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Mobile App development 1

Designing the Fitness of My App

Well written code is an integral element of app design, yet good code only one piece of the puzzle. If an app is to have any sort of success in a market, it can't just be functional it needs to stand out in a sea of other apps all fighting for space on user's phones. There are many elements that go into what determines an apps success. An app developer cannot rely on their programming prowess alone, an understanding of one's competition in the market and how to stand out is vital for success. The process requires more than just polish, an app needs something extra to distinguish it from the competition. One of the most important steps in any development process is research. Specifically, research regarding the competing apps in the market that a developer hopes to break into with their own app. This research should be used to figure out a few things. First, a developer should find out what types of features and functionality that competing apps have implemented into their designs. If a developer's app doesn't have all or most of the same functionality as its competitors, then users won't have much reason to switch apps. In addition to that, it is also critical to understand what kinds of flaws or missing features are present in the competition. This way one's app can have an advantage over existing apps and give users a reason to switch over. This is the process I had to go through when designing my app for this class. In order to design a successful app, it was integral that I not only designed a functional and good-looking app, but I also considered the market I hoped to break into with my final product.

I decided early on that in order for my app to be the best it could be, I needed to develop the type of app that played to my strengths, meaning that whatever I chose it needed to be something that I

was familiar with. A healthy understanding of my competition with would give me a leg up standing out in the market giving me a better shot at success. I decided on developing an app made for tracking workouts at the gym because I have used plenty of apps made for this purpose and all of them had some problems that I could fix. I know many of the ins and outs of this market because I've been involved in it for the past year. Personally, I have never found an app that does everything I want it to, which I felt allowed for an excellent opportunity to fill a niche that has gone unfilled until now.

MyFitnessPal, *Lose it!*, *My Workout Plan*, and *Footpath* are examples the most significant apps in the market that I hope to break into. I have used all of these apps to varying degrees of experience and I know the ins and outs pretty well. Specifically, I want to break down and dissect the apps *My Workout Plan* and *Lose it!* to get the bottom line of what these apps do well and what they do poorly so, I can understand how to make my app rise above the shortcoming of these apps.

My Workout Plan is a workout tracking app that allows users to plan and track workouts easily and quickly. The app is pretty popular on the play store with over 500k downloads and a 4.7 star rating. Overall, the app works as intended, users can easily create and log their workouts as well as create a pre-planned routines made up of said exercise. The app has a database of workouts that the users can select from, each with a picture and description of what each workout does. Once an exercise is selected users can enter the number of sets and reps as well as the weight they intend to use. Overall, this works well, and I have done my best to emulate it in my app. In contrast to what works well, the app is also missing the important key feature of the ability to plan out work outs on specific dates. This makes it hard to keep track of which routine to do on which days. For gym goers everywhere this feature is a very important to keeping a regimented workout schedule. Even though this is possible in a calendar or notes app it is far from convenient. If a day is missed or a routine is changed the user would have to go through and manually change all the workouts. Rescheduling could easily be accomplished automatically in an app.

Lose it! is another popular app with over 10 million downloads and a 4.6 star rating on the app store. The main purpose of this app is to allow users to count their calories throughout day, but it also has workout tracking capabilities as well. This app works very well for counting calories, but it is quite lacking in the workout tracking side of things. The app locks workout planning behind a pricy paywall and doesn't even have nearly as many workouts as My Workout Plan if one does pay. Another problem with *Lose it!* is that the app isn't very light weight. The user must go through a lot of complicated looking menus and screens to just log a workout out which isn't very intuitive. Overall though the app works as intended with some shortcomings such as cluttered UI and limited exercise selection.

Scouting out and analyzing the competition is an integral step in the process in developing an app. Overall both apps are very good at what they set out to do however as discussed earlier, they certainly each have their own shortcomings. My goal was to fill in the gaps left by these two apps while still occupying a similar niche. The gaps left by these apps include future workout planning with the ability to move workouts to different days if rescheduling is needed. In addition to this my app needs to have a good layout and easy to use interface that will allow users to log their exercises easily without locking important features behind a paywall.

