Team Run
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# Project Summary

▶ This project is a workout and RPG mobile app where you, the user, will grow stronger in real life and power up their RPG character simultaneously. Users log workouts (pushups, squats, water intake, etc.) and each action done will boost specific body parts and character stats. The app will be able to track water intake and heart rate (only applicable with watch) while showing animated progress. Players will be able to fight bosses, unlock gear, zones, and raids by staying active on their workouts and consistently logging on.

RUN

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# 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

# Key Features
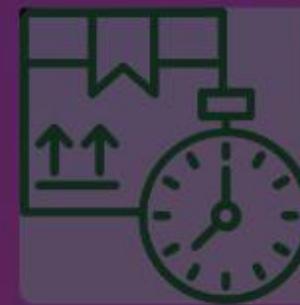
## Workout Logging

Log exercises by body part with reps and weights. See your character's stats increase and watch them perform the exercise animations.

## Hydration Tracking

Game-ify 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.

# 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 tie 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 weights for the 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-ify" 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. Have 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 workouts, I want to use my heart rate sensor so that 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 timers 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 unlocks 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

# Feature Demo: Character Creation

## Create Your Hero

**Character Name**

Enter hero name

**Class**
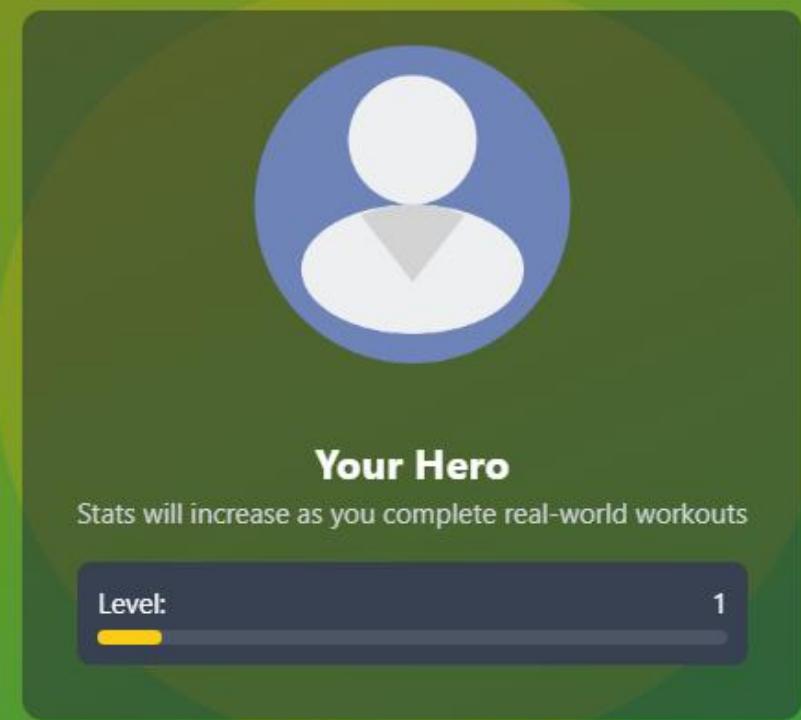
| Warrior | Ranger | Mage |

**Appearance**

**Starting Stats**

| | |
|---|---|
| Strength: | 5 |
| Stamina: | 5 |
| Agility: | 5 |

**Create Hero**

### Your Hero

Stats will increase as you complete real-world workouts

| Level: | 1 |

# Character Animations

## Dynamic Exercise Animations

Your character responds to different workout types with specialized animations:

### Weight Training
Character visibly strains with heavy weights

### Cardio
Character runs faster as pace increases

### Yoga
Character flows smoothly between poses

## Workout Complete!
Your character celebrates your achievement

**Strength Boost**

**Energy Surge**

**Health Increase**

**New Ability**

## Animation Examples

- Pushups → Arm muscles flex
- Squats → Legs glow with power
- Cardio → Character runs in place
- New PR → Victory pose
- Level up → Full transformation

## Motivational System

Animations provide visual feedback and encouragement to keep users engaged with their fitness journey.

# Body Part Focus

## Today's Focus Area

Leg
Quads
Calves

**Current Focus: Arms**
+10% XP for arm exercises

✓ Confirm Focus

## Targeted Training

Choose which body part to focus on for bonus XP and specialized workouts.

