Final Project

Project email client

- Design an email sending form interface. Create a form where users can compose an email by entering the recipient's address, subject, and message. The design should be visually appealing and provide a user-friendly experience. Notation:

NOTE: No need to implement the sending functionality, just the form and save the composed email to a file instead.

- At least includes the following components:

    1. To: field for recipient's email address
    2. Subject: field for the email subject
    3. Message: text area to compose the email content
    4. Send button to initiate the email sending process

- Highly visual design: 30 points

- At least 10 controls (label, button, textfield, etc.) on the form: 70 points

Project calendar event manager

- Design an interface for a calendar application. Create a monthly calendar. Include additional features such as ability to add and edit appointments. Notation:

- Highly visual design: 30 points

- At least 10 controls (label, button, textfield, etc.) on the form: 70 points

Project smart home control panel

- Design an interface for a smart home control panel. Create a control panel that allows users to control the lights, temperature, and other appliances in their home. Notation:

- At least includes the following components:

    1. Light switch (on/off)
    2. Temperature control (field to enter temperature or slider)
    3. Appliance control (checkboxes to select appliances)

- Program should same the state of the controls to a CSV file. The file should be updated by each change in the control panel. For example, if the user turns on the lights, the CSV file should be updated to reflect the change. If the user changes the temperature, the CSV file should be updated to reflect the change.

- Highly visual design: 30 points

- At least 10 controls (label, button, textfield, etc.) on the form: 70 points

Project AI assistant

- Implement a chatbot interface that interacts with the user. Allow users to input questions or statements, and display the chatbot's responses in a conversation-like format. Notation:

- At least includes the following components:

    1. Text field to enter user input (read and write)

2. Button to submit user input
3. Text area to display chatbot responses (read only)

- This chatbot can have only one response to all user inputs. For example, if the user enters "what's the time?" the chatbot can respond with "I am a dumb chatbot, I can't answer your question."

- Highly visual design: 30 points

- At least 10 controls (label, button, textfield, etc.) on the form: 70 points

Project IDE extension

- Design an extension for an IDE (Integrated Development Environment). Create a program that lets users choose a java program from file picker, and display the program in a text area. Has a button to run the program. List all the variables and number of times they are used in the program. Notation:

HINT: a java program is a text file with `.java` extension. And it can be ran manually by typing `java <filename>` in the terminal.

- At least includes the following components:

  1. File picker to select a java program
  2. Text area to display the program
  3. Button to run the program (or number 4)
  4. Text area to display the variables and number of times they are used (or number 3)

- Highly visual design: 30 points

- At least 10 controls (label, button, textfield, etc.) on the form: 70 points

Bring your own idea

- Design your own project. Create a user interface for a program of your choice. Notation:

- Highly visual design: 30 points

- At least 10 controls (label, button, textfield, etc.) on the form: 70 points