

Gamified Workout Mobile App

Project Definition

July 24, 2023

Project Idea

The goal of this project will be to create a gamified workout application for android and iOS. As gamification is turning regular activities into a game, this app will turn exercise into a fun game, rewarding the player for completing a workout and sticking to their fitness routines. To do so, the game will be set up like an old RPG style game.

Features

Here is a list of proposed features to be added:

- **Muscle Groups:** upon completing a workout, the player will be awarded points for the stat corresponding to the workout's muscle group. If a player completed a run workout, for example, the player could be awarded 1 point towards speed, or if a player completed an upper body workout, the player could be awarded 1 point towards strength, etc.
- **Quest routines:** to encourage long-term and consistent fitness, the app will provide fitness routines that can be represented by quests. Let's say the user wants to workout 3 times for 1 week, for instance. Then the entire routine will be the "quest" the player embarks on, and each workout day can be represented by a monster that you come across on your journey that they must defeat. Then the last day of the routine/quest will be the final boss! (And yes, the final boss would have some delicious reward to achieve!)
- **Heroes:** rather than allocating all points earned from workouts to one character, the player will instead use heroes collected on journeys to fight for them in quests. At the beginning, the player could be given 3 heroes, all at basic stats, and could then be leveled up/upgraded by allocating points from completed workouts. As such, the player could end up with one hero who is high in speed, another one high in strength, or perhaps one that is more balanced.
- **Combat:** upon arriving at a workout day in a quest routine, a monster will appear in the app for the player to fight. The player will then choose a team of 3 heroes to participate in the battle (perhaps this team of 3 heroes has to be selected at the start of the quest?). Each monster (or perhaps set of monsters?) will also have random stats of their own, and therefore heroes will either be more or less powerful against certain monsters.
- **Fitness goals and player classes:** prompt the player with their fitness goals upon first time opening app and frame monsters/quest creation around those goals. Currently, there could be monsters of any type and you would want to increase all your stats (strength, speed, intellect, etc.) and be as well rounded as possible to have the best fighting chance. Not everyone wants to train fully body and be well rounded though. Some people just want to focus on running and getting better times, whereas other are focusing on bulking up in the gym. As such, rather than design quests generically, they could be fitted to the individual based on fitness goals. Let's say someone just wants to focus on running, for example, then all the monsters they come across would require a high speed stat to beat, thus encouraging more workouts in line with what they want to do. Additionally, this could go really well with the idea of adding player classes. A player with a goal of building strength, for example, could be classified under the Warrior class, whereas a player with a goal of increasing mindfulness and flexibility could be classified under the Healer class. Each class could then have their own unique abilities that aid them in their battles and other in-app activities. These goals could always be changed by the player in settings.

- **Achievement awards** award the player different awards for hitting different milestones (outside of quests, etc.). For example, one award could be getting a hero to top level (if that exists). Other game based awards could include completing so many quests, fighting (and winning) against different monster classes, having heroes in different (or all of the) classes, etc. Fitness based awards could include completing so many type of X workouts (core, upper body, yoga, etc.), completing so many workouts in a week, achieving workout streaks, etc.

Minimal Viable Product

The MVP for this app would be to allow the player to set a fitness goal, enter in the workout(s) they complete, and allow for some form of player progression from performing activities within the app.

Nice to Haves

- Community/multiplayer to address accountability (and make the app more fun), could implement a way to make profiles, add friends, and work together on quests.
- Store to spend earnings on in-game cosmetics
- Workout trends/reports
- Paid currency system to monetize the app

Timeline (~1 year)

Learning Stage (~2 months)

Michael	Asia
HTML July 30, 2023	HTML/CSS Completed 2022
CSS August 4, 2023	JavaScript August 18, 2023
JavaScript September 4, 2023	React August 25, 2023
React Native October 4, 2023	React Native October 8, 2023

Design Stage (~2 months)

Create High-Fidelity Wireframes
Create UI Kit

Development Stage (~ 8 months)

Frontend Development
Backend Development
Testing