

Assignment 4: Individual Design Proposal

Project: Seniors Managing Diabetes

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Write Up

In this section, the choices made are presented and explained in order to give a better understanding of the prototype idea.

Description

Our system is an application to help the diabetes self management by seniors. The main functionalities are the blood sugar level control, diet regulation with food suggestions and exercises suggestions.

One of the requirements chosen was the simplicity. The application needs to be easy understandable for any senior; in other words, it needs to be self-explanatory. In order to achieve the simplicity, an easy way to change the category was used as a left side menu bar, which can have some images illustrating each category (images were not used on the prototypes).

The home screen will have information about the current situation of the patient and the exact time and action for the next steps he or she will need to take (take some medication, do some exercise or eat lunch/dinner). The main screen of each of the other categories will have basic information about the current situation, some suggestion for the next decisions, the time of taking some action related to that category and the history of actions done to help in the self-control. The history will have data about the previous 30 days, as decided in the Phase 3.

There is a reminders screen, which will appear every time that the senior needs to take some action immediately, such as take some medication. The reminder screen will come together with some alert sound and notification, no matter in what screen the application or the cellphone is.

There is an update screen to put data about a new medication/food/exercise decision or to add an action done to the history. The prototype used the blood sugar level as an example, but the screen will be similar to all categories. Moreover, there is a search information screen, where the senior will be able to search information about sugar level of food or the difficulty of some exercise, for example.

Future Scenario

Jill started her day with doubt of what to eat to breakfast without putting her health in danger. So, she looks at the application and follow the suggestion given. While she was just reading a book, she completely forget about the medication she would need to take. Fortunately, the application sent her a notification with a reminder, and she could maintain her health.

Before the lunch, she need to mesure and update the application with the current blood sugar level, so the application can give her the best suggestion of what to eat based on her current situation. She also should like to know if a specific type of food would be dangerous for her, so she goes to the search engine and uses it to take the maximum information possible, and if it is recommended to her or not.

Critical Assessment

My prototype follow what was decided in Phase 3. The home screen already provide a lot of useful information to the senior, and he or she can easily change to whatever is needed at that moment. Moreover, the suggestions of food and exercise will be totally based on their current health situation, which makes them more comfortable in using the application.