TEAM RUN

Group Memebers-
1. Osbaldo Bravo (Team Leader)
2. Carlos Martinez
3. Anthony Jimenez
4. Harut Kulakchian
5. Daniel Herrera

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

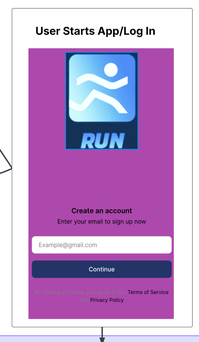
1. Character customization. (change outfit, colors, or accessories)
2. In app achievements and badges for workout milestones.
3. Social sharing of workout progress.
4. Music integration to play songs during workouts. (will not effect using another app like spotify or apple music)
5. Notifications or 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

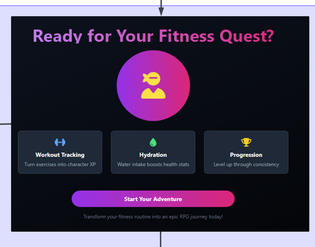
1. Augmented Reality (AR) workouts where users can see their RPG character move in real world environments.
2. AI personal trainer that gives real time feedback and custom workout plans.
3. AI based nutrition recommendations linked to user progress.
4. Multiplayer RPG mode where users can team up or 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

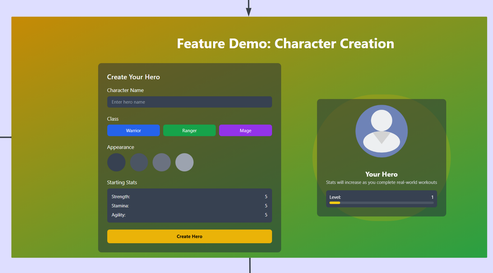
These steps will be skipped for returning users once the character is created



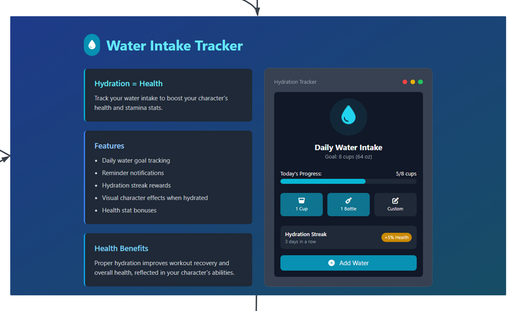
New users will be given a introduction to the app

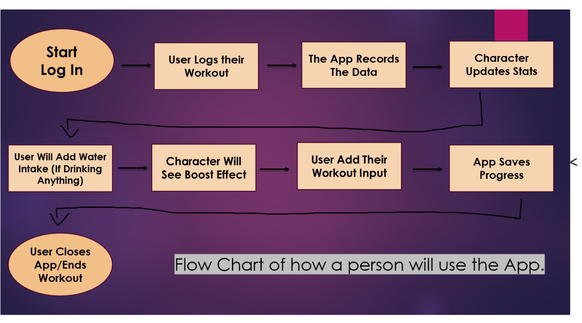


Users will be asked to create their first character

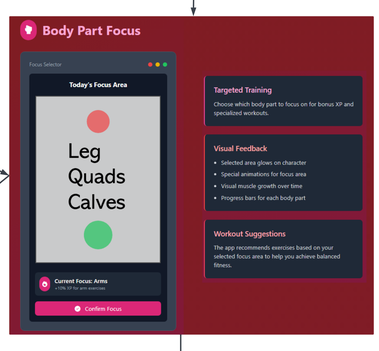


Users can track their water intake which will directly synchronize with their character

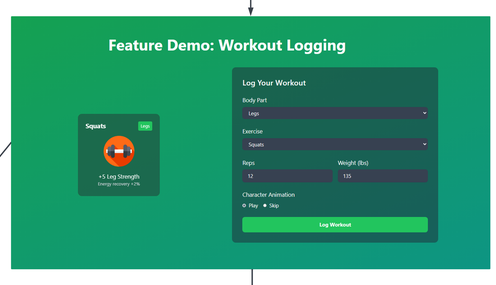


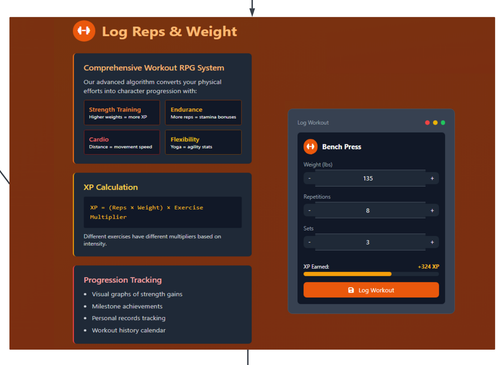


Users can select which body part to work out and will be given exercise suggestions and feedback

