# **EE/CprE/SE 492 STATUS REPORT 2**

Jan 31 - Feb 13

Group number: sdmay25-07
Project Title: Ask Captain Cyber
Client / Advisor: Doug Jacobson

### Team Members/Role:

- Ethan Comiskey Cybersecurity Implementation Principal Engineering Manager
- Steven Ragan Cybersecurity Coordinator & Integration Associate
- Alex Elsner Lead backend developer
- Casper Run Cybersecurity and WordPress developer
- Alexander Kronau Frontend developer. Limited Backend
- Caden Murphy Frontend developer

#### **Weekly Summary**

Over the past two weeks, our team has effectively caught up and fully gotten back into the swing of working on the project. We met with our advisor, Doug Jacobson, who gave us access to the OpenAI API and enough funding to conduct testing of the AI Assistant which will act as Ask Captain Cyber. We have broken down our milestones into smaller, easier to conduct tasks and entered them onto our Git issue board, which we are using as our project management tracker. A lot of our collective focus for this upcoming sprint will be prompt engineering our AI Assistant to act as Ask Captain Cyber and ensure it answers questions the way we want it to, as per project requirements. We are also focused on configuring the database for question storage and the frontend prototype

## Past week's accomplishments

- Ethan Comiskey Began drafting prompts to engineer our AI Assistant via the OpenAI API, which we recently obtained access to and created accounts in
- Steven Ragan began prompt eng with access to Open AI.
- Alex Elsner Worked with Casper to set up the database and sketch how the information will flow.
- Casper Run Researched how to allow the OpenAl API communicate with the WP Database. Worked with Alex to set up the database and map out the information flow.
- Alexander Kronau Compiled information for prompt engineering & LLM manipulation, identifying potential concerns for discussion.
- Caden Murphy Designed wireframe diagram of expert vetting dashboard.

### **Pending issues**

• Phpmyadmin is giving a white screen of death which we need to easily manage the database, rather than through the command line.

# **Individual contributions**

| <u>NAME</u>      | Individual Contributions  | Hours this<br>week | HOURS<br>cumulative |
|------------------|---|--------------------|---------------------|
| Ethan Comiskey   | Began drafting prompts to engineer our Al<br>Assistant via the OpenAl API, which we<br>recently obtained access to and created<br>accounts in | 6                  | 12                  |
| Steven Ragan     | Began prompt eng with Open Al   | 6                  | 12                  |
| Alex Elsner      | Began setting up the database and sketching how information will flow.  | 6                  | 12                  |
| Casper Run       | Researched OpenAI and database communication. Contacted Doug about getting another server.  | 6                  | 12                  |
| Alexander Kronau | Revised system initialization prompt & noted potential issues in regards to LLM manipulation  | 6                  | 12                  |
| Caden Murphy     | Formed expert dashboard plans   | 6                  | 12                  |

### Plans for the upcoming week

- Ethan Comiskey Begin testing different prompts with the AI Assistant to evaluate what writing style and word choice is the most effective for our project
- Steven Ragan perform border testing on prompt and returns via open AI and look into SQL database on the server.
- Alex Elsner Set up a database with basic tables and finalize the relational part of it. Ex
  how different fields will connect with each other. Will also need to think about security
  as we will be using SQL.
- Casper Run Start developing the Flask API to connect the OpenAPI to the WP database.
   Assist Alex with getting the database working with PhpmyAdmin. Work with Doug to gain access to a server that will help us build the middleware we need for the project.
- Alexander Kronau Finish fully assembling frontend prototype, identify method for WP

- integration.
- Caden Murphy Begin building expert vetting dashboard. Establish API endpoints with either OpenAI and/or WordPress to communicate with from the frontend.

#### Summary of advisor meeting

Last week, we met with our advisor Doug Jacobson and discussed the current state of our project as well as what we intend to complete in the near/distant future. We utilized the Instructor Review Meeting document as our guide and prompt for discussion throughout the meeting. One roadblock our team has been facing was the inability to configure and test the AI Assistant in OpenAI, since that required our advisor to set up a university account with OpenAI and fund the account. During our meeting, Dr. Jacobson agreed to set up the account and fund it with enough so we can get going on our testing. We also discussed other project specifics, e.g. how the database should function, ways he wants us to specifically prompt engineer the AI Assistant, etc. We also came to a consensus that the frontend of the project is not as important as ensuring the backbones of our project function as expected, so we will be focusing more on the backend of our project for the implementation phase of our project this semester. The meeting was very productive and allowed us to get going on aspects of the project we couldn't beforehand.