CIS 526 - Catbit Application

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Abstract

The problem we are faced with is creating an application to use with the fitbit flex. Our solution will be able to be used easily by a wide range of users and have functionality that is enjoyable to use, easy to understand, and that works well consistently. We have received feedback from people outside of class, as well as classmates in CIS 526.

Introduction

In this project, we are designing an app for people who own a fitbit flex. We are creating this app because after studying the fitbit flex, we realized that the fitbit flex will only collected the data that it gains from your body, it won't show it directly on the fitbit itself. Our goal is to create an application formatted for use on a smartphone that collects the fitbit flex's data and makes it visible to its users.

According to our study, we have found that the the types of data that fitbit will collect are: sleep quality, foot-steps taken, calories burned, distance traveled, and active minutes. Our job is to make this data available to the user and also provide some extra features such as water consumption, a food plan, or a way for the user to challenge their friends.

Related Work

Before we started to design this app for a smartphone, we did research on some similar applications. We found three competitor apps that are similar to our application and we tried to absorb some good ideas from those apps and use them in our own. The first app that we looked at was fitbit's official app. We found this to be a good reference because It utilizes all

of the data that a fitbit flex can provide. We got our ideas of functionality from the five major functions mentioned above. For our interface design, we looked at the vivo fit app and “My Fitness Pal” for some more ideas. We like how the fitbit app made it easy to see all the data at once, and then the user could click on some data to get more details about it. In our app, we will also be creating a way for the user to see all the basic information at once on a home screen with icons for each function of the app. The step-counter, for instance, will have the number of steps you’ve currently taken in that day displayed on the icon. If the user were to click on the step-counter icon, he or she could then see a chart showing the steps from previous days and weeks and give the user an idea of how they are doing compared to a goal they might have. We liked the display in the “My Fitness Pal” app because it was big font, simple, and easy to read.

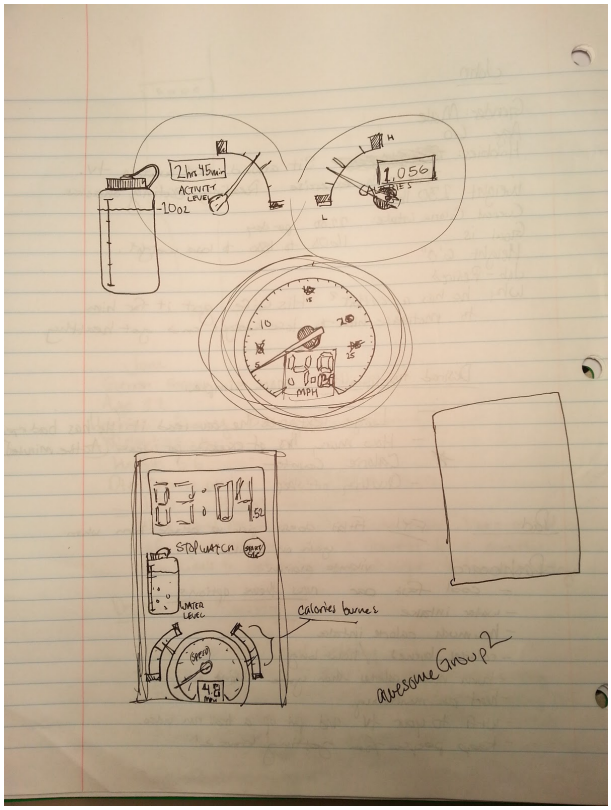
Implementation

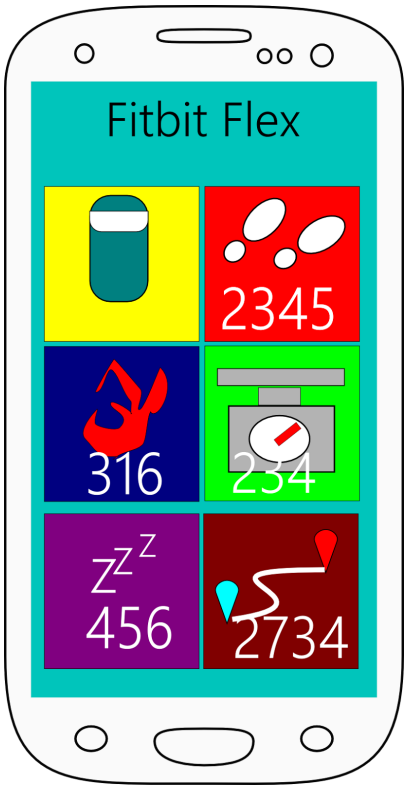
For implementation, we used Lean UX practices to create our interface design. We asked people who own a fitbit about their experience with the app, and we created two hypothetical users, Jane and John, who use the fitbit flex.

	Jane	John
Gender:	Female	Male
Age:	22	60
Hobbies:	Running, Biking, Longboarding	Watching TV, Reading, Eating snacks
Weight:	150 lbs	230 lbs
Calories Per Day:	1800	2200
Job:	Student Teacher	Retired
Why they use Catbit:	She wants to keep record of sports activities and is training for a marathon. She also wants to make sure she gets enough sleep at night to do well in college.	His wife got it for him to motivate him to lose weight and stay in shape.

