Course Number: CS 329E (51563)

Group Number: 7

Group Members:

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Application Name: MacroGoGo

General Description: This application is designed with the primary goal being to track macronutrients for users interested in weight loss or supplementing their workouts in a more effective manner. The app will also include user-to-user interaction in a chat forum feature, intended primarily to encourage support groups and advice circulation. We're hoping to save user discussions in a third-party database format. Graphical visualizations of target/goal macronutrient intake versus actual daily macronutrient intake will be incorporated.

An option to input one's daily macronutrient intake by taking a photo of an FDA label is the app's most ambitious feature. Through pattern/font recognition, we're hoping that a user can snap a picture of a prepackaged food, and our app will intake the fat, total carbohydrate, and protein content, similar to facial recognition in present-day apps like Snapchat. Our selling point is efficiency, simplicity, and effectiveness.

Target Audience: Young adults (or anyone who's technologically-minded/-able) looking for weight loss solutions and support, fitness enthusiasts desiring more efficient, paperless macronutrient logs, and nutritionists seeking consolidated, handy dietary diaries to aid with client management.

Target Devices: iPhones, past and present

Target iOS Version: Latest

Feature List:

- App icon image
    - Apple with circumventing measuring tape

- Launch screen
    - Logo displayed centrally (M*croGG, where * = an apple and $ = an orange)
    - Background color == app's color scheme (primary accents: purple and yellow)
    - Option to sign-in as existing user
    - Option to register as new user

- o Incorporate transition from launch to registration and login screens

- ■ Registration screen
  - o Enter desired username and password
  - o Enter date of birth, gender, height, and weight for BMI calculation

- ■ Login screen
  - o Requires username and password
  - o Store username and password on device locally

- ■ Settings screen
  - o User can modify the following:
    - ■ Weight (BMI inherently modified as result)
    - ■ Target/goal daily macronutrient intake (graphical visualization will adjust consequently)
    - ■ Password change

- ■ Feature 5: Daily food log/macronutrient tracker
  - o Graphical visualizations for target/goal and actual macronutrient daily intake
  - o Pop-up alerts for exceeding RDAs (such as sugar)
  - o Manual input text fields for macronutrient entries
    - ■ Cell title – date
    - ■ Cell subtitles – meal type (i.e. breakfast, lunch, snack, etc.)

- ■ Feature 6: Food log history
  - o Allows user to access past log dates to reflect on dietary choices

- ■ Feature 7: Exercise Notebook
  - o Free page of text (such as Notepad) for optional input of daily workouts/reminders

- ■ Feature 8: User discussion forum
  - o Third party database, such as Firebase, will allow for storage of chat threads in which users can pose questions to other users and swap tips

- ■ Feature 9*: FDA food label recognition with camera
  - o Serves as a macronutrient input option (vs. manual entry of carbs, fats, proteins, etc.)
  - o Separate screen entity

*This is our "stretch to complete" feature, but a big source of motivation for designing the app.

Development Plan:

- Alpha Release:
    - Launch screen
    - Registration screen
    - Login screen
    - Settings screen

- Beta Release:
    - Settings screen
    - Feature 5
    - Feature 6
    - Feature 7

- Final Release:
    - Feature 5
    - Feature 8
    - Feature 9*