CS 461: Requirement Document Activities

Prototype a web-based tool for creating and executing task-delineated, collaborative, AI-assisted assignments

Design Activities

Complete a Tutorial:

The tutorial I chose to follow was a class assignment for databases. This describes how to use MySQL to set up a basic database that contains arbitrary information about planets. What I learned from performing this activity was basic knowledge of SQL commands and how to structure a database. It walked me through each step of creating a database including instructing various ways to access the database and how to edit it. This will be very useful in creating a database for the storage of data throughout the process of training the AI model and logging its data as well.

Test Plan:

1. Identify Test Objectives: Define what you need to test (e.g., functionality, usability).
2. Create Test Cases: Develop detailed test scenarios for each feature.
3. Determine Test Methods: Choose manual or automated testing.
4. Set Success Criteria: Define what constitutes a pass/fail result.

1. Some test objectives that will be useful for the project would be to test the functionality of the AI chatbot as well as the ability to create assignments. Another big portion that should be tested is the report generation. Overall the test objectives can be summarized by saying, the test objectives are to ensure the functionality of the ability to create assignments, allowing the AI chatbot to work based on the configured limitations, and having a useful report generated.
2. The test cases for the three is as follows:
- Create Assignments:
    - Give the assignment prompt by using the interfaces given

- The assignment should be split up into tasks that are readable by the user
- Configuration:
    - Configure the chatbot to not allow giving answers out, instead only helping tips out, test whether it is still giving out direct answers
    - Configure the chatbot to only allow step by step responses to assist users. Test if the responses are following this prompt
- Report Generation:
    - Test the report generation by filling out the assignment in a sloppy and incorrect way to test if it will accurately describe the faults and errors.
3. Manual testing for all of these test scenarios as they are very human oriented and the functionality needs to be verified by a human as it will be exclusively used as a tool for humans. This means that each outcome and scenario needs to be set up and evaluated by a human.
4. Passes for the test cases are as follows:
- Create Assignments:
    a. Is the assignment is delineated and split up into tasks
    b. Is the assignment is related to the given prompt
- Configuration:
    c. Does the chatbot suggest banned topics or prompts
    d. Does the chatbot follow the prompts given to it
- Report Generation:
    e. Is the report readable and related to the assignment
    f. Can the report accurately describe the assignment