EE/CprE/SE 491 WEEKLY REPORT 2

09/19/24 - 09/26/24

Group number: sdmay25-07

Project title: Ask Captain Cyber

Client &/Advisor: Doug Jacobson

#### Team Members/Role:

• Ethan Comiskey - Cybersecurity Implementation Principal Engineer

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

## **Weekly Summary**

This week, our primary objective was to continue researching project ideas and methods we can use to effectively complete our assigned project, Ask Captain Cyber. Each team member conducted research relevant to their specific role. We also await access to previous work completed on this project before we were assigned. The plan is to wait for our advisor to give the group access to a clone of the current project so we can begin work. However, we must wait for access from Doug Jacobson since it must be granted from him. We are in contact with him regarding this, but until then we are unable to make changes to the project itself.

### Past week accomplishments

- Ethan Comiskey Researched similar products to our assigned projects, including StackOverflow, Quora, ChatGPT, etc. to get an idea of what works well and what could be improved.
- Steven Ragan Worked on researching Als that we could use. Mostly focusing on internet searching Als such as Microsoft Bing and Perplexity Al. I looked into what Als had easy-to-integrate features that would speed up the build process. Another thing I looked into is data set building and if it is a valid option for what we intend to apply it to.
- Alex Elsner Researched backend integration with WordPress and started to gather backend requirements that we need. Along with secure backend development and practices to ensure the best security features.
- Casper Run Researched the WordPress framework and looked into learning how to develop with it using YouTube tutorials as a foundation
- Alexander Kronau Continued to research and plan out the backend AI API implementation.
   Brainstormed and formulated the software architecture for our reserver questions. Began prompt engineering concerns regarding cybersecurity.
- Caden Murphy Continued to work on planning UI through Figma. Began working on ideas

for the landing page and other features besides the main "chat" area. Looked to similar products for inspiration.

#### o **Individual contributions**

NAME	Individual Contributions (Quick list of contributions. This should be short.)	<u>Hours this</u> <u>week</u>	HOURS cumulative
Ethan Comiskey	Explored similar sites related to our project and contributed ideas related to site design	6	14
Steven Ragan	Came up with a list of possible AI models we could use for Captain Cyber.	6	14
Alex Elsner	Researched backend integration with wordpress along with potential security concerns.	6	14
Casper Run	Researched the WordPress framework and how to apply it.	6	14
Alexander Kronau	Explored potential AI models that could be implemented into our solution.	6	14
Caden Murphy	Explored similar products for UI inspiration, and transferred ideas to Figma designs.	6	14

## Plans for the upcoming week

- Ethan Comiskey Will research cybersecurity-related ethical implications for this project, which will be helpful for overall project structure and how we go about certain design elements, considering this is a cybersecurity related project.
- Steven Ragan continue to look into easy-to-use AI models until access to captain cyber VM is given. At that point, switch explore the current captain cyber server.
- Alex Elsner Explore more backend integrations with wordpress and how to actually implement them with our project. This includes implementing best security practices in the backend.
- Casper Run Continue researching WordPress and watch more tutorial videos for developing webpages with the framework. Once I understand how plugins work, I will look more into secure development practices. Hopefully, we will gain access to the server to start some prototyping work.
- Alexander Kronau Explore more local LLM models that do and do not have access to live information online. Assist in determining the most cost-effective solution.
- Caden Murphy Research security protocols needed for the frontend of the site, specifically what needs to be done within React projects.

# Summary of weekly advisor meeting (If applicable/optional)

We are in contact with our advisor regarding access to the tools needed to complete our assigned project. Other than that, we have all agreed upon monthly meetings with our advisor.

- Did not meet