

# **Feasibility Study**

## **1. Introduction**

This feasibility study evaluates the practicality of developing and implementing FitNova, an online fitness training platform that unifies personalized workouts, live classes, diet planning, trainer-guided programs, and a fitness product store within a single system. The study examines how effectively these features can be supported using standard web technologies.

It assesses technical, operational, and economic factors to determine whether the platform can be built efficiently, function smoothly in real-world use, and provide long-term value to users, trainers, and administrators.

## **2. Objectives of the Feasibility Study**

- To analyze whether FitNova meets user fitness requirements through a digital platform.
- To verify whether the platform can be built using available technologies and resources.
- To ensure smooth functioning of workout management, trainer interactions, diet plans, and product store operations.
- To evaluate user-friendliness for users, trainers, and administrators.
- To estimate development costs and long-term benefits.

## **3. Information Assessment**

During feasibility analysis, the following questions are considered:

- What challenges do users face without a unified fitness platform?
- How will FitNova simplify workout access, trainer communication, and diet planning?
- How well can FitNova handle secure data storage for users, trainers, and products?
- Do the chosen technologies (PHP–MySQL) support all required features?
- What features must be developed immediately, and what can be added later?

## **Types of Feasibility**

# Technical Feasibility

This evaluates whether FitNova can be built using the chosen technologies.

## Findings

FitNova uses a **simple, stable, and well-supported technology stack**, including:

- **Frontend:** HTML, CSS, JavaScript
- **Backend:** PHP
- **Database:** MySQL
- **Hosting:** Shared or cloud hosting supporting PHP & MySQL
- **User authentication** using PHP sessions
- **No third-party APIs**—all features handled internally
- **Media upload & playback** handled through standard PHP features

The system can support:

- Workout libraries (Yoga, HIIT, Strength)
- Uploading and viewing training videos
- Class and session scheduling
- Rule-based diet recommendations
- Trainer dashboards
- Admin controls for users, trainers, products, and reports
- Fitness product store management

**FitNova is Technically Feasible**, as all required technologies are mature, stable, and available.

# Operational Feasibility

Operational feasibility measures whether users can efficiently use the system and whether it fits real-life fitness workflow needs.

## Findings

- **Users** can create accounts, set fitness goals, follow workouts, track progress, view diet plans, access training videos, and purchase products.
- **Trainers** can manage workouts, upload videos, monitor user progress, and manage training sessions.
- **Admins** can manage users, trainers, classes, diet templates, product stock, and platform content.
- The platform centralizes fitness activities that would otherwise be scattered.
- The UI is simple, making it easy for beginners and general users.

- The system reduces manual communication and streamlines fitness planning.
- Training requirements are minimal as the system is user-friendly with intuitive UI screens.

**FitNova is Operationally Feasible**, as it offers smooth workflow, easy navigation, and efficient interaction between users, trainers, and administrators.

## Economic Feasibility

Economic feasibility evaluates whether the project is financially practical.

### Costs Involved:

- Software development (design, coding, testing)
- UI design and responsive layout
- Database setup and hosting
- Basic security implementation (password hashing, sessions)
- Maintenance and updates
- Data backup and storage
- Trainer/admin onboarding

### Benefits

- No need for additional physical infrastructure
- Lower operational costs vs. traditional gym management
- Revenue through:
  - Subscriptions
  - Product store sales
  - Premium trainer programs
- Automated progress reports improve user engagement
- Scalability: new features can be added without major investment
- Increased platform reliability increases user retention

**FitNova is Economically Feasible**, as long-term benefits and potential revenues outweigh the development and maintenance costs. The chosen technologies make the platform cost-effective.

## Conclusion

The feasibility study clearly shows that **FitNova** is technically, operationally, and economically feasible as an online fitness training platform. The system can be developed efficiently, maintained easily, and scaled in the future without major investment.