# API Documentation

## 1. Overview

This API documentation outlines the endpoints, request/response formats, and error handling for the Workout Planner application. The API allows users to sign up, log in, manage profiles, download workout plans, and access static pages.

## 2. Authentication

The API uses session-based authentication. Users must log in to access authenticated endpoints. For simplicity, no token-based authentication is used in this implementation.

## 3. Endpoints

### User Registration

\*\*URL:\*\* /signup/

\*\*Method:\*\* POST

\*\*Description:\*\* Creates a new user.

\*\*Request Body:\*\*

* - username: string
* - email: string
* - password1: string
* - password2: string
* - age: integer
* - height: integer
* - weight: integer

\*\*Response:\*\*

* - message: User registered successfully
* - redirect\_url: /home/

\*\*Error Responses:\*\*

* - 400: Invalid input data.

### User Login

\*\*URL:\*\* /login/

\*\*Method:\*\* POST

\*\*Description:\*\* Logs a user in.

\*\*Request Body:\*\*

* - username: string
* - password: string

\*\*Response:\*\*

* - message: Login successful
* - redirect\_url: /profile/

\*\*Error Responses:\*\*

* - 401: Invalid credentials.

### User Profile

\*\*URL:\*\* /profile/

\*\*Method:\*\* GET

\*\*Description:\*\* Fetches user profile data.

\*\*Response:\*\*

* - username: string
* - email: string
* - age: integer
* - height: integer
* - weight: integer
* - bmi: float

\*\*Error Responses:\*\*

* - 403: Unauthorized access.

### Update Profile

\*\*URL:\*\* /update-profile/

\*\*Method:\*\* POST

\*\*Description:\*\* Updates user profile data.

\*\*Request Body:\*\*

* - age: integer
* - height: integer
* - weight: integer

\*\*Response:\*\*

* - message: Profile updated successfully

\*\*Error Responses:\*\*

* - 400: Invalid input data.

### Download Workout Plan

\*\*URL:\*\* /download/

\*\*Method:\*\* GET

\*\*Description:\*\* Provides a downloadable workout plan based on the user's BMI.

\*\*Response:\*\*

PDF File with headers: Content-Type: application/pdf, Content-Disposition: attachment; filename="Workout\_Plan.pdf"

\*\*Error Responses:\*\*

* - 404: File not found.

### Static Pages

\*\*URL:\*\* /home/ (GET): Renders the Home page., /about/ (GET): Renders the About page.

\*\*Method:\*\* GET

\*\*Description:\*\* No description provided.

\*\*Response:\*\*

HTML content with appropriate status codes (200 or 404).

## 4. Error Handling

The API follows standard HTTP status codes for indicating errors. Below are the common error codes used across the API:

\*\*General Error Codes:\*\*

* - 400: Bad Request – Invalid data provided.
* - 401: Unauthorized – User is not authenticated.
* - 403: Forbidden – User does not have permission.
* - 404: Not Found – Endpoint or resource does not exist.
* - 500: Internal Server Error – Server-side issue.