FITBOD
BUILT FOR BETTER.

One Rep Max and Charts

Given a set of data for historical workouts, your assignment will be to calculate the theoretical one-rep max. Once you do this for each exercise in the workout, you display the overall one rep max (PR) and you will provide a plot of the historical pattern of the user's one-rep max.

Input

You will receive a file containing historical data - Date of workout, Exercise Name, Reps, Weight.

Row example:
Oct 11 2020,Back Squat,6,245

File: https://drive.google.com/file/d/1HomqPGU5CW6Wqk5ykM0goZLAiAgtTtl2

- For one-rep max, you may use the Brzycki Formula found here: https://en.wikipedia.org/wiki/One-repetition_maximum
- We recommend you use Swift Charts as the charting library. However, you may use any 3rd party charts library in the project for rendering graphs as well.
- We recommend you use Swift UI for the user interface, however you may use UIKit as well.
- Everything else should be originally written and implemented by you using iOS frameworks available via Xcode

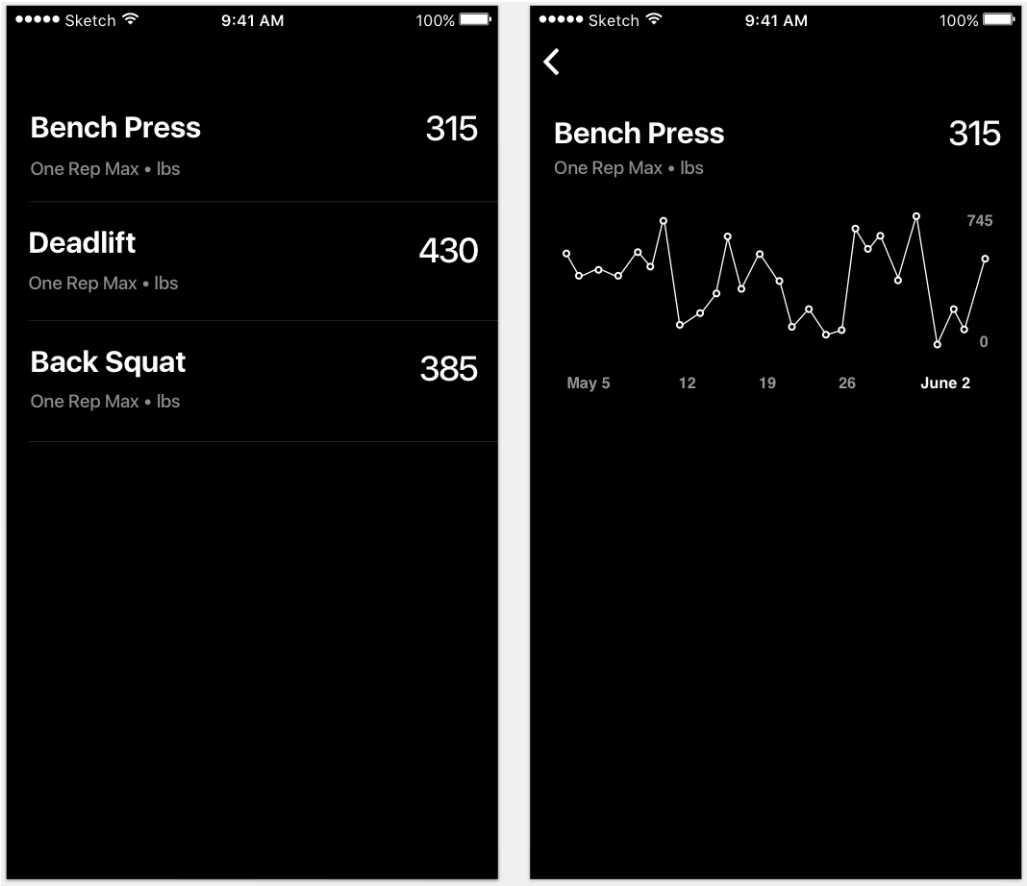
Output

Please create a standalone Xcode project written in Swift.

- If the project requires any special instructions to set up, please include a README with specific details.
- We should be able to build and run the code in the iOS Simulator to verify the result
- The solution should accommodate any number of workouts, exercises, and sets/reps/weight. We will test your solution using our own input files.

Please commit the project to a Github repo you create, and share the link with us.

Example Mock



Evaluation Criteria

- ❏ Solution correctness
- ❏ Stability and performance
- ❏ Architecture / design patterns used
- ❏ Knowledge and understanding of core iOS frameworks (Foundation, SwiftUI/UIKit etc)
- ❏ Knowledge and understanding of the Swift programming language