

ACrossFit

ACrossFit - PRD

1. Vision

ACrossFit's vision is to make training fun with AI-powered tools that empower athletes to improve, help coaches manage communities, and foster meaningful connections.

2. Problem & Opportunity Statement

Today's CrossFit athletes and coaches face several critical challenges when it comes to training management and engagement:

For Athletes:

- **Clunky workout logging:** Logging personal workouts is often tedious and unintuitive, leading to low user retention and engagement.
- **Lack of progress visibility:** There's no easy way to track improvements or visualize fitness gains over time.
- **Poor motivation loops:** Most platforms lack basic gamification features such as leaderboards, shout-outs, daily streaks, or personalized feedback — all of which drive community motivation.

For Coaches:

- **Inefficient workout programming tools:** Coaches still rely on manual tools like spreadsheets or WhatsApp to share daily workouts — these are error-prone, unscalable, and offer no automation.
- **No support for future programming:** Scheduling WODs for future dates or maintaining a visible programming calendar is either not supported or extremely cumbersome.
- **Limited athlete support:** There's no easy way to track athlete history, progress, or store personal notes for personalized coaching.

Opportunity

There is a clear need for a **streamlined, intelligent, and community-focused CrossFit platform** that:

- Makes logging a workout **as easy and intuitive as typing a message**.
- Provides **engaging, visual progress tracking and performance dashboards**.
- Delivers **AI-assisted workout parsing and future programming tools** for coaches.
- Enables **meaningful community features** like daily leaderboards, personal shout-outs, and habit-building features (e.g., streaks, badges).
- Centralizes everything into a single platform with **calendar navigation** for past and upcoming workouts.

3. Market Size & Competitive Analysis

<to-be-added>

4. Target User Personas

<to-be-added>

5. Pricing Model

- Individual Athlete registration is free.
- The revenue stream will only be through Gym owners creating a community & adding athletes to it.
 - Gym owners can have a subscription model based on the number of athletes they want to add.

Plan	Monthly	Yearly
<= 5 Athletes	Free	Free
<= 10 Athletes	X amount	X * 10 amount
<= 50 Athletes	4X amount	4X * 10 amount
<= 100 Athletes	8X amount	8X * 10 amount

Future scope of Revenue Streams:

- Add individual premium features for non-community athletes
- Include advertising opportunities for fitness brands

6. Milestones & Phases

Phase 1 (MVP)

- A working web-app with base components PLP, AUP, CUP, PPP, & CLP.
- Athlete registration & login. (USI, USU & URP)
- Admin registration & login. (ASI, ASU & ARP)
- Community Creation (CCP)
- Athlete Home Page & Workout Logging (AHP & ACP)
- Athlete Public Profile (AP)
- Managing Athlete's Account (UAP)

- Athlete's progress tracking & performance comparison through Community Leaderboard (APT & CLS)
- Managing Admin's Account (AAP)
- Coach Home Page & managing community workouts (CHP, ACW & CC)
- Managing Community (MCP & CDAP)

Phase 2 (Mobile Application)

- Creating a mobile app & extending all the Phase 1 features to mobile app

Phase 3 (Gamma Version)

- Community engagement (COS, CAS, CGS, CBS)
- AI workout recommendations to Athletes & to Coaches
- Coach notes on Athletes
- Visual Performance Graphs

Phase 4 (Final Release)

- Offline functionalities for Workout tracking + sync later.
- Implement group challenges and competitions.
- Skill Progression Planning (Gymnastics, Olympic lifts)
- Add achievement badges/gamification elements. (Habit Streaks, XP points, Badges)
- Wearable Integration (Garmin/Fitbit)
- AI based video analysis for Form & Posture correction.
- "Fistbumps" or "Kudos" from peer athletes.
- Personalized AI insights (e.g., "You've improved your Fran time by 15% over 3 months").
- Weekly AI training planner auto-generated.

Architecture & Requirements

Architecture Overview & Requirements

Blue Print

The Crossfit System will have two interfaces: User console & Admin console.

- There will be a vanilla user console & an user console with community features enabled.
- There will be a vanilla admin console & an admin console with community manager features enabled.

Actors

Admin Group (interacts with admin console only):

- Community Manager (M)
- Coach in the Community (C)

User Group (interacts with user console only):

- Athlete (A)
- Athlete in the Community (AC)

Facts

- M is a C but C is not an M.
- AC is an A but A is not an AC.
- C & M are mutually exclusive to A & AC.
- The registration will be separate for admin console & user console.
- Admin accounts & user accounts will be linked on email-id.
- M can manage only 1 community at a time.
- C & AC can be associated with only 1 community at a time.
- If M or C are registered on the user console they need not be AC in that community.

Functional Requirements

Level 1 Requirements

As a first-time visiting user,

- The PLP (primary landing page) has to be enticing enough for me to Sign Up.
The PLP should:
 - Clearly list out the functionalities.
 - Clearly highlight the USP & differentiating factor from competitors.
 - Display the count of signed-up users till now & read user feedbacks.
 - Display the screenshots of the functionalities & the product.
 - Have proper re-directs to other pages.
 - Properly highlight / publicize the use of AI / LLM in the product.
 - Highlight that Sign Up is FREE.
- I should feel the authenticity & the reliability of the product.
 - The interface should have a Contact-us page (with email, social handles & cell number of the creator)
 - The interface should have a Privacy policy page (it should list the data that we gather to enhance UX & that we store the passwords in encrypted form using Bcrypt algorithm)
 - The interface should have real reviews & feedback (should be covered as part of the landing page).
 - The interface should have a feedback / suggestion form.
- My experience for signing-up should be smooth & seamless. **[Transition from first time visiting user to Athlete (A)]**
 - The Sign Up option should be accessible from any page on the interface.
 - I should be able to Sign Up with a new email or with gmail. (password field should have a small 'i' button saying we store passwords in encrypted form)
 - If I'm a registered user:
 - The new email Sign Up should fail with an appropriate message.
 - Clicking gmail Sign Up should work as sign-in.
 - Email confirmation / OTP verification should be required for Sign Up.
 - In the Sign Up form I should have the option to add my phone number. (Mobile OTP verification is required)

As a first time visiting Gym Owner,

- The Community Landing Page (CLP) has to be enticing enough for me to create a community.
The CLP should:
 - Clearly list the community features with supporting screenshots..
 - List-out the gyms registered with the platform & real reviews.
 - Clearly explain the pricing options & different subscription packs. (Currently, all pricing tiers should be shown as discounted to free)
 - Should have a form to "Get a Quote" from the creator.

