

# Phone Phit

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## Introduction

People have troubles exercising. Whether it is a lack of time, a sense of self-consciousness, feeling too tired, or finding exercise boring that causes a person not to exercise, we still all need to get physical movement into our daily lives. Early humans got their exercise by hunting and foraging, but when our modern lives allow for us to sit on the couch and order take in, we don't get enough movement. Phone Phit steps in to allow users to access exercises on their phone anywhere.

Phone Phit allows users to select their workout by how much time they have, their skill level, and what area they want to work out. With these criteria and the simplicity of accessing a custom workout anywhere, people can begin exercises for their health.

## Purpose

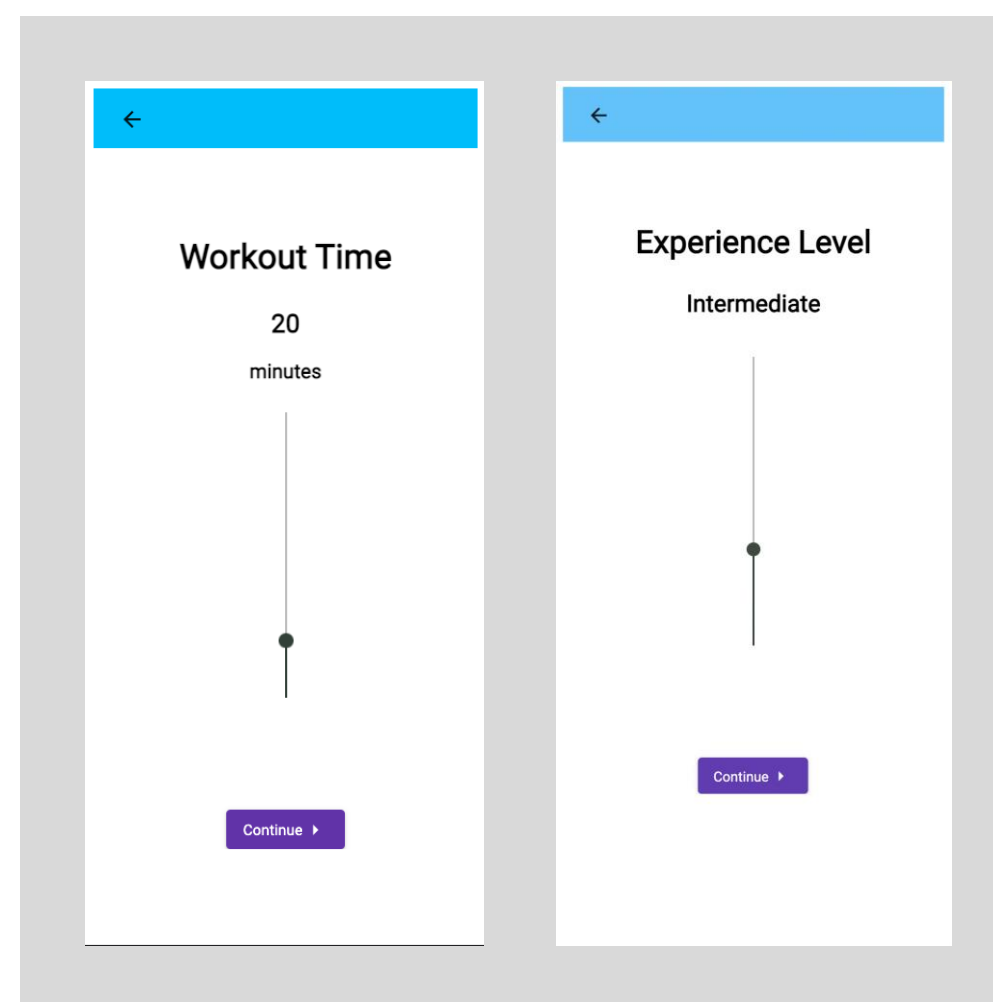
Not moving can cause a prolonged state of lower energy resulting in diabetes, a high risk of osteoporosis, muscle atrophy, slow metabolism, and heart disease. These features originally helped early humans conserve energy while not on the hunt. Exercise for early humans was meant for survival. Phone Phit helps users overcome the struggles of not wanting to exercise with its simple interface and easily customized workouts.

Phone Phit allows users to choose how they want to work out without overwhelming them with too many options. A user can easily workout just one area of the body or many areas or can choose to have a workout with equipment or without equipment. Other apps are hard for users to use and often require an upfront payment, but Phone Phit users don't have to pay a fee.