Jane was a girl our age (22) in college who is very active in sports and wants to see how she is performing. She is also training for a marathon and wants to track her progress and set goals. John is an older retired gentleman who does not get much exercise, but his wife bought him a fitbit to help motivate him to get back into shape. He wants an app that has an easy to

use interface as he is less tech-savvy. he also wants larger text so that it's easy for his eyes to read.





We originally sketched out a design on paper (seen above left) and showed it to some people in FarmHouse fraternity who use the app, or one that is similar. The feedback included a some people saying, "it looks good," but some other suggestions were also made, such as having a calorie intake display, a way to see how many calories you've consumed versus the amount you've burned in order to align with calorie goals, and a way to monitor your heart rate. We then designed the basic layout (above right) that will allow us to display those ideas as functions of the app. One of the resource videos mentioned in our homework discussed 10 ways to make a great user interface [1]. For now, our main focuses from these 10 are on having simple, clean dialogue, a small memory load, shortcuts, and consistency of the interface.

Let's take a look at our basic interface idea designed above. On our main page, we designed each of our functions to have its own block icon and have it display like a windows phone interface. We believe that this gives us a clear view of the whole app and also allows us to have more room for bigger text that is easy to read. Along the top of the main screen will be bar displaying the title of our app, we are also thinking about having a user's profile page link on the top right and a quick view dashboard on the top left.

The idea of our quick-view dashboard is to show the users a view displaying all the real-time type of data at once. The quick-view dashboard will be different than the main screen in that this dashboard will be focused on the distance, steps, speed, etc. traveled on just the current exercise event, while the main screen will show data from the whole day. The quick-view dashboard would be ideal for use during a run or a workout as a way to glance at your phone to see how well you're doing currently. Based on our original design, the quick-view dashboard will display the current speed level that we are traveling, the water level that we have consumed, the steps we've taken, the distance that we've traveled, the calories burned, and maybe even a stopwatch to keep track of elapsed-time. This interface will not reveal more detailed, long-term data, such as the graph history of each function of the app.

If users wants to see the details of the history of their data. they have to click on the icon button for each functionalities from the main screen. Take the Water bottle one as an example. Once the user clicks on it, it will transfer directly to the water level interface. it will show the amount of water that the user typed in and we have a 'thermometer-style' model that shows how much water the user is going to consume to reach his or her daily suggested level. Users can also go to the statistic page that where historical data is presented as a chart diagram. This chart diagram will show users the trend of how often and in what quantity they have been drinking their water from the leading up to the current date and time.

The second icon that we have right next to the water bottle icon is the step counter. this app will reveal steps that users have taken as long as they have their fitbit connect to the app. On the main page, we will show users the basic data of how many steps they've taken on that day. Once the user clicks on the icon, it will shows a statistic page which is similar to the water bottle one. The difference between this one and the water bottle one is that this data is automatically collect by fitbit instead of inputted it manually by the user. Once the data is collected by the fitbit. It will generate the statistic chart by itself and show it to the user.

The remaining icons will have basically the same features, only differing by their functionality. Each of them will all have their own statistic chart page to organize the data collecting from fitbit.

Evaluation

After presenting our revised user interface in class. We received a suggestion to create some sort of animation or movement to let the user know they have touched the screen and that the app is responding to them. We plan to implement this by putting said animations on our icons on our main screen and maybe in other places in the app. We also received feedback on our screen design from outside of our class. This feedback included the idea of making the app universal, so that it could receive data from wristbands other than ones made by fitbit, for example, Garmin's vivofit. Also, it was suggested to us to add an additional icon for networking of some sort, for example, the capability of posting how many steps you've taken today on facebook. With that, it was also suggested to make it simple to do, without a lot of

forms to fill out, just a simple click and post to facebook. Besides these suggestions, both sets of feedback seemed to think that the app looked good overall. We plan to add the additional facebook post compatability and animations if we have time after getting the main functionality working.

Conclusions and Future Work

Overall, we are creating an app that helps fitbit users to access data from their body easily. Since this is the prototype of the app, we are still considering adding on more features for the users, such as: creating a profile page for the user so they can change their personal information from there. If we add on the profile page. we are thinking about adding a challenge feature for this app. The challenge feature will simply function as a small social network in which users find their friends who are using the app and compete against each other with their data. We can also have a public leaderboard for people who use the app and display for everyone to see. We believe that this will become one of the motivations for our users to exercise even more. Our future plans might also include the animations and facebook (or other social network) post capabilities. And if it is possible, we could try to collect data from other wristbands besides the fitbit flex so that the app would become more universal.

References

[1] "User Interface (UX) Techniques - Janne Jul Jensen." *YouTube*. YouTube, 3 Apr. 2013. Web. 22 Feb. 2015.