# **Weather Dashboard Application**

## **Overview**

The Weather Dashboard is a web-based application designed to provide users with easy access to weather information. This application allows users to set favorite locations and quickly view current, forecasted, and historical weather data for these locations. By offering user-specific customization, the Weather Dashboard aims to deliver a personalized weather tracking experience, making it easier for users to get the most relevant weather information based on their interests and needs.

API: Weather API - OpenWeatherMap

#### **Features**

## 1. Set Favorite Locations

 Users can add and save their favorite locations to their profile. This feature simplifies accessing weather data for commonly viewed cities or areas without needing to search for them each time.

#### 2. Get Weather for a Favorite Location

Provides the current weather details for a user's saved favorite location. This
feature includes information such as temperature, humidity, wind speed, and
general weather conditions.

## 3. View All Favorites with Current Weather

 Displays a list of all favorite locations saved by the user along with the current weather for each location. This consolidated view allows users to quickly assess weather conditions across multiple areas of interest.

## 4. See All Favorites

Allows users to view a simple list of all their saved favorite locations. This feature
is useful for managing saved locations and serves as a base for selecting a
specific favorite to view more detailed weather information.

#### 5. Get Historical Weather for a Favorite

 Retrieves historical weather data for a specified favorite location. Users can look back at weather conditions for the past days, helping in trends analysis or personal record keeping.

#### 6. Get Forecast for a Favorite

 Offers a detailed weather forecast for a favorite location, including predictions for temperature fluctuations, precipitation chances, and other atmospheric conditions over the coming days.

# **Stock Trading Application**

## **Overview**

The Stock Trading Application is a straightforward and effective tool designed for individual investors who want to manage their portfolios, execute trades, and monitor market conditions.

**API: Alpha Vantage** 

#### **Features**

## 1. View My Portfolio

 Displays the user's current stock holdings, including quantity, the current price of each stock, and the total value of each holding, culminating in an overall portfolio value.

## 2. "Buy" Stock

 Enables users to purchase shares of a specified stock. The user provides the stock symbol and the number of shares they wish to buy, and the transaction is executed based on the current market price.

## 3. "Sell" Stock

 Allows users to sell shares of a stock they currently hold. Users specify the stock symbol and the number of shares to sell, and the system processes the sale at the latest market price.

## 4. Look Up a Stock

 Provides detailed information about a specific stock, including its current market price, historical price data, and a brief description of the company. This feature is useful for conducting research before making buying or selling decisions.

## 5. Calculate My Portfolio Value

 Calculates the total value of the user's investment portfolio in real-time, reflecting the latest stock prices. This helps users understand the current worth of their investments.

## **Fitness Tracker Application**

## Overview

The Fitness Tracker Application is a dynamic and comprehensive tool designed for individuals dedicated to improving their physical health and fitness.

API: wger API

#### **Features**

#### 1. Set Goals

 Allows users to establish specific fitness and nutritional goals tailored to their personal health objectives. This might include setting targets for weight loss, muscle gain, calorie intake, or specific exercise achievements.

## 2. Get Recommendations

 Provides personalized exercise recommendations based on the user's specified fitness goals. This utilizes the Wger exercise database to suggest workouts that align with the user's objectives, such as targeting specific muscle groups or improving cardiovascular health.

## 3. Log Workout

 Enables users to log details of their workout sessions, helping them track their progress towards their fitness goals. Users can record various aspects of their workout, including the type of exercise, duration, intensity, and personal notes.

## 4. Track Progress

 Offers a comprehensive overview of the user's progress towards their set goals, using data from logged workouts and nutrition logs.

## 5. View / Update Goals

Allows users to view their currently set goals and make updates if necessary.
 This feature supports ongoing adjustments to fitness and nutritional objectives as users evolve their health strategies.