

Final Project Proposal

1. Basic App Description A basic description of what the application will do.

I am planning to design a workout assistance application with Ionic. This application is targeting people who do strength training at the gym. The application will allow the user to plan and execute their desired workouts. The application will allow the user to log in and start planning their workouts. The application will allow the user to follow along with their workout's exercises, giving them a rest timer and the ability to change the weight once finished.

These workout plan can be assigned to a specific day. The application home screen will have a button that allows you to start the workout (If it is the correct day). The workouts will be comprised of specific weight training exercises. These exercises will include: Name of exercise, weight, amount of repetitions of exercise and rest time between repetitions. There will also be a statistic portion that will display a graph that will display the progression of the person working out.

2. Target Platform

The application will be cross platform since I will be using Ionic Cordova to build for IOS and Android. The testing will be done in google chrome with local host. Once complete I will insure everything works with a Android emulator.

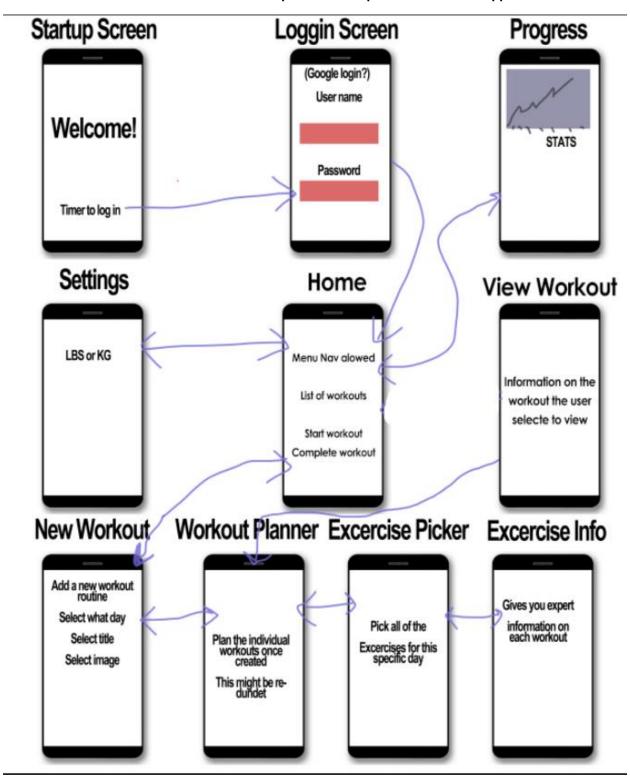
3. Development Platform

Visual Studio (With Angular/Ionic plugin). Chrome for testing in the early phases. Then android emulator/ IOS emulator for final testing.

4. Detailed Description

Screens:

This is the client side screens. I did a quick mind map so I can build the app from here.



Startup Screen

A quick welcome to the user when they start up the app.

Login Screen

The login screen will allow the user to log in. This will aid in storing the user information for their workouts for later use. Will be integrated with facebook and google login

Setting Screen

This screen will allow the user to change the weight option. Since there are pounds and kilogram for both personal weight and weight assigned to the workout. Other things could be added here.

Progress Screen

This screen will allow the user to see their progression of their workouts. This will track and display the user's weight progression over time.

Workout Planner Screen

This screen will show the user all their workout's name and day of the week. They can delete and view the workout from here. Also, they can navigate to new workout so they can add more workouts,

View workout Screen

The user can view the workout's information from the screen.

New Workout Screen

The user can select the day of the week and the name of their workout from this screen. They will be able to navigate to exercise picker to pick exercises for the workout.

Exercise Picker Screen

The user can set the exercise they want to add to their new workout. From here they can do things like set weight, reps, rest time and what exercise they want to add.

Exercise Info Screen

The user will be selecting what exercise they want from this screen. It will be a collection of photos and names of the most popular exercises.

Server-side code

Firebase:

I plan to use firebase for user authentication facebook and google. I also plan to use firebase for storage of data. This will involve setting up a data base and integrating it into the app using firebase-angular.

Google Chart Module

I will be using google charts for displaying a graph. The data will be from firebase. This is a NPM install and integration to the application.

Ionic-Angular + Cordova

An ionic angular project will be the main code base. I have found a preference to using ionic when it comes to rapid app development. The ability to use angular along side with it makes it powerful. This will allow me to design and build the application from the ground up. Cordova is used to run and build everything for cross platform. I will be using plenty of pages and adding them all to the routing from angular.

Storage requirements:

Database storage. No local storage required. The only storage necessary would be the application base size. All data that is used in the future will be stored in the firebase database.

Network requirements:

You will need internet connection since the login authentication is through google and facebook.

Hardware requirements:

A phone that is android or IOS and can run a simple application.

What should the phone support?

WIFI

5. Demonstration Method

For the README file I plan to show screen shots from the android emulator.

For the class presentation I will be showing a slide show that goes over the functionality of the application along side with the coding information.

Since we are in a room without internet I will be showing a short video of the application in use. This will include things like creating a workout, adding exercises, starting a workout, completing a workout and finally showing the statistics page.