FITNESS MOBILE APPLICATION:

Prototype and Testing

Members:

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Introduction

Our fitness app, Fitness for ALL, will be developed to focus on providing a good source of motivation for students to work out and keep a good fitness level regularly. The app will be designed primarily for Android devices as it allows for more functionality as well as having a quite simple user interface to work with. The app will allow users to choose from preset workout plans, customize and edit their own plans, as well as having timers for each workout and a map for the outdoors to work with, all alongside the ability to communicate with friends and workout together.

The report

The report will contain the following sections as listed:

1. User Inputs
2. Design patterns integrated within the prototypes to enhance user experience
3. Methodology
4. Usability testing
5. Improvements
6. Images of the prototypes itself

Link to the App Project

https://www.figma.com/proto/fxgnZFbELEe0AFVeLkGypn/UCD-FINAL-PROTOTYPE?node-id=62%3A2&scaling=scale-down

User Inputs for the prototype

Feature 1: Creating a customized plan

Starting page: Home Screen

1. Click one the customize button in the bottom navigation bar.
2. Click on the plus sign, which will create a new plan
3. Click on the plus sign of an exercise to add a set of that exercise or click on the minus sign to remove a set of that exercise (add one set to skipping)
4. Click on the back button and then on save to save the save the plan

Feature 2: Seeing a friend's fitness score and their exercises

Starting page: Home Screen

1. Click on the social button in the bottom navigation bar
2. Click on the daily button to change the time period from monthly to daily
3. Click on the friend (Mary) to see their report

Feature 3: Tracking and recording an exercise

1. Click on the track and record button in the bottom navigation bar
2. Click on the exercise (running)
3. Click on the play button to start tracking
4. Click on the stop button, and then save to stop tracking
5. Click anywhere to hide the notification

Feature 4: Timer for exercises

1. Click on any of the fitness category (home fitness)
2. Click on the exercise (skipping)
3. Enter the information (click on the box to fill in the details) and then press the "OK" button
4. Click the sound button, to the change the ringtone
5. Click on any ringtone to change it (ripples)
6. Click on the back button
7. Click on the play button to start the timer
8. Click on the stop button to stop button to stop the timer
9. Click anywhere to hide the notification

Patterns Usage

When designing mobile apps, an important factor that must be recognized are the various design patterns to be used within the user interface. The decision to use certain patterns can affect the overall user experience when using the app, either positively or negatively. How it affects the user experience is through the familiarity of such patterns being used widely across other apps, as well as the affordance which is described as essentially how users may interact with the patterns.

As we have established that patterns are really important in designing the user interface, we have used various different patterns in our fitness app in order to enhance the overall user experience positively.

Vertical Stack

The home page of the app (first image) as well as the plans page (second) and customize plans page (third) all feature the vertical stack pattern. All the necessary main components of the three pages are listed or put in vertical order from top to bottom. As we can see from the home page, it includes the three main fitness categories, as well as a bottom navigation bar. On the fitness plans page, the various preset plans are listed in vertical order, and finally on the customize fitness plans page all the exercises available is listed from top to bottom.

Bottom Navigation

The main home page of the fitness application contains a bottom navigation bar, placed at the very bottom of the screen. The bar provides the options for users to go to the home page, go to the fitness plans page as well as going to their friends' page which lists all their friends and their fitness scores for each timeframe. As stated on by the options available to the user on the bar, it includes the main three pages that the user most likely would browse most of the time using the application. In effect, it is easier for the user to browse through the application for its main intended purposes.

Card Stack

On the Friends page, a card stack pattern is included. The cards show the fitness scores of the users' friends for various timeframes as stated; daily, weekly, monthly and yearly. The use of card stacks in turn allows the user to easily navigate the page, whether they would like to see the scores of friends for whichever timeframe they desire.

Thumbnails
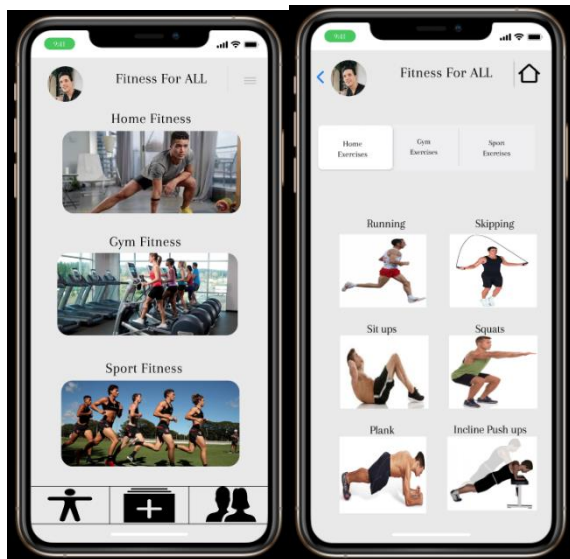
On the main home screen, for each specific fitness category that being Home, Gym and Outdoor fitness, an image/thumbnail relevant to that category is included. By including thumbnails, users can more easily decide which type of fitness they choose to participate in based on the intensity and style of each fitness category.

