TEAM RUN

RUN

Group Memebers:
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Required

1. User account creation and login.
2. Connection to Google Maps API, terra, sahha.ai to read real workout and activity data.
3. Display user fitness data in the app (Water intake, workouts, reps.)
4. Convert workout data into RPG character stats and levels.
5. Save and retrieve user data and apply to a database.
6. Provide basic navigation between screens. (home, profile, stats, etc.)
7. Update progress for real time during workouts. (shows you the history of passed workouts)
8. React frontend communicates with Java backend.

Desired

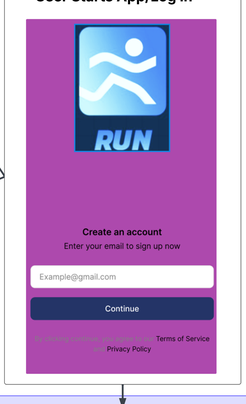
1. Character customization. (change outfit, colors, or accessories)
2. In app achievements and badges for workout milestones.
3. Social sharing of workout progress.
4. Music integration to play songs during workouts. (will not effect using another app like spotify or apple music)
5. Notifications or reminders to stay active.
6. Dark mode and custom themes for better visual design.
7. Animated transitions and progress bars for RPG character growth.
8. Leaderboards or friend challenges to add competition.

Aspirational

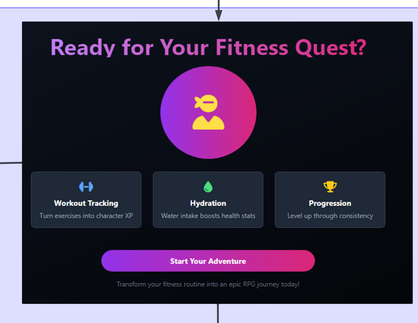
1. Augmented Reality (AR) workouts where users can see their RPG character move in real world environments.
2. AI personal trainer that gives real time feedback and custom workout plans.
3. AI based nutrition recommendations linked to user progress.
4. Multiplayer RPG mode where users can team up or battle others.
5. Integration with smartwatch biosensors to track heart rate, oxygen, and calories in real time.
6. Dynamic weather and time of day effects reflected in the games visual.
7. In game economy or marketplace for unlocking special gear and power ups. (like small store)
8. Gain points that are spendable to use to buy certain cosmetics.

This is the login/sign up page for the user

User Starts App/Log In

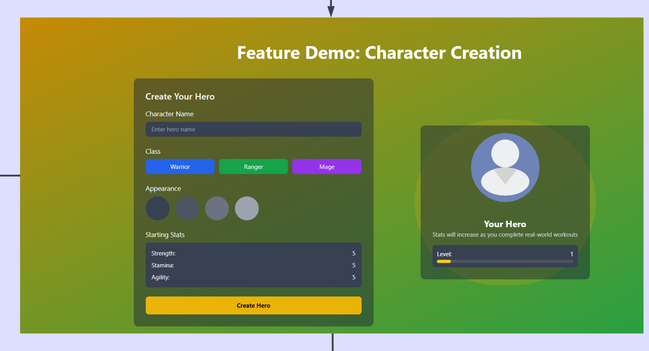


New users will be given a introduction to the app

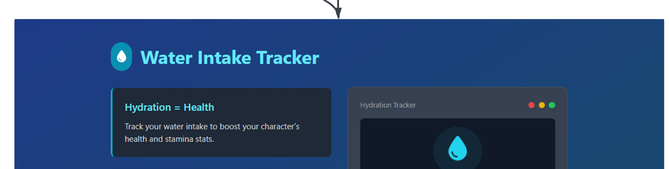


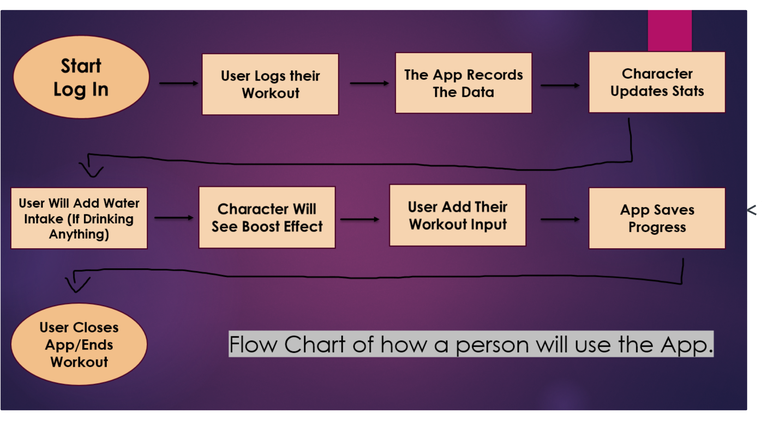
These steps will be skipped for returning users once the character is created