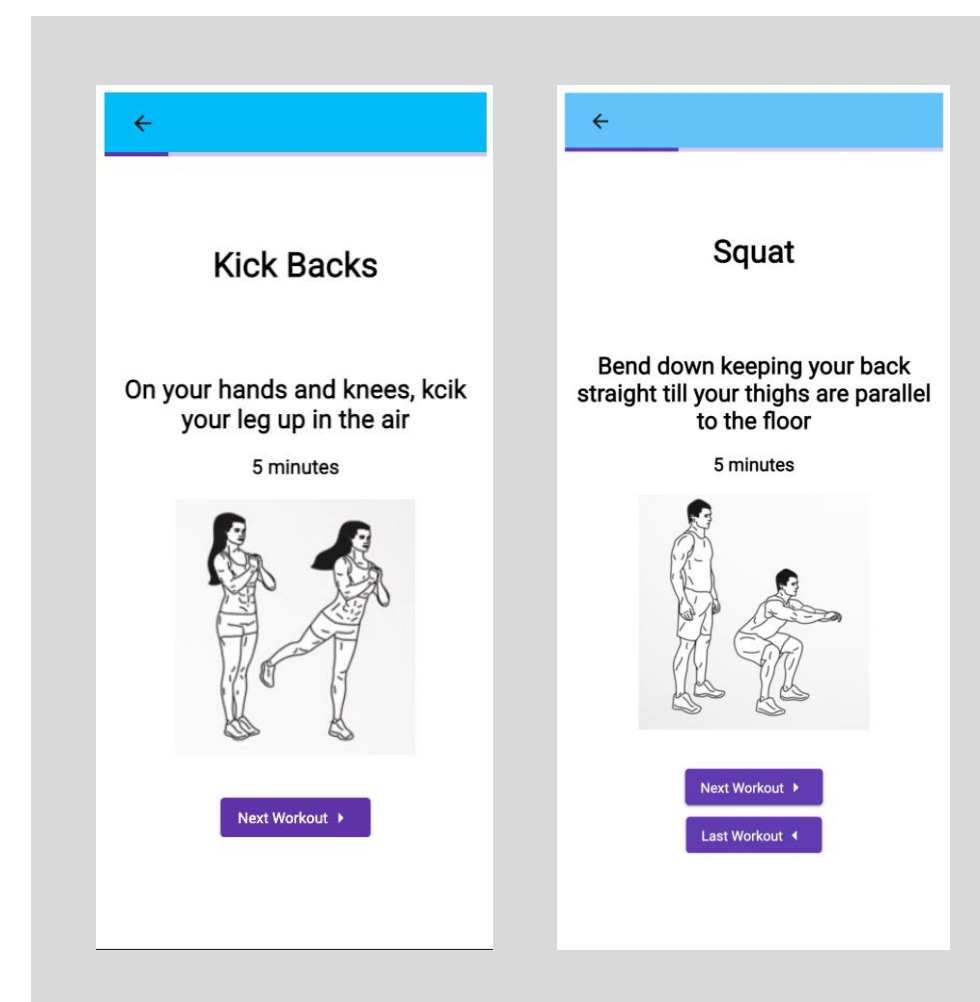
## Methods

We used an AngularJS stack to develop the application, with components built off of Angular's Material library to support the forms and results. We store the exercises as entries in a hash map with keys relating to each requirement. The user is asked a series of questions using Material buttons to submit answers, which form a query for the hash map. This process returns all exercises that fit the requirements the user has laid out.

More specifically, the categories we decided to use for our queries are Time to Perform, Difficulty, Required Equipment, and Part of the Body to Exercise. After the query is submitted, the matching exercises and lists out their individual details.



Exercise Questionnaire Pages



Resulting Exercise Page

## Results

To use the app, a user clicks through the splash screen, and is presented with the questions about exercise specifics. These questions each take place on separate screens that are cycled automatically, to reduce clutter. Time to Perform and Difficulty are sliders, Required Equipment has the user select any equipment they have on hand from a list, and Part of the Body functions the same way, using a list of supported body parts. Difficulty is cumulative, meaning that if selecting a higher difficulty will also give results for lower difficulties.

After answering the last question, the app automatically presents the matching exercises. Exercises are presented in a randomized list, and the user will begin the workout that the app has created for them.

## Conclusion

The app has a very basic use case finished and fulfills the requirements we set out for it. This functionality is a bit barebones but presents several opportunities and avenues for further development like setting up a workout routine like playlists on music apps. Another possible future development could see a friend system, stat tracking, and badges, as competition and tangible rewards prompt more consistent exercise.

## Citations:

- [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>

