ARCHIE

The ARCHIE system has significant room to grow, and many useful features can be added. You have asked good questions about possible improvements, new features and possible design ideas, which we appreciate. However we have to limit the extensions and enhancements we consider for ARCHIE, just like in the real world one must be concerned with 'scope creep'. Therefore, for any questions of yours, that were not answered in Lecture, do the following:

- (1) See if information in this document addresses your questions fully, and use that to complete your homework assignment
- (2) If any unanswered questions remain, consider them to be out of scope for this assignment.
- (3) Finally, if you feel that you have strong ideas or questions that deserve to be addressed, use the requirements structure:
- (a) Use Assumptions for any assumptions you feel you could or should make, that were not addressed fully
- (b) Use a section like Design Constraints or Application Context for items that are design or implementation issues
- (c) Use Future Changes for your great ideas that did not make into the scope of the current requirements.

Purpose of the App

This is a different app from ARC. We are not happy with the current ARC app and want to replace it with ARCHIE. This goal is to improve the health of UCI students. For now we don't want to make any profits from the app.

We are interested in the following main features - ARC Classes, Fitness, Food Journaling, Events, and Data Analysis.

Assuming we have enough budget, we have 10 weeks to build the app.

Roles

(Every user has to log in to use any feature of the app)

- 1. Anyone with a valid UCI ID (Once they graduate/leave UCI, they cannot use the app. All their data is anonymized for data analysis)
- 2. ARC admins (to create events, edit class schedules)
- 3. Web admins of the current ARC website

User Profile

User's profile should have the following information:

- 1. Name
- 2. Age
- 3. Height and Weight (To calculate daily calories requirement)
- 4. Profile Photo

User Interface

This questions are more related to how the software should execute the features than what the features are. Clients can have specific UI requirements that enter the Requirements document, but for us the only constraints are: the app need to work on android and IOS following the design rules of each platform and the UI must attend the qualities expected from the app.

Features

Classes: Users should be able to register and pay for classes. (How the payment is carried out is an implementation issue, choose any option that you think fits best). Once the user registers for the app, the class must be added in their calendar.

Fitness: Users should be able to track their steps (How to track them is an implementation issue, choose any option that you think fits best). The calories burnt from walking are shown on the app. For now, the focus is only to track steps. Other types of fitness activities are not tracked (They can be considered for future enhancements.)

Food Journaling: The app should have all the predefined meals available on campus, UTC, and Campus Plaza. It also should provide the possibility for the user to input food (like other food journaling apps do) for when the user does not go to the restaurants, or when there is a customized product (select the base and add the other items individually - if the user wants to be detailed). We want users to be able to track their calorie consumption. The app should display how many calories the user consumed out of his daily calorie requirement (This can be calculated from user's height and weight or can be set by the user).

Events: Events can be categorized into student-created events, and official events created by ARC admins. Within the app the user can create, view, join, and invite others to events. But he can only export these events to Facebook. Events must be related to ARC only and these events are held only at ARC. ARC Admin is also the moderator - they can take down any event that they find inappropriate or is against the rules. Events can be cancelled or updated. When this happens the users that joined the event should be notified but no replacement is required. Events can be posted on Facebook (No other Facebook integration is allowed.)

Social Features: User can send friend requests to other users. Once accepted, the friend's feed can be seen on user's wall. A user can decide what he wants to share amongst his friends. He can share classes that he is enrolled in, events that he goes to, his step count and food consumed.

Analysis: Aggregated data from all the users (anonymized) can be viewed on a companion website. (This is not a new website that we want built. An ARC website exists, we just want to add a link to data analysis). We want to be able to view statistics - graphs that show us the average step count and calorie consumption of the users for every day/week/month/year. All the roles of the app (Users and Admins) can view all the anonymous data. The app should just include how much the user is healthy when compared to the rest of UCI.

Other: The app can record the step counting or access the built-in features that do it and sync when the internet is available again. How this is going to be done is a development decision, the main point is that the step counting data, if available (in the case users can disable it), should be recorded.