- Should have contact details of the creator or re-direction links to the Contact Us page.
- My experience for creating a new community has to be smooth & seamless. **[Transition from first time visiting Gym owner to Community Manager (M)]**
 - The platform should ensure timely communication from the product team if support is needed.
 - I should have a “Create Community” option from the CLP.
 - I understand that I will need to Sign Up / Register myself as an Admin from the Admin console (Admin Sign Up Page - ASU) to be eligible to create a community. This requirement will be communicated to me after clicking the “Create Community” option.
 - I should get a form to enter details of my Community:
 - Gym Name
 - Location
 - Social Handles (optional)
 - Community Manager Name (M name)
 - M Contact Details (email, contact number etc.)
 - M Bio (optional)
 - I should get an email confirmation after creating the community.

As an Athlete (A) or an Athlete in the community (AC),

- I should be able to sign-in to the user console, using either of the options Email, Gmail or Phone number.
- If I’m using Email or Phone number & I forgot my password, I should be able to reset the password either with OTP from email or phone number. Clicking on “Forget Password” should re-direct me to the User Reset Password page (URP).
- Signing-in from the User Sign-in page (USI) should re-direct me to my Athlete Home Page (AHP).
- If I’ve an admin account, I should be able to transition / re-direct to my C / M account without having to sign-in again.

As a Community Manager (M) or a Coach (C),

- I should be able to sign-in to the admin console, using either of the options Email, Gmail or Phone number.
- If I’ve an athlete account, I should be able to transition / re-direct to my A / AC account without having to sign-in again.

As a Community Manager, sign-in should re-direct me to the Manage Community Page (MCP).

As a Coach, sign-in should re-direct me to the Coach Home Page (CHP).

Level 2 Requirements

As an Athlete,

- I should be able to create / view / edit personal workouts for any days in the past or future, via Athlete Calendar Page (ACP).

- I should be able to log my scores against these personal workouts from the same page ACP.
- I want my Home Screen (Athlete Home Page - AHP) to always show the Workout Of The Day (if I already have added a workout for that day).
- I should be able to manually log my scores & track my progress (historical scores) for these 3 categories of workouts (APT):
 1. CrossFit Benchmark Workouts (Heroes, Girls etc.)
 2. Olympic Lifts (Deadlifts, Bench press, Clean & Jerks, Snatches etc.)
 3. CrossFit past competitions (Crossfit Opens, Mayhem etc.)
- While logging the scores of any of the above workouts categories I should get 2 options - Scaled or Rx'd, the Scaled version should give me the text box to enter the scale of my workout.
- To create & save workouts, I want to have a Smart Workout Parsing logic. [Workout Parsing Algorithm](#)
- Creating & logging custom workouts are two different functionalities, I should be able to create custom workouts without having to do them (log results for it).
- I should have a My Account Page, with the following functionalities enables:
 - Update my username (defaulting to email id after Sign Up)
 - Update password (should re-direct to URP)
 - Link my gmail
 - Update / Add occupation
 - Update my Body Profiles (Weight, Height etc.)
- I should be able to create personal goals for myself.
- I should have my personal Athlete Profile with the following:
 - My Picture
 - My Socials
 - My Occupation
 - My PRs across different workout categories
 - Years of Crossfitting experience
 - My Community (only if AC not applicable for an A)

As a Community Manager,

- I should see a list of all my athletes on the Community Home Page (CHP).
- I should be able to add / remove athletes from my community through CHP.
- I should be able to add / remove coaches to my community through CHP.
- I should be able to make edits / updates in the following sections - Community Announcements (CAS), Community Overview (COS), & Community Blogs (CBS).

As a Coach in the Community or a Community Manager,

- I should see a list of all my athletes on the Community Home Page (CHP).
- I should be able to create / view / edit Community Workouts for any of the days in the past or the future through Community Calendar (CC).
- I should be able to make updates in the CAS & CBS.
- I should be able to mark the attendance of my athletes through the Community Daily Attendance Page (CDAP).
- I should be able to save some personal notes against my athletes (personal injuries etc.) via CHP.

- I should be able to see individual member scores for the Workout of the Day through the Community Leaderboard Section (CLS).
- I should be able to create the Community Workout of the Day through Add Community Today's WOD section (ACW).

As an Athlete in the Community,

- I should be able to access all features of my community.

Level 3 Requirements

User Experience

- Extending the functionalities to Mobile App
- Offline functionalities for Workout tracking
- Integration with Fitness Wearables
- AI-based video analysis for form and posture correction.
- Weekly/monthly performance graphs (weights, reps, metcon time, consistency, etc.)
- **AI Q&A Coach / GPT Assistant**
 - Ask things like:
"What's a good scale for today's WOD if I can't do pull-ups?" or "What did I do last week for squats?"

Community Features

- Implement group challenges and competitions.
- Add achievement badges/gamification elements.
- Direct messages or threaded comment sections under workouts with coach feedback.
- WhatsApp/Telegram Integration

Tech Stack

<to-be-decided>

Community Features

Community Features

1. Community Overview Section

- Community Vision
- Community Description - Including Years In Business, Location, PAN branches etc.
- Classes Schedule
- Owner Bio
- Our Coaches Section
 - Coach Bio - Including Certification, YOE etc.
 - Coach Level
 - Social Handles

2. Community Announcements Section

- Community Class Schedule Changes (Timings / Holidays / Maintenance etc.)
- Current Theme of Workouts (usually lasts 2-3 months)
- New Program Additions
- Upcoming Planned Social Events
- Miscellaneous Announcements (Lost & Found etc.)

3. Community Leaderboard Section

- Daily WOD Leaderboard
- Benchmarks Workouts & Olympic Lifts Leaderboard
- Special Individual Shout-outs (New PRs, Gymnastic movements unlocked etc.)

