CSCI-C 212 Final Project Report:

Health Management Calculator

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1.Project Implementation Overview

Original Proposal:
The Health Management Calculator aimed to provide personalized calorie, protein, and nutrient intake recommendations based on user inputs such as age, height, weight, and body goals. Core functionalities included user data input, calculations for daily nutrient intake, and a user-friendly interface for result display.

Implemented Features:

- User input for personal information and goals.
- Calculation of calorie, protein, carbohydrate, and fat requirements.
- Display of results in a clean, user-friendly interface.
- Additional improvements to the graphical user interface for enhanced usability.

Unimplemented Features:

- Persistent data storage to retain user input across sessions.
- Graphical representation of user progress, such as a weight graph.

Additional Features:

- Enhanced graphical user interface for a more professional appearance and intuitive navigation.

2. Work Distribution and Collaboration

- Kiev Shields: Developed the login and signup interface along with its GUI.

- Brian Cuahuizo: Focused on the core calculator functionality and its integration with the GUI.
- Musa Vranjaca: Designed the display page for calculation results and implemented its GUI.
- Moubarak Mossi: Focused on creating the weight recorder, graph and having it built in the GUI.

We communicated through text and talking in person discussing which person does what and checking on one another code. We shared the code by using GitHub.

3. Future Development Plans

- Persistent Data Storage: Implementing a system to save user input, allowing users to

retain their data between sessions.
- Progress Visualization: Adding features like weight graphs to enable users to track their progress visually.
- Expanded Functionality: goal suggestions, or integration with fitness devices for real-time data tracking.
- These improvements aim to make the app different from other competitors with health calculators by making it easier to look at and more simple to use.

4. Challenges

- Inputs: Ensuring user inputs on the GUI were correctly saved and exported to a CSV file.
- Solution: Worked on debugging and validating the integration, though some challenges remain unresolved.
- Storing the data: Lack of persistent storage for user data.
- Errors: A lot of errors occurred and trying to find out where that error occurred.

Conclusion:

The Health Management Calculator successfully meets its primary objective of providing personalized dietary recommendations while serving as a learning experience in collaborative development and GUI design. Future enhancements can make this tool even more practical and impactful for users.