To accomplish my goal of creating an easy to use, light weight app that allows users to create, track, and plan out their workouts I decided I would need to use a simple three-tab bottom navigation bar design for my app. The first tab holds the workout routines tab, the second holds the routine calendar view, and final the third tab holds the profile tab. Each of these tabs have a distinct and necessary purpose which require their own tabs to accomplish. I decided on three tabs because I felt that it provided users with the optimal amount of user control while keeping the app relatively simple. I took some inspiration of this layout from the *Lose it!* app which also follows a tab design. However, it has 5 tabs instead of 3 which adds to the apps clutter problem. Along with my reduced clutter layout, I needed to design a clean and simple looking UI to go with it.

I decided I wanted to help my app stand out by giving it its own custom UI theme instead of the default one that is built into Android Studio. I decided to go with a white, green, and purple color theme that felt simple yet pleasing to the eye. The navigation bar itself is solid white with three separate icons and accompanying info text below each icon. My design has no visible dividers between each of the icons, so I decided I needed a way to give the user a clear indication of which tab is currently open. When selected the navigation icons are a light shade of green and the info text underneath is purple. When an icon is not selected both the icon and info text for that tab are gray. I found that colors as opposed to visible dividers were the best way to maintain the clean and clutter-free theming I want the app to have. As for the tab icons I chose 3 simple clip art icons. For the workout routines tab, I chose a dumbbell, for the planning tab I chose a calendar, and finally for the profile tab I chose a simple clip art person. Each of these icons illustrates what a specific tab is for while adding very little visual business for the content displayed on screen.

When the user opens my app, they are greeted by the routine calendar view which displays all the user's current and upcoming routines in an easy-to-read way. I decided on having the app open with the calendar view because I wanted users to have a way to quickly open the app and see which routine they are doing that day. From my own personal experience, I found that I often forget which routine I am doing on any given day so it was important that users could access this information quickly and easily. The routines are displayed in a list calendar view similar to that of the weekly view in the Google Calendar app with the current day displayed on at the top. I plan on implementing the ability to tap on a routine to get the list of the workouts in each routine but as of writing that feature is not implemented quite yet. Users can also scroll the list down to view their upcoming routines. I chose this design because I felt it provided users with the most relevant information possible without overloading them with information. I debated displaying the whole month as opposed to just the current week however, I found that there was far too much information that was not immediately relevant. On any given day it

most likely won't matter what routine a person is doing in two weeks, all that really matters is what they are doing on the current day with the upcoming days being very easily accessible.

On the routine tab is laid out in a similar way to the calendar tab, which is a scrolling view of each routine and the exercises associated with them. I wanted this tab to be in keeping with the rest of the app's theme, so the color scheme and fonts are all the same. At the bottom of the page there is a floating action button that allows users to create a new routine. When pressed the button prompts the user to enter a routine name, then places a new empty routine on screen. From there the user can interact with the routine by setting which days the routine will take place on, which will automatically be added to the calendar planning tab. In each routine box there is a button to add an exercise. When pressed, the button prompts the user for an exercise name, how many sets they intend to do, how many repetitions in each set, and the weight amount. When added, the exercise is added to the routine box in a checklist which helps users keep track of which exercises they've already done. In addition to this the set, rep, and weight amounts can easily be edited by tapping on the edit button on top of a routine and then simply typing in a new value. The design of this tab is meant to give users a means to easily edit and add exercises to their routines as well as create whole new routines on the fly. This fills the gaps left by the others competing apps as mentioned above.

Finally, there is the profile tab meant to allow users to keep track of their physical attributes. I felt that an account was unnecessary for my app, so I decided to have all data stored locally on a user's phone. The profile keeps track of age, height, sex, and weight and when entered will automatically come up with some basic stats for the user such as their BMI. This tab is also in keeping with the rest of the minimal design. Overall, this is the least complicated tab of the app. In conclusion I feel that I have designed an app that effectively fills the gaps in the market and maintains a clean and effective visual style.

Resources used: My Workout Plan, Lose it!