4. Community Individual Goals Section

- Community Individual Goals
- Grouping based on similar goals

5. Community Blogs / Newsletters / Goodreads Section

- Posture, form videos & articles
- Outside workout personal achievements in career

Components

Components

Component Name	Component Acronym	Actor Interaction			Database Interaction	Console	
		Intended Target	Can View	Edit/Update Access			
Primary Landing Page	PLP	A & AC	all	-			
About Us Page	AUP	all	all	-			
Contact Us Page	CUP	all	all	-			
Privacy Policy Page	PPP	all	all	-			
Community Landing Page	CLP	M & C	all	-			
User Sign-in	USI	A & AC	all	all			
User Sign Up	USU	A & AC	all	all			
User Reset Password	URP	A & AC	A & AC	A & AC			
Admin Sign-in	ASI	M & C	all	all			
Admin Sign Up	ASU	M & C	all	all			

Admin Reset Password	ARP	M & C	M & C	M & C			
Create Community Page	CCP	M	M & C	M			
Athlete Home Page	AHP	A & AC	A & AC	-			
Manage Community Page	MCP	M	M	M			
Coach Home Page	CHP	C	M & C	-			
Athlete Performance Tracking	APT	A & AC	A & AC	A & AC			
Athlete Calendar Page	ACP	A & AC	A & AC	A & AC			
My User Account Page	UAP	A & AC	A & AC	A & AC			
My Admin Account Page	AAP	M & C	M & C	M & C			
Athlete Profile	AP	all	all	A & AC			
Community Announcements Section	CAS	AC	AC, M & C	M & C			
Community Leaderboard Section	CLS	AC	AC, M & C	-			
Community Goals Section	CGS	AC	AC, M & C	-			

Community Overview Section	COS	AC	AC, M & C	M			
Community Blogs Section	CBS	AC	AC, M & C	M & C			
Community Calendar	CC	AC	AC, M & C	M & C			
Community Daily Attendance Page	CDAP	AC, M & C	AC, M & C	M & C			
Add Community Today's WOD	ACW	AC	AC, M & C	M & C			

Parsing Algorithm

Parsing Algorithm

Overview

CrossFit includes a wide range of workouts from multiple fitness domains. It's a high-intensity training methodology that combines **weightlifting**, **gymnastics**, and **metabolic conditioning (cardio)**. A CrossFit workout can include any combination of these elements, often with varying rep schemes and time constraints.

Benchmark WODs (e.g., *Fran*) are standardized workouts designed to measure an athlete's performance over time.

Example – FRAN:

21-15-9 Reps For Time
Thrusters (95/65 lb)
Pull-Ups

CrossFit also uses the concept of the WOD (Workout of the Day), which may contain multiple entities (e.g., strength + conditioning).

Example - the following WOD has 2 workout entities: strength section & a conditioning section:

27-June-2025 | Friday

STRENGTH

Build to 1 RM Clean and Jerk in 15 mins.

Workout : Chicago Slice

For Time :

120 Double Unders
30 Kettlebell Swings
50 Back Squats (40/30)
30 Kettlebell Swings
120 Double Unders

Cap: 13 mins

Problem

Due to its complex nature, manually logging a crossfit workout is a challenging task. The current solutions in the market require users to manually select the workout & log their scores against it.

For example, if I have done FRAN workout today, I will have to go to a different page, select FRAN from the list of all workouts & log my scores against it, if I have also done an Olympic lift also today I will have to again have to go to a different page, select that lift & log my scores for it.

This process is:

- Time-consuming
- Tedious
- Prone to drop-offs due to friction

Solution

Creating / Logging a workout is a core feature for my product & in general for the fitness industry. I want it to be as seamless as possible & as quick as possible. This will ensure the users will not face any friction while logging their scores, creation of workouts will be smoother for the coaches & hence the user engagement will increase.

I believe the entire process of Athletes opening the app & logging their scores **should not take more than 30 secs** & similarly for the coaches the creation of a WOD **should not take more than 30 secs**.

Creating & Logging workouts are two different functionalities, as a User I should be able to create custom workouts without having to do log results for it.

Creation of WOD

Information required to create a Workout:

1. **Date (optional)** - The date for which the workout is created.
2. **Workout Name** - This will be the unique identifier of each workout.
3. **Workout Type** - One from the following list: [CrossFit Workout Types & Associated Scoring Patterns](#)
4. **Workout Description** - Properly formatted workout description
5. **Related Benchmark** - Is it a scaled/modified version of any benchmark workout? [Girl WOD](#), [Hero WOD](#), [Notables](#) or [Barbell 1RM](#)
6. **Total Effort in the Workout** - Effort is a cumulative sum of Total Reps + Total Distance (in m) + Total calcs
7. **Time Cap** - Maximum duration of the workout
8. **Rest between intervals (optional)** - This is only required for "Interval" Type workouts
9. **Barbell Lifts (optional)** - List of Barbell lifts in the workout.

The Parsing Algorithm

It is clear that manually creating a workout is a hassle for the users. Hence, the idea is to build an intelligent algorithm capable of extracting the above information from the raw workout text.

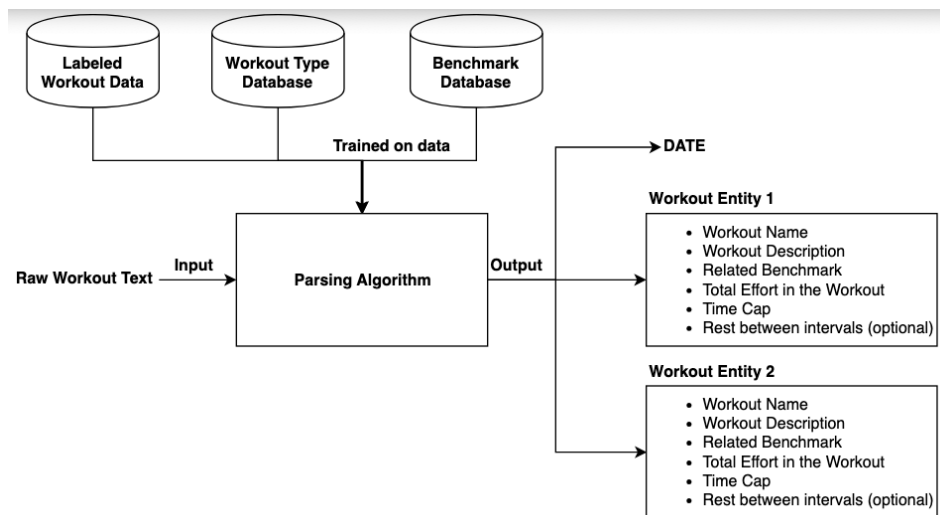
Phase 1:

- **Date extraction** - The date field is usually present in the starting few lines of the raw text, although the date could be formatted in any way, it'll be fairly simple to extract the date from the workout using regex.