Users will be asked to create their first character

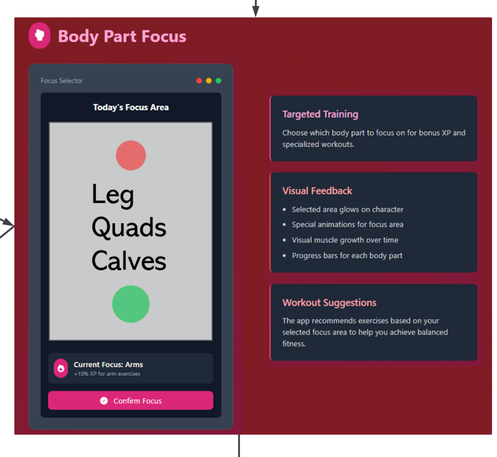


Users can track their water intake which will directly synchronize with their character

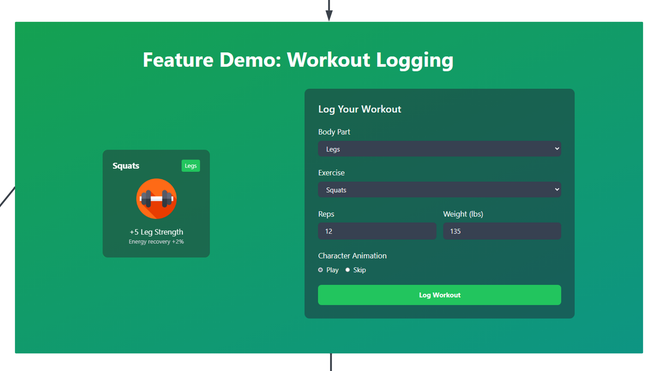


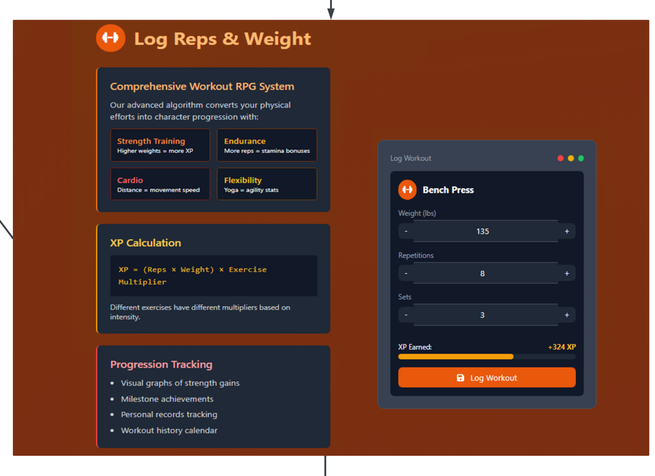


Users can select which body part to work out and will be given exercise suggestions and feedback

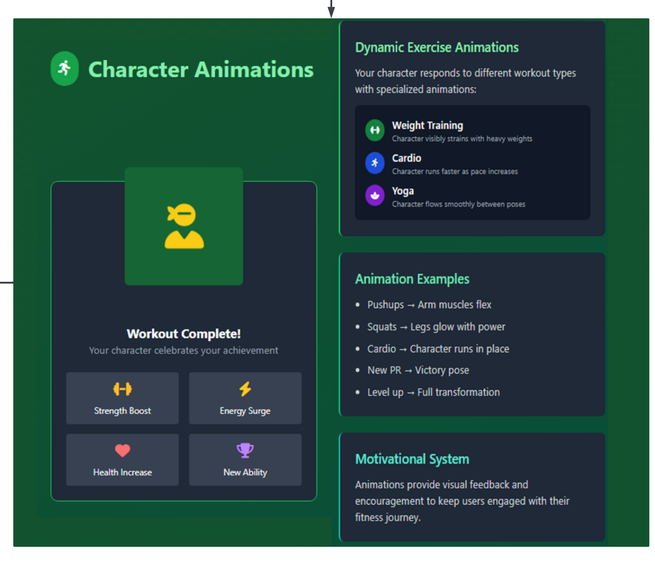


Users can log thier workouts then the app will reward the users characters with progression bonuses





After a exercise is logged into the app the user will see their progression towards thier exercise goal and thier character will be shown geting stronger depending on their work out



Example How the App will work from a user point of view.

User Stories: (examples)

1. As someone who plays games and goes to the gym, I want a tracker that keeps me incentivized so that I stay consistently in the gym.

Acceptance Criteria:
a. User can file progress to an account.
b. User can let built-in software have certain permissions.
c. User can create a character.

