# Fitness App Documentation

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GitHub Repository: https://github.com/Chiefkahliq/FITNESS

## User Stories (System Requirements)

As a New User:

- I want to register for an account so I can access the fitness resources.

As a Returning User:

- I want to log in so I can view the available workout plans, diet options, and meal plans easily.

As a Registered User:

- I want to see three workout plans so I can select an exercise routine that suits my goals.

- I want to see three diet options so I can pick a dietary approach aligned with my needs.

- I want to see three meal plans (breakfast, lunch, dinner) to have a simple guide for daily eating.

## Prototype User Manual

### Introduction

This prototype Fitness App allows users to register, log in, and view basic fitness resources. It serves as the foundation for a future, more feature-rich capstone project.

### System Requirements

- Python 3.7 or higher

- A web browser (Chrome, Firefox, etc.)

- Dependencies listed in requirements.txt (Flask, Flask-SQLAlchemy, Flask-WTF)

### Installation Instructions

1. Clone the Repository:

git clone https://github.com/Chiefkahliq/FITNESS.git  
cd FITNESS

2. (Optional) Create a Virtual Environment:

python3 -m venv venv  
# On Windows:  
venv\Scripts\activate  
# On macOS/Linux:  
source venv/bin/activate

3. Install Dependencies:

pip install -r requirements.txt

4. Initialize the Database:

python  
  
Inside the Python interpreter:  
  
from app import db  
db.create\_all()  
exit()

5. Run the Application:

python app.py  
  
Open http://127.0.0.1:5000/ in your web browser.

### Usage Instructions

Register an Account:

- Navigate to http://127.0.0.1:5000/register

- Enter a username and password

- Click “Register”

You will be redirected to the login page after successful registration.

Log In:

- Go to http://127.0.0.1:5000/login

- Enter your username and password

- Click “Login”

On success, you are taken to the dashboard.

Viewing Workout Plans:

- After logging in, the dashboard displays three workout plans (e.g., Cardio, Strength, Flexibility).

Viewing Diet Options:

- Below the workout plans, three diet options are listed with brief descriptions.

Viewing Meal Plans:

- Further down, three meal plans (Breakfast, Lunch, Dinner) are provided.

### Troubleshooting

- If you cannot register, ensure the username is unique.

- If login fails, verify username and password correctness.

- If no data appears, ensure db.create\_all() was run and that the server is running properly.

### Future Enhancements

- Password reset functionality

- Personalized workout and diet recommendations

- Integration with mobile apps and online booking

## Creative Brief

Project Name: Fitness App Development  
  
Objective: To create an innovative fitness application that enables users to register, log in, and access personalized workout plans, diet options, and meal plans, serving as a foundation for a comprehensive capstone project.  
  
Target Audience: Individuals seeking structured fitness guidance, including beginners and fitness enthusiasts aiming to achieve specific health goals.  
  
Key Features:  
- User registration and authentication  
- Access to multiple workout plans  
- Dietary options and meal planning  
- User-friendly interface  
  
Tone and Style: Professional, supportive, and motivational, encouraging users to engage consistently with their fitness journey.  
  
Deliverables: A functional prototype of the fitness app with core features implemented, accompanied by comprehensive documentation.  
  
Success Metrics:  
- User engagement rates  
- User feedback and satisfaction  
- Achievement of user-defined fitness goals  
  
Stakeholders: Project manager, development team, UI/UX designers, and end-users.  
  
Distribution Channels: Available on web browsers; future plans include deployment on iOS and Android platforms.

### Enhanced Future Enhancements

- Neural Interface Integration: Developing technology that allows users to control the app and receive feedback through neural impulses, creating a seamless mind-body fitness experience.  
- DNA-Based Personalized Training: Utilizing genetic information to tailor workout and nutrition plans that align with an individual's unique genetic makeup, optimizing results.  
- Holographic Personal Trainers: Implementing holographic technology to project virtual trainers into the user's environment, providing real-time guidance and motivation.  
- Quantum Computing for Predictive Analytics: Leveraging quantum computing to analyze vast datasets and predict the most effective fitness strategies for individual users, staying ahead of emerging health trends.  
  
These visionary enhancements aim to position the fitness app at the forefront of technological innovation, offering unparalleled user experiences and setting new standards in the fitness industry.  
  
Note: The implementation of these advanced features will require extensive research and development, adherence to ethical guidelines, and compliance with privacy regulations.