



Basic Details of the Team and Problem Statement

Student Innovation: AICTE, MIC – Student Innovation

PS Code: 1494

Problem Statement Title: Student Innovation

Team Name: The Black Pearl

Team Leader Name : Kiran Mehta

Institute Code (AISHE) : C-423

Institute Name: Government Engineering College, Patan

Theme Name: Fitness & Sports

Idea/Approach Details

We are looking for a solution by creating an **android / IOS** application that will serve as a platform for users to maintain as well as boost their **fitness**. The Prototype will function as follows:

- Develop a virtual fitness guide that analyses user information, preferences, and objectives and offers **real-time** workout suggestions and adjustments.
- Incorporate a feature that lets users manually enter their meals and snacks, and the app will analyze the nutritional information and offer **personalized** advice on how to eat nutritiously based on their fitness goals.
- Create a **gamification** system that encourages competition and collaboration among users through fitness challenges, rewards, and leaderboards, making fitness more enjoyable.
- Establishing a **community forum** will help to create a welcoming environment for all fitness enthusiasts by allowing experienced users to share their knowledge, experience, and advice with newbies.
- Sync the application with popular fitness wearables like smartwatches and fitness bands to seamlessly track and consolidate all fitness data in one place.
- Offer a stream of motivational content, including success stories, inspirational quotes, and progress updates from fellow users to inspire and encourage users on their fitness journey.



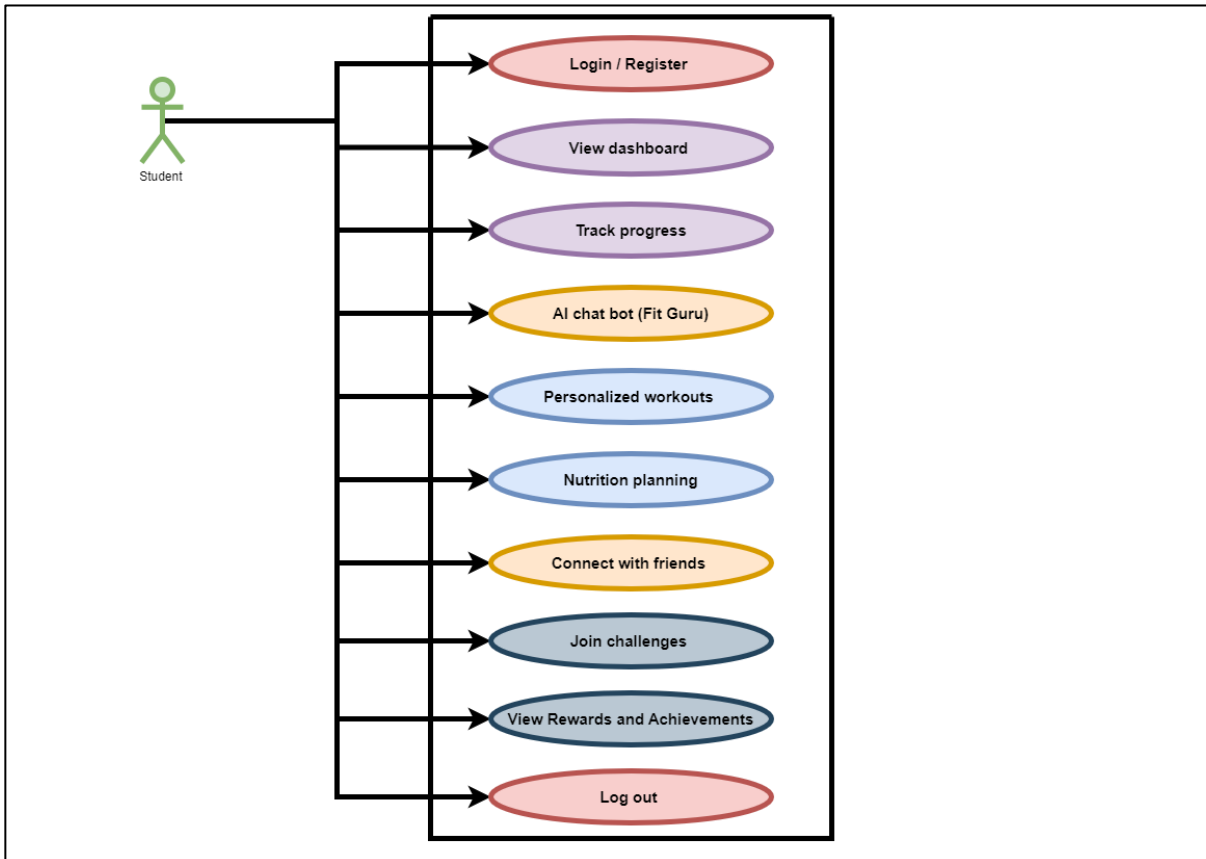
[Click here for the UI design](#)

Technology stack



Idea/Approach Details

Use Cases



Dependencies / Show stopper

- Ensuring that the application complies with **data privacy** regulations and securely manages user **data**, including health and fitness information, is crucial to building user trust and avoiding legal issues .
- The effectiveness of the app depends on having precise **health metrics**, like heart rate and step counts. The accuracy of progress tracking and recommendations may be compromised by reliance on unreliable sensors or devices .
- The application needs a dependable source of dietary and fitness knowledge in order to provide personalized workout plans and nutritional advice. To give trustworthy advice, we must work with nutritionists or fitness experts .
- **Wearable fitness technology**, such as fitness trackers and smartwatches, is widely used. For convenience and accuracy, it is essential to seamlessly integrate the app with a variety of these devices for data collection .
- The application must be able to scale its server infrastructure as the user base expands to accommodate more data storage, processing, and user interactions. Poor scalability may cause sluggish performance or downtime .
- The success of the app depends on maintaining user engagement. It's crucial to put into effect strategies, like gamification, social features, and frequent content updates, to maintain user motivation and stop them from the application.

Team Member Details

Team Leader Name: Kiran Mehta

Branch : Btech

Stream : CSE

Year : V

Team Member 1 Name: Shaikh Sakir Naeem

Branch : Btech

Stream : CSE

Year : V

Team Member 2 Name: Vikhnesh Vijay

Branch : Btech

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Year : V

Team Member 3 Name: Patel Monish Dharmendrakumar

Branch : Btech

Stream : CSE

Year : V

Team Member 4 Name: Urja Koriya

Branch : Btech

Stream : CSE

Year : V

Team Member 5 Name: Sorathiya Dhruv Dineshbhai

Branch : Btech

Stream : CSE

Year : V

Team Mentor 1 Name: Mr. Harshad Chaudhary

Category :Academic

Expertise : DTN/ IOT

Domain Experience : 7years