SMART INDIA HACKATHON 2025



Fitness & Sports

- Problem Statement ID –SIH25129
- Problem Statement Title-Student Innovation
- Theme-Fitness & Sports
- PS Category- Software
- Team ID-TXROSIH25090
- Team Name (Registered on portal)-Code Force





MoveMate:Personalized Fitness & Sports Assistant



Proposed solution:

• We propose a fitness & sports platform to provide personalized workout/ sports plans, integrates with wearables for real-time tracking, and offers gamified challenges with rewards and badges. The platform will connect users with coaches and communities, Encouraging healthy competition and fitness engagement.

Addressing the problem:

• We address the problem by combining technology, gamification ,and community-driven Engagement to make fitness and sports more accessible, engaging, and sustainable.

Innovation and Uniqueness of the problem:

Unike ,exixting solutions our platform provides

- -providing rewards/badges for completing the daily tasks.
- Both the fitness & sports oriented benefits will be available.
- -The Fitness specialization based on age groups will be available.

App Name	Personalized Workouts	Nutrition Tracking	Community Features	Meditation & Mindfulness
Nike Training Club	✓	×	✓	×
Peloton App	×	×	✓	×
MyFitnessPal	×	~	✓	×
Centr	~	×	~	×
Strava	×	✓	×	×
Fitbod	~	×	✓	×
Sweat	✓	×	~	×
Apple Fitness+	×	✓	~	~



TECHNICAL APPROACH



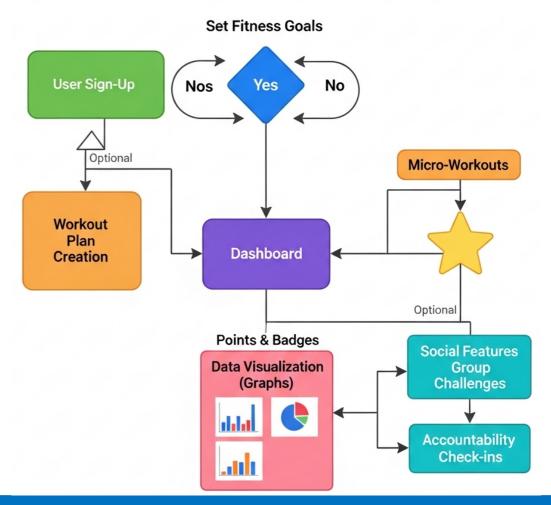
Your Fitness App Journey

Technologies Used:

- Frontend: React.js + Tailwind CSS + Chart.js
- Backend: Node.js + Express.js
- Database:MySQL
- Authentication: JWT + OAuth
- Hosting: Vercel + Heroku
- Notifications: Web Push API + NodeMailer

TecMethodology & Process

- User signs up → Sets fitness goals.
- Scheduler creates personalized workout plan.
- User performs micro-workouts tracked via dashboard.
- Points & badges awarded for each completed task.
- Data visualized in graphs (progress over time).
- Social features (group challenges, accountability check-ins)





FEASIBILITY AND VIABILITY



➤ Analysis of feasibility:

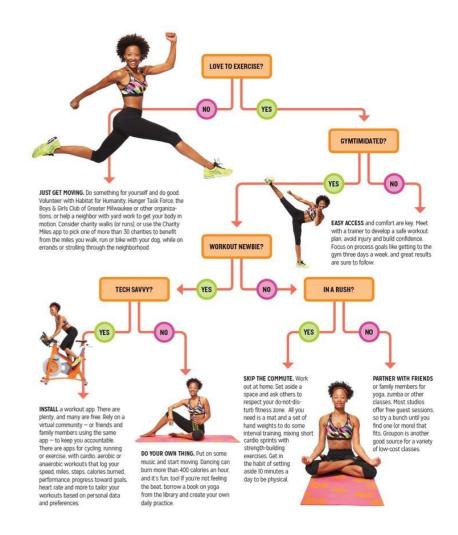
- It is technically possible, economically viable oprationally Manageable, and in strong market demand.
- The main focus should be on unique features, AI based
- Personalized fitness and sustainability.

➤Potential challanges & risks:

- Technical Challenges ,Data & privacy risks,
- Sustainability Risks, Market User Risks,
- Operatinal Challenges , Technical Challenges.

➤Stratagies of overcoming:

- Competition from established Apps.
- Technical Challenges (Scalability, Integration).
- Lack of Awsarness & user acquisition.
- Data privacy& security.





IMPACT AND BENEFITS



Progress tracking:

- •weakly BMI, muscle Mass tracking with graphs
- Goal settingwith visual milestones.

Nutirition fitness races with friends:

- personalized diet
- •Barcode scanner for quick calories & nurition logging.
- Water intake trakes with remainders.

Accessibility &inclusive:

• Fitness solutions for people of all ages, gender & differently abled individuals.

Community engagement:

• Social features, like team formation, fitness groups and peer engagement.

Activity perfomance tracking:

• Monitors steps, heart beat, calories burned.







RESEARCH AND REFERENCES



REFERENCES:

Thomus ,W.R.(2023). Worldwide "Survey Of Fitness Trends. A CSM'S Health & Fitness journel.

Kraemer, W.J., & Ratamess, N.A. (2020). Fundamentals of Resistance Training. Human Kinetics.

Technology Reference links:

https://developers.google.com/fit

https://developer.apple.com/documentation/healthkit

RESEARCH:

- -Rising Demand for fitness fitness
- -sports & fitness trends
- -Technology integration in fitness.