Tasks:
a. Create an account using email/password
b. Enable tracking permissions such as heart rate, steps, breathing, and water intake
c. Create and design a character in a design area UI

2. As someone who struggles with warming up, I want a plan that will have warm-ups that will keep me engaged.

Acceptance Criteria:
a. User can choose a "Warm-Up" option
b. User can choose between set warm-ups or create their own
c. User can choose to display a timer or a video for the warm-ups chosen
d. User can see a character animation do it alongside him

Tasks:
a. Make a button that will lead to a set of warm-up options such as a light warm-up, or heavy warm-up.
b. Will log the warm up and update stats accordingly
c. Displays the created character and animates the character doing the warm-ups

User Stories (Continued):

3. As someone who forgets to track my current workout, I want to be able to log my workout in a way that keeps me consistent and honest.

Acceptance Criteria:
a. User can choose what body part
b. User can enter the number of repetitions and weight
c. User can see character stats increase as information is logged
d. User can see character do animations based on the workout

Tasks
a. Have body parts listed that the user can choose from
b. Show workouts related to the body part that the user can choose from
c. Be able to enter a custom amount of repetitions and weight for that workout chosen
d. Play an animation of the character doing the workout chosen
e. Increase the body part stats for the created character based on the info that the user inputs

4. As someone who struggles drinking enough water, I want to be able "game-fy" the task so that I am no longer struggling with it

Acceptance Criteria:
a. User can choose a water intake option
b. User is able to choose the amount of water
c. User is able to see a water-intake progress bar
d. User can see the effect it has on character in raids/battles

Tasks:
a. Have a water icon displayed on screen that can be pressed
b. Show amounts of water (cups/bottles/ounces/etc.) that can be pressed and be able to input an amount
c. Play an animation showing the progress bar filling up
d. Move and show battle buffs from the amount of water drank

User Stories (Continued):

5. As someone who can struggle with going to the gym, I want to see how not going can affect my character so that I have incentive to go consistently

Acceptance Criteria:
a. User can see stats lower
b. User can see chance of raid success lower

Tasks:
a. Have a custom schedule and track if user did not go and lower stats accordingly
b. Show a raid success percentage and have it lower according to how many days/what type of day is missed

6. As someone who likes seeing consistency rewarded, I want a way to visualize my own diligence so that I would want to keep going

Acceptance Criteria:
a. User can see a 3/7/15/30 day consistency pop up
b. User can see a new map zone unlocked per each goal met
c. User can visually see the map unlock through an animation

Tasks:
a. Create a pop up that displays on each goal achieved
b. Have zones blocked until each day-streak is met
c. Display an animation for each zone unlocking that plays after achieving each goal

User Stories (Continued):

7. As someone who enjoys progressing to beat a boss, I want a way to see my progress reach a goal so that I can challenge a boss

Acceptance Criteria:
a. User can fight a boss at the end of a raid
b. User will be able to see if boss can be challenged based on stats
c. User can choose a reward after each boss beaten
d. User can choose to see or skip the battle animation and outcome

Tasks:
a. Have a boss as a battle at the end of a raid
b. The boss should be able to be challenged if the character reached the required stats
c. Cap the character reward to not be too powerful
d. Create a reward list to choose between after defeating the boss
e. Show a battle animation and outcome but let the user have the choice to skip it

8. As someone who enjoys earning rewards through effort, I want to unlock and equip gear so that I can feel my progress making my character stronger

Acceptance Criteria:
a. User can unlock gear by meeting specific goals or milestones
b. User can equip or change gear once unlocked
c. User can view achievements related to unlocking gear
d. Equipping gear should increase character stats

Tasks:
a. Track milestone achievements and display them in a side slide notification
b. Lock gear until the required stats or goals are met
c. Create a wardrobe where new items appear once unlocked
d. Implement stat boosts when gear is equipped

User Stories (Continued):

9. As someone who wants an easier way to track my workouts, I want to be able to use my Apple Watch my workouts log automatically without extra effort

Acceptance Criteria:
a. User can connect a smartwatch or other bluetooth heart rate device.
b. App can read and retrieve heart rate data during workouts
c. Heart rate data is automatically logged
d. System prevents fake workout entries

Tasks:
a. Implement Bluetooth connection to heart rate sensors
b. Retrieve and process heart rate data in real-time during workouts
c. Auto log heart rate as workouts progress
d. Disable manual logging when auto logging is active to prevent fake entries

10. As someone who wants to track my leg workouts, I want to log squats so that I can see my character get stronger and recover energy faster

Acceptance Criteria:
a. User can select "legs" and then "squats" to log the workout
b. Logging squats increases the leg strength stat
c. Character plays a squat animation when the workout is logged
d. Leg strength stat visually updates on the character (strength/armor appearance)