- **Splitting the WOD** - Since the WOD can contain multiple workout entities, we'll need to split the entire WOD, into smaller workout entities. Assuming the different workout entities will always be in sequence, it'll also be fairly simple to categorize the WOD into smaller workouts.
- **Workout Name extraction** - Usually the first line of the workout entity will have the workout name, a complex regex expression should be capable enough of getting this information.
- **Workout Type** - To determine the workout type, keywords like "For Time, AMRAP, EMOM etc." need to be searched in the workout description.
- **Workout Description** - From the second line to the last line of the workout entity, everything will be part of the workout description.
- **Time Cap** - To determine the workout type, keywords like "Cap, Time Cap etc" need to be searched in the workout description.
- **Barbell Lifts** - To determine the barbell lifts in the workout, keywords like "Deadlift, Snatch, Snatches, Squat, Barbell Squats etc." need to be searched in the workout description.

Phase 2 (LLM):

- **Related Benchmark** - An LLM algorithm needs to be trained on the **Gym's WOD history** to be capable of determining the closest Benchmark workout against for the workout description.
- **Total Effort in the Workout** - We'll need an LLM algorithm to convert the raw workout description into machine understandable language & perform calculations on top of it.
- **Rest between intervals (optional)** - This can only be made possible with LLM.
- **Once we have a LLM model, all the Phase 1 attributes can also be derived using that model.**



As a fallback, all the above attributes can be edited by the user. We'll display a pre-filled sort of a form to the user, with all fields as editable.

- Users will get the option to choose Date from a calendar.
- Workout Name will be editable through a text box.
- Workout Type can be changed from a Dropdown.
- Workout Description will be editable through a text box.
- Time Cap & Rest between intervals will be editable.
- Related Benchmarks can be changed from a Dropdown.
- Total Effort will be editable.

- There will be a list of Barbell lifts which can be edited by the user via a dropdown for each lift.

Constraints of Saving the workout:

- If there's already a Workout with the given Workout Name (provided by the user), the current workout will be updated with the new details.
- The users will only be allowed to update workouts from their [personal custom workouts table](#).
- The coaches will only be allowed to update workout from the [community custom workouts table](#).

Result

The final process of creating a WOD for the user / coach should look like the following:

1. The user gets two options to create a workout:
 - a. Copy the workout from their personal notes & pastes in the Add WOD text field.
 - b. Create a new workout by editing a pre-existing workout - the user will get a dropdown to select a pre-existing workout. (If user selects this option, Step 2 will be skipped)
2. The user clicks on the Parse Workout option. (Parsing algo is triggered & returns it's output)
3. The user sees a workout creation form with pre-filled fields. (If required, the user makes edits to the auto-populated fields)
4. The user clicks on the Create Workout option.

Outcome

- If the user is an Athlete the workout is saved in the Athlete's [personal custom workouts table](#) & if the user is a Coach the workout is saved in the Community's [custom workouts table](#).
- If **Date is provided by the user**, the workout will be automatically appended against the Date's workout.

Potential Failure Points

Risk	Explanation	Mitigation
Ambiguous workout language	Unstructured text like "5x2 Deadlift 80% then AMRAP 10 mins" may confuse parser	Use fine-tuned LLM + fallback UI
Wrong workout type classification	Misidentifying Chipper as RFT or vice-versa	Show editable fields with AI-suggested defaults
Multiple benchmark matches	Parser might link to several possible workouts	Let user confirm via ranked suggestions

Noisy text from WhatsApp or screenshots	Formatting issues may fail parser	Offer “clean up” before parsing
Missing scoring logic	Some workouts (e.g. holds, skill work) may not have clear scores	Add “Free Text + Tag” fallback option

Progress Tracking

Progress Tracking System

Problem / Overview

Tracking long-term progress is one of the most critical elements in the fitness journey. The way we record, interpret, and visualize a user's performance over time is a key determinant of platform engagement and retention.

If progress tracking is confusing, missing, or lacks positive reinforcement, users are likely to drop off.

Solution

The Progress Tracking System is built in two layers:

1. Storage Layer - Handles the logging of workout results and scores.
2. Visualization Layer - Provides dashboards, charts, and insights to showcase user progress.

Storage Layer

How we log workout scores becomes important if we have multiple use-cases dependent on the data. Some of the use-cases are:

- Drawing analysis & generating insights on the data.
- Feeding the data to the AI models.

Scoring System

Total Effort = Total Reps + Total Distance (in m) + Total calcs

Final Score

- **For Time / RFT / Chipper:**
 - (Finished workout before Time Cap) Score = Total time taken by User (in secs) / Total effort by User
 - (Didn't finish before Time Cap) Score = Time Cap / Total effort by User
- **AMRAP / Endurance / Tabata / Unbroken / Ladder:**
 - Score = Total effort by User
- **Strength:**
 - Score = Maximum weight (in kgs)
- **EMOM / Interval:**
 - Round effort = Total effort in one round or Total effort in one interval
 - Score = Round effort * (Number of rounds completed + 1 / Fasted Time Round (in secs))

Working Logging Algorithm

The workout logging algorithm will be triggered once the user clicks on the Log Results option. The algorithm will be responsible for storing the scores for the user & if required updating past scores.

Input Parameters:

Parameter	Type	Acquired from
Date	Date	User input
Workout Name	String	User input
Workout Type	Enum	From Database
Time Cap	Depends on Type	From Database
Total time taken by User	Integer	User input
Total Effort exerted by User	Integer	User input
Score in Human readable text	String	User input
Barbell Lift Details Object	Json	User input

Barbell Lift Details Object:

```
{
  "Lift-1": {
    "Weight-1 (in Kgs)": max-unbroken-reps (integer),
    "Weight-2 (in Kgs)": max-unbroken-reps (integer)
  },
  "Lift-2": {
    "Weight-1 (in Kgs)": max-unbroken-reps (integer),
    "Weight-2 (in Kgs)": max-unbroken-reps (integer)
  }
}
```

Example:

```
{
  "Squats": {
    "10": 10,
    "20": 5,
```

```
"100": 3
},
"Deadlift": {
  "100": 10,
  "50": 20,
  "170": 1
}
}
```

Algorithm:

1. Validate Input:
 - a. The workout (Workout Name) must be present in the Workout Databases.
 - b. The workout type must be present in the Workout Database - [CrossFit Workout Types & Associated Scoring Patterns](#).
 - c. Validate the user inputs (total time, effort etc.)
2. Evaluate the final user score using the [Scoring System](#).
3. In the performance database of the user, add a new entry for the Date:
We'll store the following fields to track the progress of the User:
 - a. Date
 - b. Workout Name
 - c. Workout Type
 - d. Time Cap
 - e. Total Time taken by the User (for AMRAP type, it defaults to Time Cap)
 - f. Total Effort exerted by the User
 - g. Scores in human readable text form (5 rounds + 12 reps + 400 m + 20 Cals)
 - h. Final Scores
4. Update Barbell Lifts Progress Table:
 - a. The idea is for a lift if the user has done N unbroken reps with W kgs, the user has also done (N-1, N-2, N-3 ... 3, 2, 1) RM with W kgs. Now if the weights for (N-1, N-2, N-3 ... 3, 2, 1) RM are less than W, we'll need to update it to at least W.
 - b. For example, if the user has done 3 squats unbroken with 100 kgs. This means that for the user:
 - i. 3 RM must be \geq 100kgs. (if 3 RM is $<$ 100 kgs, new entry should be created for Date with 100kgs)
 - ii. 2 RM must be \geq 100kgs. (if 2 RM is $<$ 100 kgs, new entry should be created for Date with 100kgs)
 - iii. 1 RM must be \geq 100kgs. (if 1 RM is $<$ 100 kgs, new entry should be created for Date with 100kgs)
 - c. In the [Barbell Lifts - Progress table](#), for each column 1 RM, 2 RM, ... etc. We're storing a Json object with (Date - Weight) key pair.
 - d. Now, if the user has done N unbroken reps with W kgs, the algorithm will parse the Json object of N-1 & if the max weight is $<$ W kgs, it'll create a new key pair in that Json object (Date of the workout - W kgs), this will be repeated for all rep schemes N-1 to 1.

Result

The final process for the user will look like the following:

1. The user can log scores in two ways:

- a. From the Log Results page the user selects a workout from a dropdown to log their scores. (will be asked to enter the Date)
 - b. From the Home Page the user clicks on Log Results for the WOD. (there can be multiple workout entities in the WOD, the below steps 2 - 4 will be executed for each entity separately)
2. The user sees a small form to enter scores required for the workout.
Based on the [scoring system](#), the user will be asked for the relevant information required for storing the scores:
 - a. If the workout is **For Time**, ask if they finished the WOD before time cap:
 - i. If Yes, ask the total time they took to finish (in seconds).
 - ii. If No, ask total effort (in numerical).
 - b. If the workout is **AMRAP / Endurance / Tabata / Unbroken / Ladder**, ask total effort (in numerical).
 - c. If the workout is **Strength**, ask maximum weight (in numerical / in Kgs).
 - d. If the workout is **EMOM / Interval**, ask the number of rounds they finished (in numerical) & their fastest round (in seconds).
3. [Optional] Ask the user to enter results in a text field in human readable form (5 rounds + 12 reps + 400 m + 20 Cals).
4. [Optional] If there are Barbell Lifts in the workout, for each barbell lift the user will get an option to enter the weight & max unbroken reps for it.
5. The user clicks on the Log Results option.

Visualization Layer

Traits of a good Progress dashboard are:

- The dashboard should be as simplistic as possible to understand.
- As a user I should feel that I'm improving over-time. (this will entice the users to check their progress more frequently)
- Minimal texts & more visualizations.

Suggestions:

- Weekly & Monthly PR charts
- Movement-specific history (e.g. Fran time trend, Deadlift 1RM over time)
- "This month vs last month" gains
- Personal milestone badges ("Fastest Fran ever!")

Potential Failure Points

Risk	Description	Mitigation
Inconsistent input format	Users may enter WODs or scores in unstructured ways	Use robust LLM parsing + user preview before save
No benchmark associated	Users forget to tag workouts to a benchmark	Prompt users to link or create before saving
Overwriting PRs by mistake	Misdetected RM may override legit PRs	Allow manual override & display "Pending PR" first
Edge lifts (e.g., 5x2 squats)	Is it a 2RM? or just volume?	Ask user: "Was this a 2RM attempt?"

Databases

Databases

Workout Databases

1. CrossFit Workout Types & Associated Scoring Patterns [Global Table]

Workout Type	Description	Common Scoring Patterns	Score Format Examples
For Time	Complete a set task as fast as possible.	Time	12:34, 08:15
AMRAP	As Many Rounds/Reps As Possible in a time cap.	Rounds + Reps	5 + 12, 6 + 8
EMOM	Do work every minute on the minute.	Reps per round / Total reps	12 reps each min, Total: 84
RFT (Rounds for Time)	Complete N rounds as fast as possible.	Time	10:40
Chipper	Complete a long list of movements in order.	Time or Reps	18:22, or Completed 200 reps
Interval	Work/Rest structure with multiple rounds.	Fastest/Avg time or Total reps	Fastest: 1:20, Total: 120 reps
Strength / Max Effort	Focused on heavy lifts or max effort.	Weight	100kg, 225 lbs, 1RM
Gymnastics Skill Work	Movement quality or hold-focused.	Time Held / Max reps	45 sec hold, Max 20 HSPU
Endurance	Long duration aerobic efforts.	Time or Distance	5km in 23:10, 2000m row

Tabata	20s on / 10s off x 8	Lowest round reps / Total reps	Lowest: 7, Total: 64
Unbroken / Ladder	No rest sets or ascending reps.	Max reps / Final round	Unbroken: 38, Reached 21 reps

2. Girl WODs [Global Table]

WOD Name	Category	Workout Type	Scoring	Time Cap	Workout Description	Total Effort	Barbell Lifts
Amanda	Girl WOD	For Time	Time	60 min	9-7-5 Reps For Time Muscle-Ups Squat Snatches (135/95 lbs)	42	Snatch
Angie	Girl WOD	For Time (Chipper)	Time	60 min	For Time 100 Pull-Ups 100 Push-Ups 100 Sit-Ups 100 Air Squats	400	-
Annie	Girl WOD	For Time (Couplet)	Time	60 min	50-40-30-20-10 Double-Unders + Sit-Ups	300	-
Barbara	Girl WOD	Rounds for Time	Time	60 min	5 rounds for time: 20 Pull-Ups, 30 Push-Ups, 40 Sit-Ups,	700	-

