direct answers rather than consulting the provided syllabus.

To address this pattern and alleviate the burden on professors, we developed CourseCompanion—an AI-powered chatbot accessible via our website. CourseCompanion leverages the course syllabus to provide students 24/7 immediate support and accurate responses to their questions.

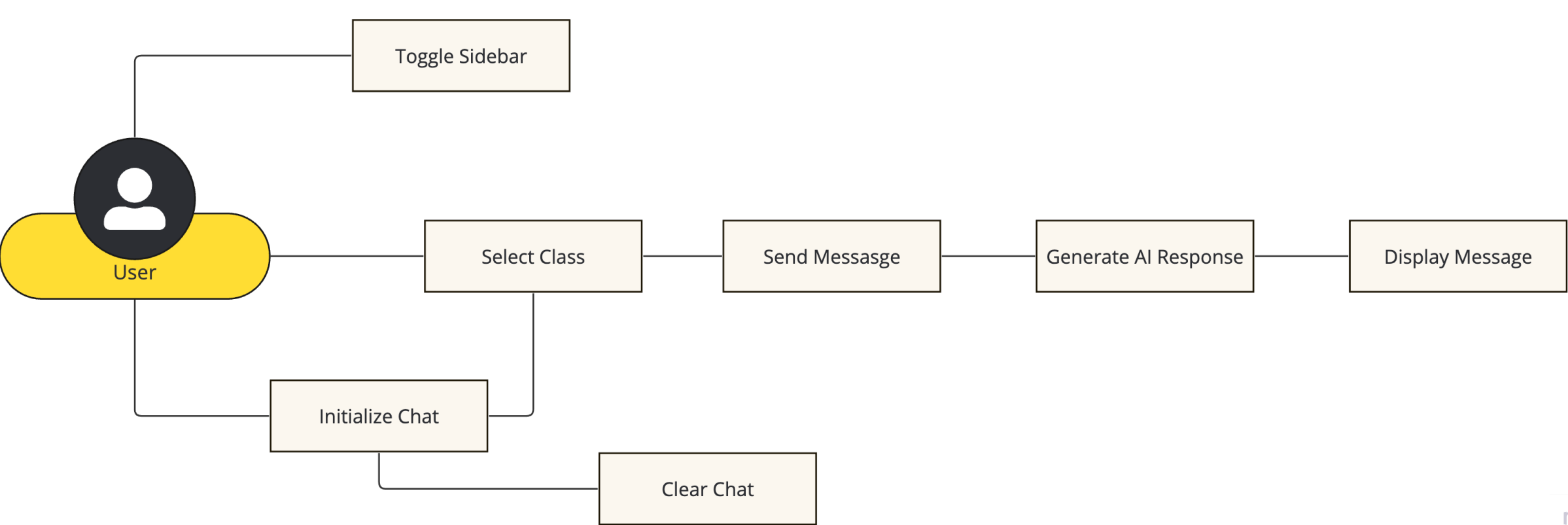
Personal Contributions

Throughout this semester, I focused on designing the UI elements on the webpage, along with implementing them. This involved creating a wireframe, or initial mockup, on Figma to be approved by my team members, which is shown below. To achieve this goal, I first organized the sections of the page using CSS grid, which includes the header, the chat box, and the input containers. As I tackled this task, I also solidified the theme colors to be consistent with Canvas' mobile dark mode. With the style set up in CSS, I worked on integrating the FIU link, the input and button changes in the HTML file. Lastly, the ability to toggle the sidebar and the display of the loading gif as the user waits for the AI response was implemented into the JavaScript file that is responsible for the client's interactions with the chatbot.