## Visual Feedback

- Selected area glows on character
- Special animations for focus area
- Visual muscle growth over time
- Progress bars for each body part

## Workout Suggestions

The app recommends exercises based on your selected focus area to help you achieve balanced fitness.

# Feature Demo: Workout Logging

## Squats
**Legs**

+5 Leg Strength
Energy recovery +2%

## Log Your Workout

**Body Part**

Legs ⌄

**Exercise**

Squats ⌄

**Reps**

12

**Weight (lbs)**

135

**Character Animation**

◉ Play  ● Skip

**Log Workout**

# Log Reps & Weight

## Comprehensive Workout RPG System

Our advanced algorithm converts your physical efforts into character progression with:

### Strength Training
Higher weights = more XP

### Endurance
More reps = stamina bonuses

### Cardio
Distance = movement speed

### Flexibility
Yoga = agility stats

## XP Calculation

```
XP = (Reps × Weight) × Exercise
Multiplier
```

Different exercises have different multipliers based on intensity.

## Progression Tracking

- Visual graphs of strength gains
- Milestone achievements
- Personal records tracking
- Workout history calendar

Log Workout

## Bench Press

Weight (lbs)

| - | 135 | + |

Repetitions

| - | 8 | + |

Sets

| - | 3 | + |

XP Earned: +324 XP

Log Workout

# Water Intake Tracker

## Hydration = Health

Track your water intake to boost your character's health and stamina stats.

## Features

- Daily water goal tracking
- Reminder notifications
- Hydration streak rewards
- Visual character effects when hydrated
- Health stat bonuses

## Health Benefits

Proper hydration improves workout recovery and overall health, reflected in your character's abilities.

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Hydration Tracker

### Daily Water Intake
Goal: 8 cups (64 oz)

Today's Progress:                    5/8 cups
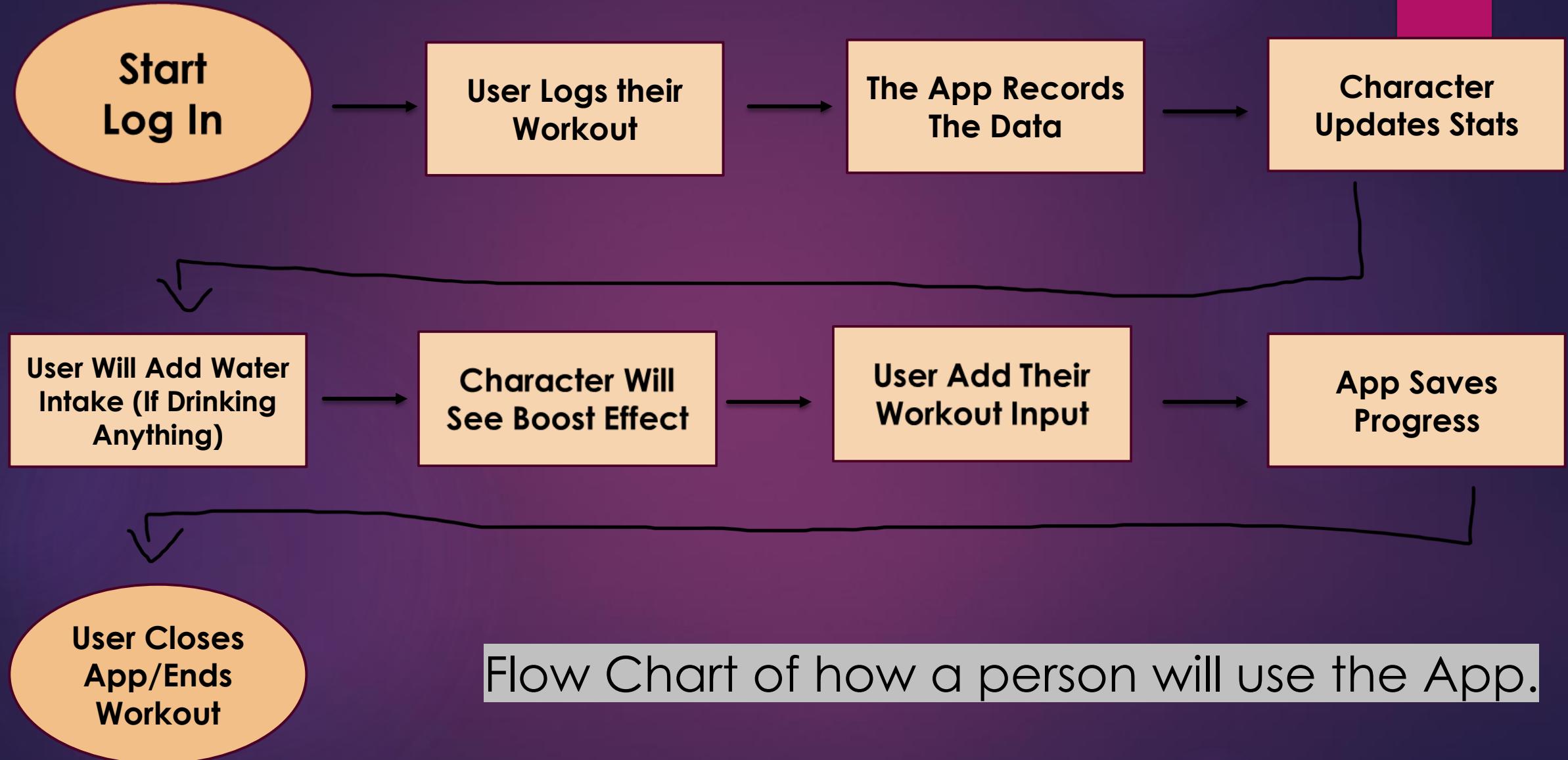
| 1 Cup | 1 Bottle | Custom |
|-------|----------|--------|

