EE/CprE/SE 491 WEEKLY REPORT 1

9/5/24 - 9/19-24

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

Took notes to list out what needs to be done before going forward. We defined the project scope and figured out what we need to decide on, and what will be determined by the client. Our team compared and started to research various AI models to utilize for this project. This includes figuring out what AI model will work best with what has been given to us. Finally we learned what content was still there. For example there is already a word press server with a basic backend and frontend already set up. Our team will need to clean it up and add a lot more functionality, but now we know there is material to start with.

o **Past week's accomplishments**

As a team, we worked together to define the scope and requirements for each member. Additionally, we assigned specific individual development roles and have dedicated research time for gaining a deeper understanding of the technologies we will be using

- Ethan Comiskey - Research Cybersecurity Technology, more specifically what the optimal AI model for this project would be. Also researched potentially similar projects to identify what works well with those solutions and what could be improved.
- Steven Ragan - Research Cybersecurity Specific To AI. Such as what AI api would be best for this project and how much the AI would cost. Along with what cyber security problems may arise due to AI, such as: what if someone asks an inappropriate question, what if the answer the AI gives is wrong, or will the AI save any information.
- Alex Elsner - Mapped out the current backend for WordPress. Researched what already exists for our backend and how to figure out what is still needed in the backend. Researched potential solutions to future problems we might have for the backend, such as API integration, database management, vendor access to backend UI, and general cyber security practices

- Casper Run - Research and select plugins for WordPress
- Alexander Kronau - Finalize AI model selection possible implementation framework. We will likely be using the [Azure OpenAI](#) service to access the Copilot API, unless a more efficient solution is proposed.
- Caden Murphy - Plan frontend UI, will use a React-based project as it has the most support, customization, and reliability. Made initial plans through figma and received feedback from rest of group. Continuing to work on making changes based on group ideas and will implement them accordingly, eventually transitioning to development on React project.

o **Pending issues**

- All Team Members: Awaiting VM and Cyber House Rock website access. This access has been requested from Doug Jacobson.

o **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Ethan Comiskey	Researched back-end solutions.	3	8
Steven Ragan	Researched AI model solutions.	3	8
Alex Elsner	Researched WordPress backend implementation solutions.	3	8
Casper Run	Established and maintained communication lines. Researched various AI models.	3	8
Alexander Kronau	Compiled advisor meeting notes. Researched various AI models.	3	8
Caden Murphy	Researched front-end solutions.	3	8

o **Plans for the upcoming week**

- Ethan Comiskey - Research Cybersecurity Technology
- Steven Ragan - Research Cybersecurity Specific To AI
- Alex Elsner - Map out current backend for WordPress
- Casper Run - Research and select plugins for WordPress
- Alexander Kronau - Finalize AI model selection possible implementation framework.
- Caden Murphy - Map out frontend UI

o **Summary of weekly advisor meeting**

During this week's meeting with Doug Jacobson we made significant process in defining the scope of the project and gaining a better understanding of the necessary technologies we will be implementing. It was critical that we gained a comprehensive understanding of the project's

requirements, which allowed us to address potential challenges with the design. Clarifying the expectations for this project helped ensure that all team members understood their expectations, and which technologies will need to be implemented. We also established multiple lines of contact amongst the group to ensure reliable communication.