The use of thumbnails are also included in the customize fitness plans page, in which images of each specific exercise is shown, which allows the user to better recognize what each exercise entails which in turn results in more efficient decision making.

Centre Stage and Visual Hierarchy
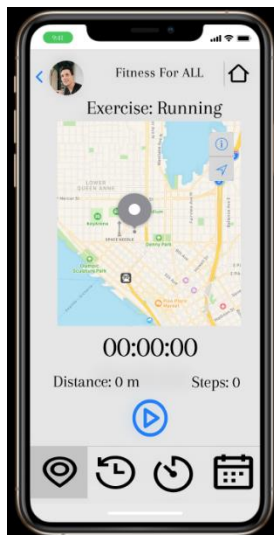
Within the running exercise, a navigation page is brought up. This page utilizes the center stage design pattern by positioning the main feature, a live map, right on the center of the page. The map is also the most prominent thing on the page, being the largest size taking up around 40% of the total page. The user when running, will most likely only need to know where they are, and as such the map needs to be the most prominent thing on the page. By positioning it on the center as well as making it a large size achieves that goal.

User Testing

Methodology

User testing is one of the ways to gather feedback about the high-fidelity prototype. As an approach for collecting information, we selected participates who had some prior experience with using a fitness application. This is important because having experience allows users to set some standard toward the application. In other word, this gives users to compare whether some designs and feature are either useful to them or not.

Moreover, when the users are testing the application, it is made sure that the users are speaking their thoughts aloud. This gives an insight of what is the uses' through process are while using the application and by analyzing the pace of their thoughts can represent comfortability of the app. For instance, if the thoughts have pauses in between for some seconds, this can mean that the user does not know is the step to take to perform a task.

Furthermore, during the testing, we prompt the user to perform a task without giving any details on how and what are steps to perform the task. This process of letting the user themselves trying to understand the application will allow to us to the application's usability such as learnability, memorability, and errors.

User Testing 1

Application Name: Fitness for All		
Date: 10/6/2020	Time: 20:00	Facilitator: Jainam Doshi
Tasks 1	Creating a customized plan	
Observations:	- Recognized the customized plan menu button fairly without any efforts. - The user was intuitively clicking outside the overlaying error prevention box, which includes save, delete, and cancel buttons. The user realized that they must click one of the buttons for the buttons in the box as a response.	
Tasks 2	Seeing a friend's fitness score and their exercises	
Observations:	In the friend's list, the user expected to change the time periods by swiping from left to right and vice versa.	
Tasks 3	Tracking and recording an exercise	
Observations:	The user did not recognize the icon for the tracking and recording and there of pause in the user's thoughts for 3 to 4 seconds.	
Tasks 4	Timer for exercises	

Observations:	• The user did not understand what values they should type in the dialogue box durations.
	• The back button did not work when not pressed precisely.

Post Testing questions

1. What do you think about "Fitness for All"? Does it motivate you to do exercise and how?
   - Yes, I will use this app for my fitness routine just because this have very minimalist design and does not distract me with the random advertisements which cover up half of my screen.

2. Do you like the style color, app interface?
   - I think there is very little color present in the app. But in terms of app interface, the gives a vibe of a fitness app.

3. What improvement advise you could give for "Fitness for All"?
   - Adding more color, like highlighting names of the exercises depending in the category they are in home, gym, or sport fitness
   - The back button is very close the profile picture. It can be easily to miss click the profile button instead of the back button

4. Could you give rate for "Fitness for All"? out of 10
   - I would give 7/10, just because this app allows me to perform task which I want to do.

User Testing 2

Application Name: Fitness for All		
Date: 11/6/2020	Time: 13:00	Facilitator: Lang Chen
Tasks 1	Creating a customized plan	
Observations:	• Identify the customized plan menu button effortlessly.	
	• The user free to controls the functional button.	
Tasks 2	Seeing a friend's fitness score and their exercises	
Observations:	• The user can identify the friend's fitness section easily.	
	• The user wants to set up the top one in friend 's list.	
Tasks 3	Tracking and recording an exercise	
Observations:	• The user can not identify the button of Tacking and recording an exercise quickly.	

	• Free to control when the user wants to leave the page.
Task 4	Timer for exercises
Observations:	• The user can identify the button of timer for exercises immediately. • The user feels free to set up the time for exercises. • Free to control it when the user wants to end of timer.

Post Testing questions

1. What do you think about "Fitness for All"? Does it motivate you to do exercise and how?
   - I think "Fitness for all" is good and motivate me to exercise because it is informational and functional app.