					50 Squats, 3 min rest between rounds		
Barbara Ann	Girl WOD	For Time (Rounds)	Time	60 min	5 rounds for time: 10 Pull-Ups, 20 Push-Ups, 30 Sit-Ups	300	-
Candy	Girl WOD	For Time	Time	60 min	5 Rounds for Time 20 Pull-Ups 40 Push- Ups 60 Air Squats	600	-
Chelsea	Girl WOD	EMOM (30 min)	Rounds + Reps	30 min	EMOM×30: 5 Pull-Ups, 10 Push-Ups, 15 Air-Squats	900	-
Christine	Girl WOD	For Time (Triplet)	Time	60 min	3 Rounds for Time 500 meter Row 12 Deadlifts (Bodyweig ht) 21 Box Jumps (20 in)	1599	Deadlift

Cindy	Girl WOD	AMRAP (20 min)	Rounds + Reps	20 min	AMRAP×20 : 5 Pull-Ups, 10 Push-Ups, 15 Air-Squats	30	-
Diane	Girl WOD	For Time (Couplet)	Time	60 min	21-15-9 Reps For Time Deadlifts (225/155 lb) Handstand Push-Ups	90	Deadlift
Elizabeth	Girl WOD	For Time	Time	60 min	21-15-9 Reps For Time Cleans (135/95 lb) Ring Dips	90	Clean
Ellen	Girl WOD	For Time	Time	60 min	3 Rounds for Time 20 Burpees 21 Alternating Dumbbell Snatches (50/35 lb) 12 Dumbbell Thrusters (2x50/35 lb)	159	-
Eva	Girl WOD	For Time	Time	60 min	5 Rounds For Time 800 meter Run 30 Kettlebell Swings	4300	-

					(2/1.5 pood) 30 Pull-Ups		
Fran	Girl WOD	For Time	Time	60 min	21-15-9 Reps For Time Thrusters (95/65 lb) Pull-Ups	90	Barbell Thruster
Friendly Fran	Girl WOD	For Time	Time	60 min	3 Rounds for Time 21 Thrusters (115/85 lb) 21 Chest- to-Bar Pull- Ups	126	Barbell Thruster
Grace	Girl WOD	For Time	Time	60 min	For time: 30 Clean & Jerks (135 lb / 95 lb)	30	Clean & Jerk
Grettel	Girl WOD	For Time	Time	60 min	10 Rounds for Time 3 Clean- and-Jerks (135/95 lb) 3 Bar-Over Burpees	60	Clean & Jerk
Gwen	Girl WOD	Unbroken Sets	Load	60 min	15-12-9 Reps for Load Clean-and- Jerks (unbroken) Rest as needed between sets	36	Clean & Jerk

Helen	Girl WOD	For Time	Time	60 min	3 Rounds For Time 400 meter Run 21 Kettlebell Swings (54 lb / 36 lb) 12 Pull-Ups	1299	-
Ingrid	Girl WOD	For Time	Time	60 min	10 Rounds for Time 3 Snatches (135/95 lb) 3 Bar Over Burpees	60	Snatch
Isabel	Girl WOD	For Time	Time	60 min	For Time 30 Snatches (135/95 lb)	30	Snatch
Jackie	Girl WOD	For Time	Time	60 min	For Time 1,000 meter Row 50 Thrusters (45/35 lb bar) 30 Pull-Ups	1080	Barbell Thruster
Karen	Girl WOD	For Time	Time	60 min	For Time 150 Wall Ball Shots (20/14 lb, 10/9 ft)	150	-
Kelly	Girl WOD	For Time	Time	60 min	5 Rounds For Time 400 meter Run 30 Box Jumps (24/20 in)	2300	-

					30 Wall Ball Shots (20/14 lb)		
Linda	Girl WOD	For Time	Time	60 min	10-9-8-7-6-5-4-3-2-1 Reps, For Time Deadlift (1½ bodyweight) Bench Press (bodyweight) Clean (¾ bodyweight)	165	Deadlift, Bench Press, Clean
Light Linda	Girl WOD	For Time	Time	60 min	For Time 24-21-18-15-12-9-6-3 reps of: Deadlifts (Bodyweight) Bench Presses (¾ Bodyweight) Squat Cleans (1/2 Bodyweight)	324	Deadlift, Bench Press, Clean
Nicole	Girl WOD	AMRAP	Rounds + Reps	20 min	AMRAP in 20 minutes 400 meter Run Max Pull-Ups	400	-

3. Hero WODs [Global Table]

WOD Name	Category	Workout Type	Scoring	Time Cap	Workout Description	Total Effort	Barbell Lifts
Murph	Hero WOD	For Time	Time	120 min	For time (with vest): 1 mile Run, 100 Pull-Ups, 200 Push-Ups, 300 Squats, 1 mile Run	3800	-
Mini Murph	Hero WOD	For Time	Time	120 min	For Time: 400 meter Run, Then, 5 Rounds of: 10 Pull-Ups, 20 Push-Ups. 30 Air Squats Then, complete: 400 meter Run	1100	-
Randy	Hero WOD	For Time	Time	60 min	For Time 75 Power Snatches (75/55 lb)	75	Power Snatch

Tillman	Hero WOD	For Time	Time	60 min	7 Rounds For Time 7 Deadlifts (315/205 lb) 200 meter Sprint 15 Pull-Ups 45 seconds Rest	1554	Deadlift
Tumilson	Hero WOD	For Time	Time	60 min	8 Rounds For Time 200 meter Run 11 Dumbbell Burpee Deadlifts (2x60/40 lb)	1688	-

Tommy	Hero WOD	For Time	Time	120 min	13 Rounds for Time 100 meter Sandbag Carry (150/100 lb, 50 meter down & 50 meter back) 7 Strict Pull-ups 16 Sandbag Over the Shoulder Tosses (150/100 lb) 15 Sandbag Squats (150/100 lb)	1794	-
Ricky	Hero WOD	AMRAP	Reps	20 min	AMRAP in 20 minutes 10 Pull-Ups 5 Dumbbell Deadlifts (75/55 lb) 8 Push- Presses (135/95 lb)	23	Push Press

White	Hero WOD	For Time	Time	60 min	5 Rounds For Time 3 Rope Climbs (15 ft) 10 Toes-to- Bars 21 Overhead Walking Lunges (45/35 lb plate) 400 meter Run	2170	-
Wittman	Hero WOD	For Time	Time	60 min	7 Rounds For Time 15 Kettlebell Swings (54 / 36 lb) 15 Power Cleans (95/65 lb) 15 Box Jumps (24/20 in)	315	Power Clean