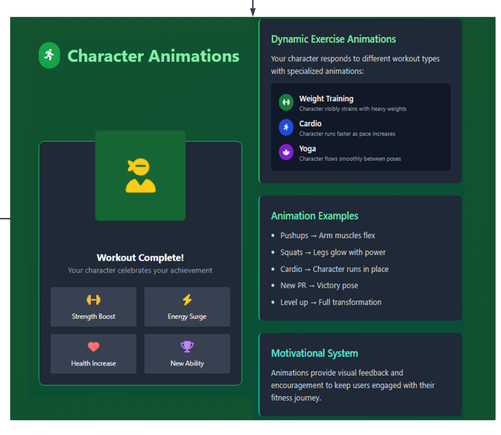


Users can log thier workouts then the app will reward the users characters with progression bonuses

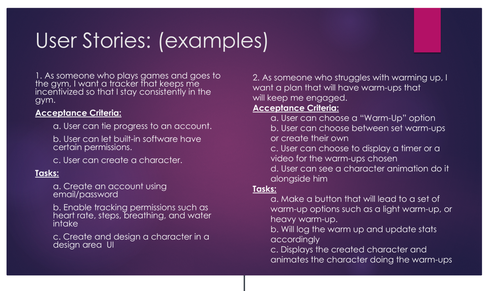


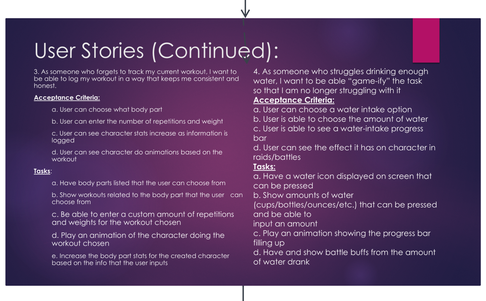


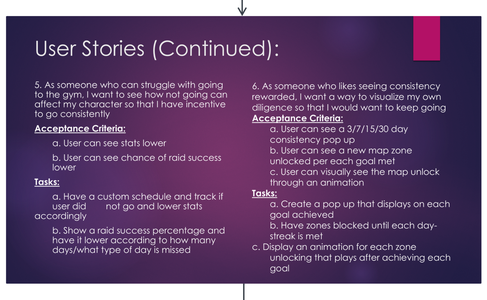
After a exercise is logged into the app the user will see their progression towards thier exercise goal and thier character will be shown geting stronger depending on their work out

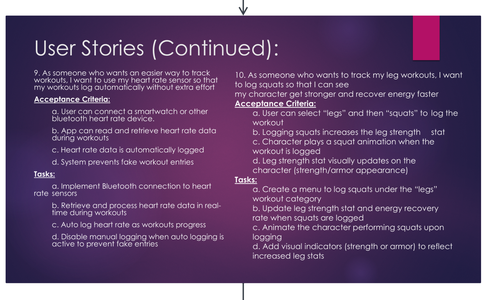


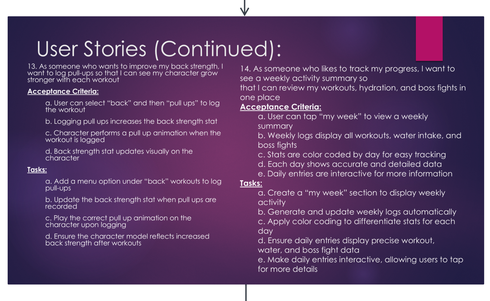
Example How the App will work from a user point of view.

