Progress summary #1

My senior project, which began as a cybersecurity awareness campaign, has now turned into an experimental project that will aim to determine if personalized lessons are more effective at increasing security awareness in comparison to video lessons. After just two sessions of meeting with Dr. Plante, I was advised to seek direction from a psychology student or professor about creating personalized surveys. This led me to speak with Dr. Eskenazi, my “memory in everyday life” professor, who quickly helped me realize that my project included a strong psychological aspect as it involved the interpretation of user responses and data. Following this, I met with Dr. Plante alongside Dr. Scarlato, and had a follow-up collaborative meeting with Dr. Plante and Dr. Eskenazi. The combination of these meetings allowed me to solidify the way forward with my project, which will aim to confirm or deny the hypothesis: “Personalized lessons are more effective than video lessons at increasing security awareness.” To effectively do this, the method will include a pre-test followed by personalized lessons or video lessons (users will be randomly assigned to groups respectively) and a post-test which will determine the success of the experiment (expecting a greater increased awareness for individuals who took personalized lessons). These tests will measure variables such as learning, security anxiety, as well as motivation. Based on previous research done on healthcare and environmental awareness, these questions will aim to give insight to the users’ knowledge on cybersecurity, hypothetical predicted behaviors, as well as how motivated they feel to practice secure habits. These variables have proven to be successful in measuring an increase in an individual’s environmental and healthcare awareness. Research will continue to determine the best survey questions to accurately measure these variables. This will include research on:

* Most important security topics to test users on
* Determining the best “base” topic to begin with
* Creating a “tree” for users’ progression through topics
  + The best way to measure an individual’s:
* Predicted behavior in different situations
* Security anxiety when browsing the web
* Motivation to practice sure habits.

In collaboration with this research, chat-gpt will be prompted and responses will be analyzed to determine what will be most effective for measuring the variables of this study.