**Hydration Streak**
3 days in a row                    +5% Health

Add Water

Flow Chart of how a person will use the App.

Run API Forms

# Run API Documentation

Create and Play with the Run RPG API

Access Player Profiles, Workout Stats, Leaderboards, and Challenges.

📖 Get Started    <> API Reference

## API Documentation

**Getting Started**
Authentication
Profile
Input Reviews
Customer Service
Free Examples
Terms of Service

## Getting Started

The Run RPG API lets you get game data almost right away. To use it, you need to sign up for a developer account and make a key for your app.

### API Keys

API keys help control who can use the API and how much traffic it gets. When you make a key, you have to list the IP addresses that are allowed to use the API. It's best to keep your keys private and make a separate key for each app, so you don't run into problems.

```
This request makes a new API key.

name = The name of your app.

allowed_ips = the IP addresses that are allowed to use this key.
```

## Making Requests

To use the API, you need a special access token. You must send this token with every request. The token has rules, like how many times it can be used and which IP addresses are allowed. Because of this, you'll need a web server to get the data and run your app. If you go past the limits, the API will stop working until you're back under them.

```
This request gets a player's info.

Authorization = your access token.

Content Type = tells the system what format the data is in
```

## Response Format and Status Codes

All API responses come back in a standard format. They use normal status codes to show if something worked or if there was a problem. If there is an error, the response also includes extra details to explain what went wrong.

```
This is what a successful response looks like

player id = the players ID number

username = the players name

level = the players level in the game

xp = how much experience the player has

stamina = the players energy
```

```
This is what an error response looks like
(401 Unauthorized).

error = Unauthorized

message = why it failed (the access token
is missing or not valid)
```

# Available Endpoints

## Player Inforamtion

`GET`

Retrieve player information including stats, level, and progress.

## Player Logs

`GET`

Submit workout data to update player stats and progress.

## LeaderBoard

`GET`

Retrieve global or friend leaderboard rankings.

## Profile Customization

`GET`

Update player profile information and settings.

**Run RPG API**

Discord

Getting Started

Account Policy

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Privacy Policy

Manage Cookies

**Requirements**

Getting Started

API Reference

Examples
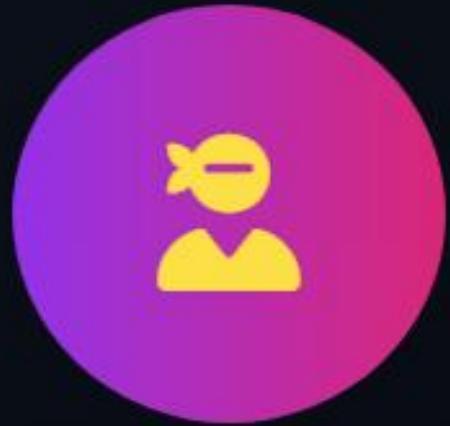
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# Ready for Your Fitness Quest?

## Workout Tracking
Turn exercises into character XP

## Hydration
Water intake boosts health stats

## Progression
Level up through consistency

**Start Your Adventure**

Transform your fitness routine into an epic RPG journey today!