The Seven	Hero WOD	For Time	Time	60 min	7 Rounds For Time 7 Handstand Push-Ups 7 Thrusters (135/95 lb) 7 Knees-to- Elbows 7 Deadlifts (245/165 lb) 7 Burpees 7 Kettlebell Swings (2/1.5 pood) 7 Pull-Ups	343	Barbell Thruster, Deadlift
Pheezy	Hero WOD	For Time	Time	60 min	3 Rounds For Time 5 Front Squats (165/105 lb) 18 Pull-Ups 5 Deadlifts (225/155 lb) 18 Toes-to- Bars 5 Push Jerks (165/105 lb) 18 Hand- Release Push-Ups	207	Front Squat, Deadlift, Push Jerk

Tyler	Hero WOD	For Time	Time	60 min	5 Rounds For Time 7 Muscle-Ups 21 Sumo-Deadlift High-Pulls (95/65 lb)	140	Sumo Deadlift High Pull
Ralph	Hero WOD	For Time	Time	60 min	4 Rounds For Time 8 Deadlifts (250/175 lb) 16 Burpees 3 Rope Climbs (15 ft) 600 meter Run	2508	Deadlift
Paz	Hero WOD	AMRAP	Reps	60 min	Cash-In: 1,000 meter Run Directly into AMRAP in 22 minutes of: 23 Air Squats, 7 Burpees, 14 Push-Ups Cash-Out: 1,000 meter Run	2044	-

Sean	Hero WOD	For Time	Time	60 min	10 Rounds For Time 11 Chest- to-Bar Pull- Ups 22 Front Squats (75/55 lb)	330	Front Squat
Zembiec	Hero WOD	For Time	Time	60 min	5 Rounds for Time 11 Back Squats (185/135 lb) 7 Burpee Pull-Ups (Strict) 400 meter Run	2090	Back Squat

Zeus	Hero WOD	For Time	Time	60 min	3 Rounds For Time 30 Wall Ball Shots (20/14 lb) 30 Sumo Deadlift High-Pull (75/55 lb) 30 Box Jump (20 in) 30 Push Presses (75/55 lb) 30 calorie Row 30 Push- Ups 10 Back Squats (Bodyweigh t)	570	Sumo Deadlift High Pull, Push Press, Back Squat
DT	Hero WOD	For Time	Time	60 min	5 Rounds For Time 12 Deadlifts (155/105 lb) 9 Hang Power Cleans (155/105 lb) 6 Push Jerks (155/105 lb)	135	Deadlift, Hang Power Clean, Push Jerk

Hansen	Hero WOD	For Time	Time	60 min	5 Rounds For Time 30 Kettlebell Swings (2/1.5 pood) 30 Burpees 30 GHD Sit- Ups	450	-
Holleyman	Hero WOD	For Time	Time	60 min	30 Rounds For Time 5 Wall Ball Shots (20/14 lb) 3 Handstand Push-Ups 1 Power Clean (225/155 lb)	270	Power Clean
RJ	Hero WOD	For Time	Time	60 min	5 Rounds For Time 800 meter Run 5 Rope Climbs (15 ft) 50 Push- Ups	4275	-

Griff	Hero WOD	For Time	Time	60 min	For Time 800 meter Run 400 meter Run (backwards) 800 meter Run 400 meter Run (backwards)	2400	-
Glen	Hero WOD	For Time	Time	60 min	For Time 30 Clean-and-Jerks (135/95 lb) 1 mile Run 10 Rope Climbs (15 ft) 1 mile Run 100 Burpees	3340	Clean & Jerk

4. Notables / Skills / Tests [Global Table]

WOD Name	Category	Workout Type	Scoring	Time Cap	Workout Description	Total Effort	Barbell Lifts
30 Muscle-Ups	Notable	For Time	Time	60 min	30 Muscle-Ups for time	30	-

50 Wall Balls	Notable	For Time	Time	60 min	50 Wall-Ball shots (20 lb / 9 kg to 10 ft) for time	50	-
Bar Muscle-Ups: Max Reps	Notable	Max Reps	Reps	60 min	Max reps Muscle-Ups in one set	-	-
Box Jump: Max Height	Notable	Max Height	Height	60 min	Box-Jump max height	-	-
Broad Jump: Max Distance	Notable	Max Distance	Distance	60 min	Standing broad jump max distance	-	-
Double Unders: 2-Minute Test	Notable	Max Reps (Timed)	Reps	2 min	Max double unders in 2 minutes	-	-
Double Unders: Max Reps	Notable	Max Reps	Reps	60 min	Max Double Unders unbroken	-	-
Handstand Hold: Max Time	Notable	Static Hold	Time	60 min	Max Handstand hold (against wall)	-	-
HSPUs: 2-min max reps	Notable	Max Reps (Timed)	Reps	2 min	Max HSPUs in 2 min	-	-
HSPUs: Max Reps	Notable	Max Reps	Reps	60 min	Max Handstand Push-Ups (strict)	-	-

HSPUs (Free-Standing): Max Reps	Notable	Max Reps	Reps	60 min	Max Free-Standing HSPUs	-	-
HSPUs (Strict): Max Reps	Notable	Max Reps	Reps	60 min	Strict HSPUs max reps	-	-
Handstand Walk: Max Distance	Notable	Max Distance	Distance	60 min	Max handstand walk distance	-	-
L-Sit Hold: Max Time	Notable	Static Hold	Time	60 min	L-Sit max hold time	-	-
Muscle-Ups: Max Reps	Notable	Max Reps	Reps	60 min	Max rep muscle-ups (strict)	-	-

5. Barbell Lifts – Table [Global Table]

Lift Name	Category	Lift Type
Back Pause Squat	Squat	Strength
Back Squat	Squat	Strength
Box Squat	Squat	Strength
Front Box Squat	Squat	Strength
Front Pause Squat	Squat	Strength
Front Squat	Squat	Strength

High Bar Back Squat	Squat	Strength
Low Bar Back Squat	Squat	Strength
Overhead Squat	Squat	Strength / Mobility
Split Squat	Squat	Strength / Balance
Zercher Squats	Squat	Strength / Core
Clean	Clean	Olympic Lift
Clean Extension	Clean	Olympic Accessory
Clean Pull	Clean	Olympic Accessory
Hang Clean	Clean	Olympic Variation
Hang Power Clean	Clean	Olympic Variation
Hang Squat Clean	Clean	Olympic Variation
Muscle Clean	Clean	Technique Focused
Power Clean	Clean	Olympic Variation
Squat Pause Clean	Clean	Technique / Strength
Bench Press	Press	Strength
Floor Press	Press	Strength / Assistance
Push Press	Press	Strength / Overhead