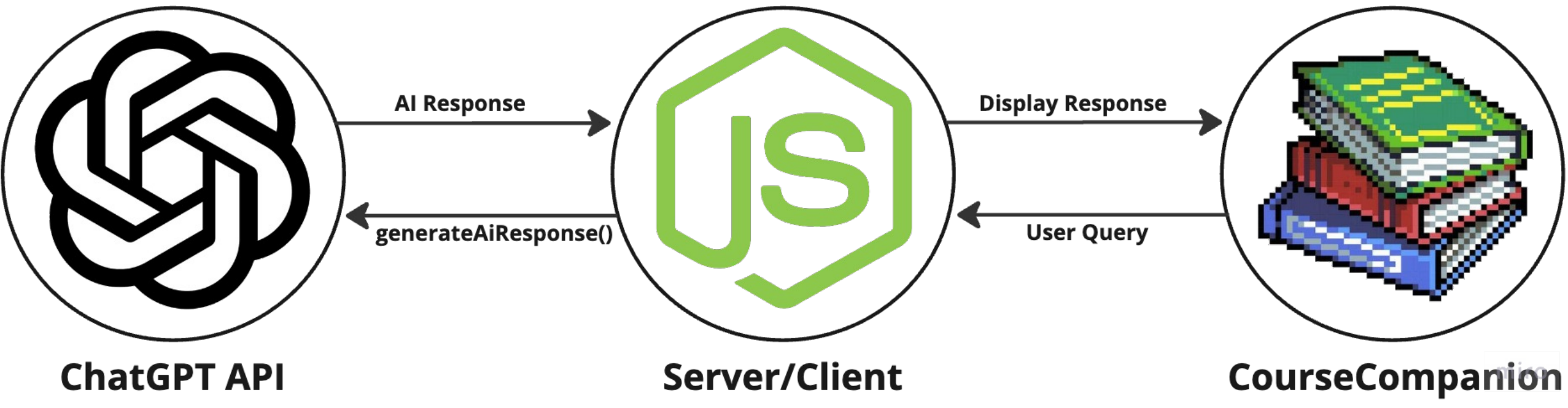
Object Design



Use Case Diagram



Architecture Diagram



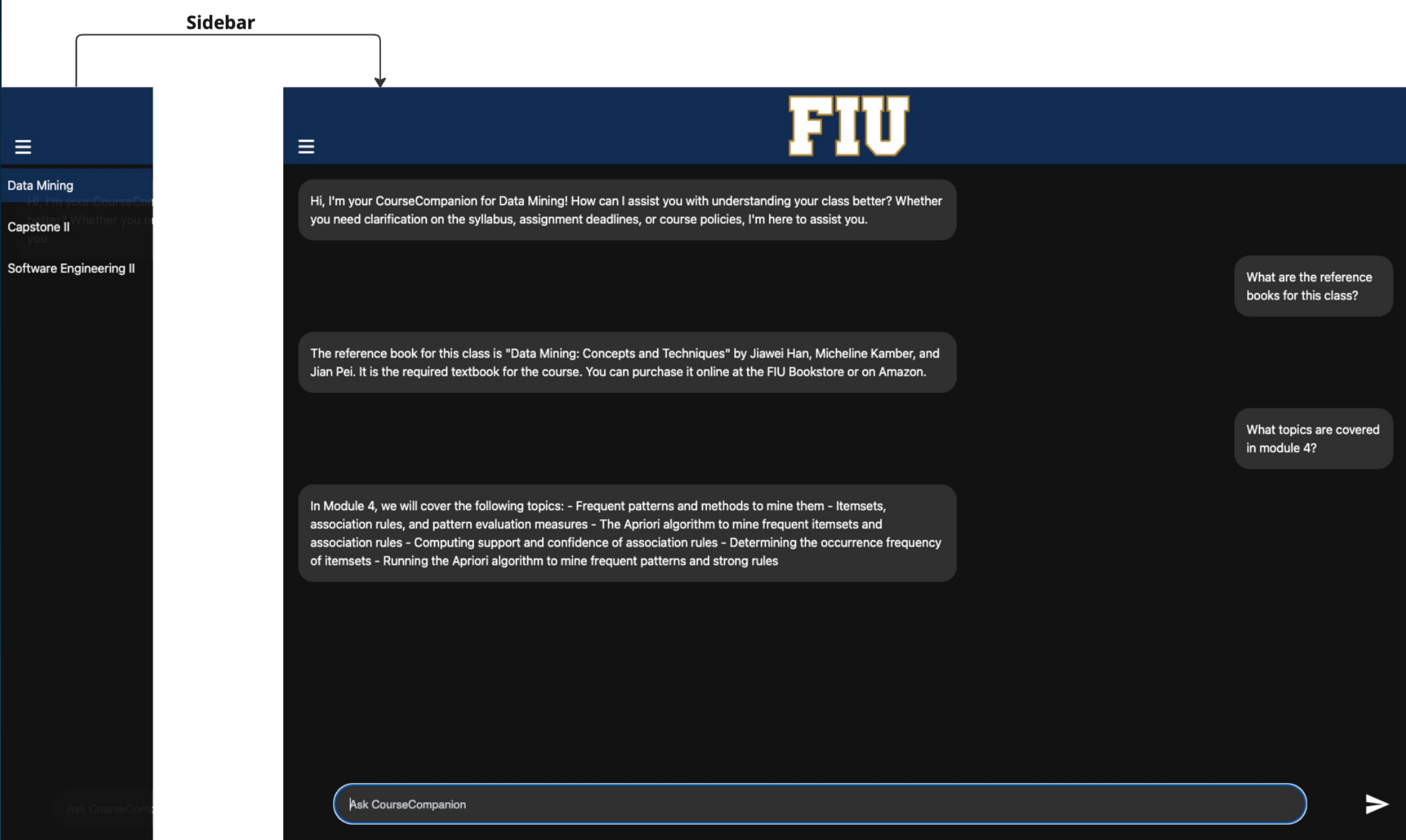
Summary

As a team, we focused on developing a user-friendly webpage for students to interact with an AI chatbot that answers questions about a course syllabus. We were able to establish a connection between ChatGPT's API and our HTTP server. With this set up, we designed and integrated a webpage that allows the student to interface with the server. To ensure that our goals were met, our team tested our solution with current FIU students and took note of their feedback. Moving forward, subsequent teams are encouraged to prioritize the development of a teacher interface incorporating upload functionality, as well as the integration of student Canvas accounts into our CourseCompanion platform.

Technologies



References



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