

# Workout App

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# 1.0 Problem

- People have troubles exercising including:
  - Time restrictions
  - A sense of self-consciousness
  - Feeling too tired
  - Find exercising boring
- People still need daily movement
- Early humans exercised by hunting and foraging
- Modern humans sit on the couch and order take-in

# 1.0 Problem (continued)

- Not moving causes the body to conserve energy causing:
  - Poor insulin absorption (diabetes)
  - Increased risk for osteoporosis
  - Muscle atrophy
  - Slower metabolism
  - Heart Disease
- Exercise was meant for survival
  - Scientists theorize that no early human would just go on a run
  - Modern day humans don't want to exercise because of this

# 1.0 Problem (continued)

- Getting daily exercise helps:
  - Manage weight
  - Improve your ability to do daily activities
  - Increase your endorphins
  - Reduce stress
  - Bring you back into the moment
  - Increase your chances of living longer
- Getting daily exercise prevents:
  - Poor insulin absorption (diabetes)
  - Increased risk for osteoporosis
  - Muscle atrophy
  - Slower metabolism
  - Heart Disease

## 2.0 Objective

- Create a webapp to help people exercise daily

# 3.0 Background

## Key Concepts:

- Angular
  - Development platform built on TypeScript
  - Component-based framework
  - Offers a collection of libraries and developer tools
- Firebase
  - Backend-as-a-Service
- Ionic Framework
  - Open-source UI toolkit for building mobile and web applications
  - Using web technologies and frameworks
  - Focuses on the frontend UX and UI interactions

# 4.0 Design

## 4.1 - Requirements

- User Inputted Data (Time/Equipment/Difficulty/Area)
- Database
- Secondary Routine / Logging Functionality

# 4.0 Design (Cont.)

## 4.2 - High Level Architecture

- Database Schema
  - Probably slightly different than input fields
- Results Screen
  - Info about each exercise
  - Diagrams/Video
- Routines
  - Work similarly to YouTube or Spotify playlists
- Play functionality
- Logging



# 5.0 Facilities and Equipment

Developer Environment requirements:

- Text Editor
- Command line knowledge
- Firebase login
- WFH style with sprints to focus on specific work
- Figma: online visual designer
- Jira: ticket tracking for progress

## 7.0 References

- [1] Why Is Exercise Hard? | Harvard Magazine, <https://www.harvardmagazine.com/2016/09/born-to-rest>
- [2] Exercise and Stress: Get Moving to Manage Stress – Mayo Clinic, <https://www.mayoclinic.org/healthy-lifestyle/stress-management/in-depth/exercise-and-stress/art-20044469>
- [3] Benefits of Physical Activity | Physical Activity | CDC, <https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>