Seated Press	Press	Shoulder Isolation
Shoulder Press	Press	Strength / Overhead
Snatch Grip Push Press	Press	Overhead / Mobility
Sots Press	Press	Mobility / Stability
Jerk Balance	Jerk	Technique
Jerk Dip	Jerk	Technique / Prep
Push Jerk	Jerk	Olympic Lift
Split Jerk	Jerk	Olympic Lift
Squat Jerk	Jerk	Advanced Olympic
Hang Power Snatch	Snatch	Olympic Variation
Hang Squat Snatch	Snatch	Olympic Variation
Muscle Snatch	Snatch	Technique Focused
Power Snatch	Snatch	Olympic Variation
Snatch	Snatch	Olympic Lift
Snatch Balance	Snatch	Technique / Overhead
Snatch Extension	Snatch	Olympic Accessory
Snatch Pull	Snatch	Olympic Accessory

Squat Pause Snatch	Snatch	Technique / Strength
Deadlift	Deadlift	Strength
Romanian Deadlift	Deadlift	Hamstring / Posterior
Snatch Grip Deadlift	Deadlift	Olympic Accessory
Stiff-Legged Deadlift	Deadlift	Hamstring / Strength
Sumo Deadlift	Deadlift	Strength Variant
Sumo Deadlift High Pull	Deadlift	Strength + Pull
Clean & Jerk	Olympic Lift	Olympic Composite
Power Clean & Jerk	Olympic Lift	Olympic Variation
Back Rack Lunges	Other	Unilateral Strength
Bent Over Row	Other	Pull / Assistance
Front Rack Lunges	Other	Unilateral Strength
Good Morning	Other	Posterior Chain
Barbell Thrusters	Other	Legs

6. Custom Community Workouts [Community Level] -> Daily Community WODs should be added here

WOD Name	Category	Workout Type	Scoring	Time Cap	Workout Description	Related Benchmark
Fran (Scaled)	Girl WOD	For Time (Couplet)	Time	60 min	21–15–9 reps for time: Thrusters (66 lb / 30 kg), Pull-Ups	Fran

7. Custom User Workouts [User Level] -> User WODs should be added here

WOD Name	Category	Workout Type	Scoring	Time Cap	Workout Description	Related Benchmark
MyFran (Akshat)	Girl WOD	For Time (Couplet)	Time	60 min	9–6–3 reps for time: Thrusters (200 lb / 90 kg), Pull-Ups	Fran

Progress Databases

1. Workout Track & Progress [User Table]

<to be added>

2. Barbell Lifts Progress – Rep Max [User Table]

Lift Name	1 RM	2 RM	3 RM	4 RM	5 RM
Back Pause Squat	{Date1: Weight1, Date2: Weight2}				
Back Squat					
Box Squat					
Front Box Squat					
Front Pause Squat					
Front Squat					
High Bar Back Squat					
Low Bar Back Squat					
Overhead Squat					
Split Squat					
Zercher Squats					
Clean					
Clean Extension					
Clean Pull					
Hang Clean					

Hang Power Clean					
Hang Squat Clean					
Muscle Clean					
Power Clean					
Squat Clean					
Squat Pause Clean					
Bench Press					
Floor Press					
Push Press					
Seated Press					
Shoulder Press					
Snatch Grip Push Press					
Sots Press					
Jerk Balance					
Jerk Dip					
Push Jerk					
Split Jerk					

Squat Jerk					
Hang Power Snatch					
Hang Squat Snatch					
Muscle Snatch					
Power Snatch					
Snatch					
Snatch Balance					
Snatch Extension					
Snatch Pull					
Squat Pause Snatch					
Squat Snatch					
Deadlift					
Romanian Deadlift					
Snatch Grip Deadlift					
Stiff-Legged Deadlift					
Sumo Deadlift					
Sumo Deadlift High Pull					

Clean & Jerk					
Power Clean & Jerk					
Back Rack Lunges					
Bent Over Row					
Front Rack Lunges					
Good Morning					
Barbell Thrusters					

Marketing

Marketing Strategies

- Instagram:
 - Instagram profile
 - n8n agent to publish posts & reels
- Facebook:
 - Facebook profile
- LinkedIn:
 - LinkedIn page
 - n8n agent to publish posts & reels
- Reddit:
 - Marketing in fitness pages
- Automated agent to send personalized emails
- Slack channels
- Telegram channel & bot
- Affiliate marketing with gyms & crossfit boxes

Setting-it up for Failure

Setting-up for Failure

Why am I sure my product will fail?

- Failed Marketing
 - I'll be doing free marketing, which means there's less reach to the target audience.
- Current revenue stream is **only via Gym owners** creating the community, this poses the following problems:
 - Slower client acquisition (there are very less number of CrossFit gyms in Hyd)
 - The client onboarding is a hassle - the gym owner will have to ask all gym members to Sign Up on the platform, only after that he'll be able to add athletes to his community.
- As an athlete, if I'm not associated with a Gym / Community or if my community is not onboarded to the platform why would I register to this App? Why shouldn't I use the other 100 apps available to track my workouts?
- Sub-par UI & UX
 - The UI & UX is not appealing to the users.
 - Users encountering bugs on the platform.
- Clients Attrition
 - The client was on-boarded but I failed to deliver whatever I had promised. They realize that it's not worth spending time each day logging their workouts & they eventually leave.

Setting-it up for Success

Setting-it up for Success

Why am I sure my product will sky-rocket?

- Once a client (athlete) is on-boarded & starts using the platform to track their workouts they tend to get hooked to it & are less likely to switch to other platforms. This is due to the friction of starting to add the workouts/progress all over again.
- The above is also the case **with the Gym owners**, they'll have all the schedules & workouts listed, along with individual athletes performances, they wouldn't want to lose all of that.
- As a Gym owner, if all of my athletes are onboarded to this platform, I wouldn't want them to quit & switch to other platforms.
- CrossFit is yet not that prevalent in India & it's picking-up slowly. There are very few tools / apps available with the functionalities I'm promising.
- The use of AI & LLM is not yet adopted & that's why I feel this is a Green field of opportunities. **Daily workouts & programs data** from a gym is going to be a key factor in building a customized solution for a gym.
- I want to market my product as "Personalized for You", since I will not be having a lot of clients initially I can have different customizations/personalizations for individual gym owners.
 - The ML models can be trained on their gym specific workout history.
 - The workout parser can be customized for their gym specific workouts.