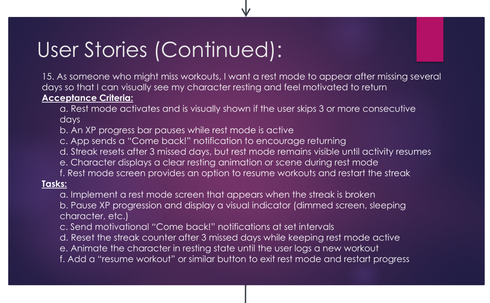


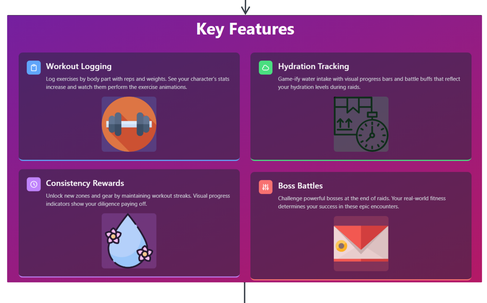


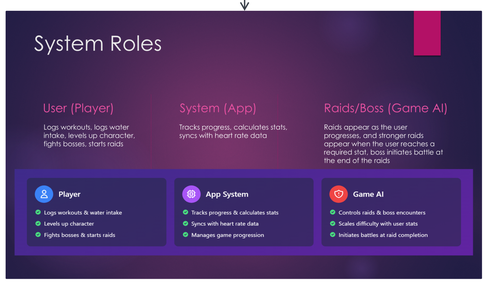












Architecture Design – Workout RPG Tracker

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.

Languages / Frameworks / Libraries / Services / APIs

- **Frontend: React or Web: React/Next.js**
- **Backend: Python**
- **Database: Postgres/etc.**
- **APIs/Services: HealthKit / Google Fit, Sahha.ai , Terra**

Package / Build Manager

any build tools (still working on it)

Database Tables (Models)

- **User** — account, streak, level
- **Workout** — body part, type, reps, weight, time
- **WaterLog** — amount ml, timestamp
- **Character** — per body part stats & XP
- **Raid/Boss** — required stats, rewards
- **Gear / UserGear** — unlocks & equipped
- **ReminderSetting** — water reminders
- (Shown in the slides we provided)

Views (Screens / Pages) — describe each briefly from slides <--

- **Dashboard ("My Week")** — weekly workouts/water/boss fights.
- **Log Workout** — choose body part, exercise, reps/weight, plays animation.
- **Water Tracker** — quick amounts + progress bar + buffs.
- **Warm-Up** — preset or custom with timer/video + avatar.
- **Raids/Boss** — zone unlocks, challenge boss, rewards.
- **Gear/Wardrobe** — unlock/equip gear.
- **Rest Mode** — appears after 3 missed days, resume button.
- **Settings** — permissions, HR device link.

Readability

Will be shown on our GitHub Page for more information.

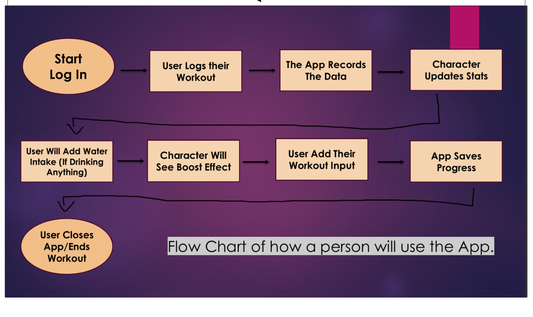
URLs

/login, /log/workout, /log/water, /warmup, /week, /raids, /gear, /rest, /settings
(API versions if we want: /api/workouts, /api/water, /api/summary/week, etc.)

Task Assignments (Team RUN)

- **Osbaldo (Lead):** gear & customization
- **Carlos:** workout logging + streaks
- **Anthony:** water + reminders
- **Harut:** raids/boss logic
- **Daniel:** frontend setup, DB schema, weekly summary
- (Each person has there own role but we will be asking for help all around. The more we help each other the easier it will be to understand the roles)

Design Considerations

- **Decoupling:** controllers , services, repositories.
- **Anti-cheat:** prefer server computed stats: disable manual when auto logging active.
- **Streak/Rest:** rest after 3 missed days, resume button.
- **Accessibility/UX:** quick add, clear feedback, animations tied to actions.

Images shown on the left <--