COMP 150 Project Proposal

Project Title (make it interesting)

• **Project Definition—What is this project?**

A paragraph or two describing what the game/project does and why it's interesting. Some also call this your "elevator pitch" - if you happen to bump into someone in the elevator and you have 30 seconds before they get out, how do you sell them on your great idea for an app. Specifically:

> o What is the name of the project? o Who might use this project? Why might they find it useful?

- The name of the project is Quick Wit
- This project may be useful for anyone who needs conversational AI for their business or personal use. It can be used in customer service to handle simple queries, in educational settings to provide personalized learning experiences, or in personal settings to have engaging conversations with an AI assistant.

• **Who is in the team?**

Be sure to list all team members working on the project. You may want to give a preliminary breakdown of responsibilities for each team member.

- Alex: GUI design
- Isaac: GUI design
- Drew: API and model integration

• **Analysis and Design—What will the program look like, and what will it do?**
  What will your program look like? How will the user use it?
  - o The program is a chatbot that uses OpenAI's GPT-3 language model to generate responses to user input.
  - o Users will use the program through a GUI instead of having to use it in the terminal

- **Implementation--How will the program be developed?**

What are the key Python components that you plan to use? Include such things as dictionaries, functions, graphics, timing, different kinds of loops, files, web, etc.

- Import statements to bring in necessary libraries and modules such as os, sys, openai, PyQt5.QtCore, and PyQt5.QtWidgets.

- A function called **generate_response()** which takes in instructions, chat history, and a new question and returns a response generated by OpenAI's GPT-3 language model.

- A class called **MainWindow** which sets up the main window of the program using PyQt5.

- Various widgets such as **QTextEdit**, **QLineEdit**, and **QLabel** are used to display the chat history, user input, and the OpenAI API key.

- Event handling using **returnPressed** signal and **send_message()** function to handle user input and display chat history and chatbot's response.

- A main function that initializes the program and sets up the **MainWindow** class with the OpenAI API key as an argument.

- Exception handling to catch errors when initializing the OpenAI API key and the GPT-3 engine.

- **What to turn in**

Prepare a proposal based on this template (complete all sections). Bring it to class for the next project "walkaround". You may be asked to submit it to Sakai. This is a working document, which your team will update as progress is made and changes are introduced.

- **Grading**

Your plan is part of your overall project performance, and is part of the 200 points for the project. It will count for approximately 20 points of the project.