Tasks:
a. Create a menu to log squats under the "legs" workout category
b. Update leg strength stat and energy recovery rate when squats are logged
c. Animate the character performing squats upon logging
d. Add visual indicators (strength or armor) to reflect increased leg stats

User Stories (Continued):

11. As someone who forgets to stay hydrated, I want water reminders during my workout so that I can maintain my performance and health

Acceptance Criteria:
a. User can enable or disable water reminders
b. User can set custom interval times for reminders
c. Notifications alert the user to drink water during sessions
d. User can mute reminders or pause them with a "Break" option
e. User can confirm water intake or skip the reminder

Tasks:
a. Add a toggle to enable/disable water reminders
b. Implement customizable interval timers for alerts
c. Send notifications with customizable text during workouts
d. Create a "break" button to pause notifications until the user returns
e. Provide options to confirm "intake" or "skip" for each alert

12. As someone who likes personalizing my character, I want to unlock customization options so that I can change my character's appearance as I progress

Acceptance Criteria:
a. User gains access character customization at level 10
b. User can apply new outfits or looks once unlocked
c. New styles unlock at specific milestones
d. Custom appearances can be saved to the profile
e. Some items remain locked until earned
f. Character model updates immediately when customization is applied

Tasks:
a. Enable outfit customization when the user reaches level 10
b. Create a menu to apply and change character appearances
c. Unlock additional styles at milestone levels
d. Save and load custom appearances for the character profile
e. Lock certain gear or styles until requirements are met
f. Update the character model dynamically when changes are applied

User Stories (Continued):

13. As someone who wants to improve my back strength, I want to log pull-ups so that I can see my character grow stronger with each workout

Acceptance Criteria:
a. User can select "back" and then "pull-ups" to log the workout
b. Logging pull-ups increases the back strength stat
c. Character performs a pull-up animation when the workout is logged
d. Back strength stat updates visually on the character

Tasks:
a. Add a menu option under "back" workouts to log pull-ups
b. Update the back strength stat when pull-ups are recorded
c. Play the correct pull-up animation on the character upon logging
d. Ensure the character model reflects increased back strength after workouts

14. As someone who likes to track my progress, I want to see a weekly activity summary so that I can review my workouts, hydration, and boss fights in one place

Acceptance Criteria:
a. User can tap "my week" to view a weekly summary
b. Weekly logs display all workouts, water intake, and boss fights
c. Stats are color coded by day for easy tracking
d. Each day shows accurate and detailed data
e. Daily entries are interactive for more information

Tasks:
a. Create a "my week" section to display weekly activity
b. Generate and update weekly logs automatically
c. Apply color coding to differentiate stats for each day
d. Ensure daily entries display precise workout, water, and boss fight data
e. Make daily entries interactive, allowing users to tap for more details

User Stories (Continued):

15. As someone who might miss workouts, I want a rest mode to appear after missing several days so that I can visually see my character resting and feel motivated to return

Acceptance Criteria:
a. Rest mode activates and is visually shown if the user skips 3 or more consecutive days
b. An XP progress bar pauses while rest mode is active
c. App sends a "Come back!" notification to encourage returning
d. Streak resets after 3 missed days, but rest mode remains visible until activity resumes
e. Character displays a clear resting animation or scene during rest mode
f. Rest mode screen provides an option to resume workouts and restart the streak

Tasks:
a. Implement a rest mode screen that appears when the streak is broken
b. Pause XP progression and display a visual indicator (dimmed screen, sleeping character, etc.)
c. Send motivational "Come back!" notifications at set intervals
d. Reset the streak counter after 3 missed days while keeping rest mode active
e. Animate the character in resting state until the user logs a new workout
f. Add a "resume workout" or similar button to exit rest mode and restart progress

Key Features

Workout Logging
Log exercises by body part with rep and weights. Set your character's stats increase and watch them perform the exercise animations.

Hydration Tracking
Game-fy water intake with visual progress bars and battle buffs that reflect your hydration levels during raids.

Consistency Rewards
Unlock new zones and gear by maintaining workout streaks. Visual progress indicators show your diligence paying off.

Boss Battles
Challenge powerful bosses at the end of raids. Your real world fitness determines your success in these epic encounters.

System Roles

User (Player)
Logs workouts, logs water intake, levels up character, fights bosses, starts raids

System (App)
Tracks progress, calculates stats, syncs with heart rate data

Raids/Boss (Game AI)
Raids appear as the user progresses, and stronger raids appear when the user reaches a required stat. Boss initiates battle at the end of the raids

Player
- Logs workouts & water intake
- Levels up character
- Fights bosses & starts raids

App System
- Tracks progress & calculates stats
- Syncs with heart rate data
- Manages game progression

Game AI
- Controls raids & boss encounters
- Scales difficulty with user stats
- Initiates battles at raid completion