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February 2021
CSC 491 - Project Proposal (Individual project)

Calorina Tracker

For my project, I will build a calorie app. More specifically, I will build an app that allows users to monitor their caloric intake to help keep up with their desired goals. The user will have the ability to enter their desired calories for the day and then when it comes time to eat – they can select the food items that they've eaten and the app will update the current calorie intake. With this app, I'm hoping to give users the ability to select popular foods, alleviating the need to search for the calories of common food items to keep track of their daily caloric intake.

Before I start actually implementing the application, I first will research popular food and drink items, find their respective calories, and store that information in a data structure (likely a hashmap) for my application to use. There will be at least 20 food items that the user will be able to choose from. Aside from selecting a popular food, if the food item is not there, the user will have the ability to directly enter the calories of what they have eaten. To make the application more capable of tracking user calories, I will also add popular beverages to the options. This will allow users to track their food and drink caloric intake.

Once all the data is collected, I will begin designing the interface of the application. When the app initially loads, the user will be greeted with a welcome message and details on how the app works. On the bottom of the welcome page, there will be a continue button which means the users has agreed to proceed to use the app. When segued from the initial screen to the second screen, the second view controller will prompt the user to enter their details such as age, gender, height, and weight. This information will be used to make a guestimate on what the caloric intake of the user should be. If time permits, I will try to search for an API that does this so the app can be more accurate.

Figure 1: Welcome screen

Once the user finishes entering their personal information, the screen will display the user's recommended normal daily caloric intake and also their caloric intake as if they were on a diet. If none of these are fitting, the interface also has a text field that allows the user to enter their own desired daily caloric intake allowing the user more flexibility.

Figure 2: User info screen

Figure 3: Select daily goal

Once the goal caloric intake is selected, the screen will segue into a tab view controller. The tabs on this view controller will consist of home, breakfast, lunch, drink/snack, and dinner. The home tab will be the initial view and on it will be a display of the running total calorie intake. That means that when starting out initially, the running total will be equal to the total calories allowed and as the user enters food/drink items the remaining total calories will decrease.

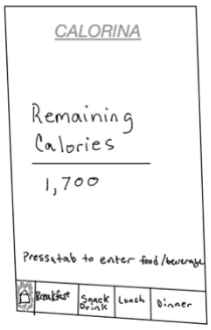

Figure 4: Home screen/tab view controller

While at the home view/tab, when the user is ready to enter a food item, they can now select the most appropriate tab to enter their food or drink that was or will be consumed. On either of those tabs (breakfast, snack/drink, lunch, dinner), the user will be displayed a wheel of food items that they can select from. When the user selects and confirms the food or drink item, the remaining total calories will adjust according to the item. If consuming the food or drink item brings the user close to their daily goal caloric intake, an action sheet will pop up notifying the user that their close or going over their goal. The user has the option to cancel or continue. If continuing and the food or drink item caused the user to go over their daily caloric goal, an alert will be shown notifying the user they are actually going over their daily goal. The user then has a chance to confirm or cancel the requested item.

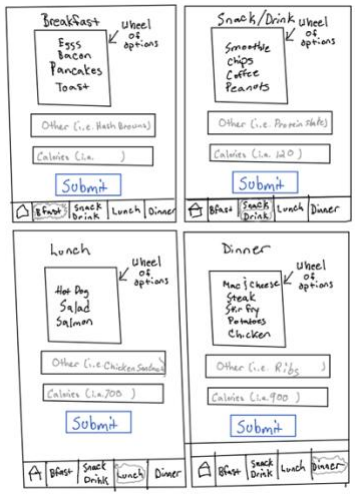

Figure 5: Food/Drink Tab Views

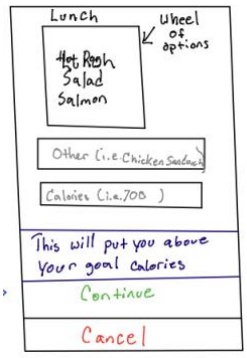

Figure 6: Action sheet

Figure 7: Alert

Now that the user is able to select their food/drink items to calculate their caloric intake, the user can now complete the day and start an entire new day. When the user wants to look back at their previous daily caloric intake, they will have the capability to do so by going to the home tab and swiping to the right. When swiping to the right, the user will be able to see what their intake was and also a drawing will be displayed that represents if they've achieved their goal or not. Swiping to the right will display the most recent days to the oldest.

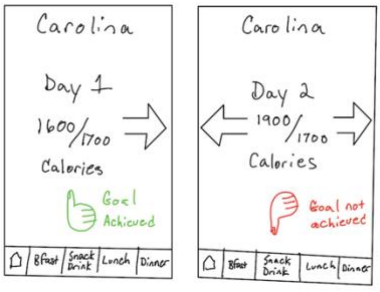

Figure 8: Previous day's view