2. Do you like the style color, app interface?
   - Sure, it is very clear color and interface.

3. What improvement advise you could give for "Fitness for All"?
   - I think that makes some icon higher recognition or put some note under the icon.

4. Could you give rate for "Fitness for All"? out of 10
   - I would like to give 7 out of 10.

User Testing 3

Application Name: Fitness for All		
Date: 11/6/2020	Time: 17:30	Facilitator: Qiwen Dun
Tasks 1	Creating a customized plan	
Observations:	• After entering the main page of the application, the user can accurately find the customized fitness plan page. • On the customized fitness plan page, the user easily and successfully added and saved a Skipping plan as Plan 4. • After completing the planned actions, the user enters Plan 4 and successfully deletes this plan from the list.	
Tasks 2	Seeing a friend's fitness score and their exercises	

Observations:	• The user can accurately locate the Friends button in the bottom navigation bar from the main page. • On the Friends page, the user can clearly see the friends' daily fitness scores and monthly fitness scores.
Tasks 3	Tracking and recording an exercise
Observations:	• The user enters Running through the Home Fitness on the main page. • The user easily stopped and saved it after recorded a running and received a prompt for successfully saved.
Task 4	Timer for exercises
Observations:	• The user enters the Skipping through the Home Fitness on the main page. • The user can easily set the details of the timer through the pop-up window. • The user cannot set the timer reminder tone. • The user easily stopped and saved it after started the timer of rope skipping and received a prompt for successfully saved.

Post Testing questions

1. What do you think about "Fitness for All"? Does it motivate you to do exercise and how?
   - The functions of this app are very clear to me. It can provide services to my needs in the most direct way, which saves my time in choosing features. In terms of style and function, it can really inspire my interest in sports, especially after seeing my friends exercise seriously.

2. Do you like the style color, app interface?
   - I want to say yes. In fact, as a minimalist fitness application, it has reached the standard in color and page style, not to mention that it does not use traditional stick figures as icons on the main page but uses photos instead, which makes me appreciate it more.

3. What improvement advise you could give for "Fitness for All"?
   - First of all, I think this app is flawed in the classification of sports. For example, running should belong to outdoor sport fitness instead of home fitness. This was a bit confusing to me.
   - Secondly, I think this app is a bit monotonous in background color for some people, if it can add some color elements it will be more attractive.

- Finally, just as a suggestion, I hope you can add a personal page to set up personal details and to logout the current account.

4. Could you give rate for "Fitness for All"? out of 10
   - Since it can meet most of my needs, so I would rate it as 8 over 10.

User Testing 4

Application Name: Fitness for All		
Date: 12/6/2020	Time: 21:50	Facilitator: Clinton Thai
Tasks 1	Creating a customized plan	
Observations:	• The user was able to, with ease, identify the plans button on the bottom navigation bar as well as the plus button to add customized plan	
Tasks 2	Seeing a friend's fitness score and their exercises	
Observations:	• The user was able to easily identify the Friends button on the bottom navigation bar. • In the Friends tab, the user was able to easily press each button for different time periods • User would like to see their own score compared to others	
Tasks 3	Tracking and recording an exercise	
Observations:	• The user was easily able to add each exercise to their custom fitness plan. • User doesn't know how to confirm and create the custom plan	
Task 4	Timer for exercises	
Observations:	• The user was able to easily identify the start timer button, as well as the pause and stop button. • The user was not sure what the bell button was used for.	

Post Testing questions

1. What do you think about "Fitness for All"? Does it motivate you to do exercise and how?
   - The feature that allows me to track my exercises would motivate me to work out more, as it's a feature that allows me to see the progress of all my workouts compiled together. That would make me want to work out more and improve.

2. Do you like the style color, app interface?
   - The color palette is very simple and nice on the eyes. However, it would be nice to have a dark mode where the main background color is black instead of light gray. The interface is also very simple and easy to understand, however it would be nice to have the bottom navigation bar on every page so that any page can be accessed at any time.

3. What improvement advise you could give for "Fitness for All"?
   - Bottom navigation bar on every page, or every main page. Dark mode to have a dark themed app.

4. Could you give rate for "Fitness for All"? out of 10
   - I would personally rate it 6/10.

Improvements

I regard to the user testing, there are some improvements can be amended to improve the application's usability. Some of these improvements are:

- Adding more vibrant colors will make the app more attractive to the user's eyes.
- Add color coded patterns to categorize exercise into groups, for example, all home fitness exercises need to be highlighted by one color.
- Spreading out the buttons, so to minimize the issue about the fat fingers.
- Having a global navigation pattern in the application. So, the user does not have to press the back button to get to the navigation bar. Therefore, reducing the number of steps need to jump from one page to another.

Screenshots of Prototype