

```
## Project name
Weatherly

## Introduction
Weatherly is a personalized weather application that helps users customize their
weather update based on the activity they tend to perform in the future.

## Setting Up Your Development Environment
To set up a Flutter development environment in Visual Studio Code, you need to follow
several key steps.

1. **Install Flutter SDK**
  - Download the Flutter SDK from the [Flutter
website] (https://flutter.dev/docs/get-started/install).
  - Extract the zip file to a desired location on your machine.
  - Add the Flutter tool to your path.

2. **Install Android Studio (Optional but Recommended)**
  - Although not strictly necessary for Flutter, Android Studio provides the Android
SDK and device emulators.
  - Download and install [Android Studio] (https://developer.android.com/studio).
  - During installation, ensure that the Android SDK, Android SDK Platform-Tools, and
Android SDK Build-Tools are selected.

3. **Configure the Android Emulator**
  - In Android Studio, open the AVD Manager and create a new Android Virtual Device.
  - Follow the prompts to choose a device and download the necessary system images.

4. **Install Visual Studio Code**
  - If not already installed, download and install [Visual Studio Code (VS
Code)] (https://code.visualstudio.com/).

5. **Install the Flutter and Dart Extensions in VS Code**
  - Open VS Code.
  - Go to Extensions (View -> Extensions).
  - Search for "Flutter" and install the Flutter extension (this should automatically
install the Dart extension).

6. **Validate the Installation**
  - Open a terminal in VS Code (View -> Terminal).
  - Run `flutter doctor`. This command checks your environment and displays a report
to the terminal window.
  - Address any issues identified by `flutter doctor`.
```

7. ****Create and Run a Flutter App****

- In VS Code, open the Command Palette (View -> Command Palette or `Ctrl+Shift+P` on Windows/Linux, `Cmd+Shift+P` on macOS).
- Type "Flutter", and select the `Flutter: New Project` option.
- Follow the prompts to create a new Flutter application.
- Once created, navigate to the project's directory in VS Code.
- Start your emulator through Android Studio.
- Run the app by pressing `F5` or selecting "Start Debugging" from the Run menu.

These steps will set up a basic Flutter development environment in VS Code, allowing you to develop, test, and run Flutter applications.

Also you need to set up Xcode for iOS development on a Mac.

Project Structure

In the development phase, we created four different scripts: main.dart, weather_model.dart, weather_service.dart, weather_page.dart.

****Main.dart****

This class is a Flutter application entry point that sets up a Material Design app with a single screen, WeatherPage, for displaying weather information.

- Main.dart contains imported libraries and dart files necessary for the app's functionality.
- Main function which calls runApp() to start the app with the MyApp widget.
- MyApp Widget which is a stateless widget that defines the overall structure of the app, usually including theming, navigation, and home screen.

****weather_model****

The weather_model class defines a data model for weather information, including properties like city name, temperature, main condition, humidity, and wind speed. It includes a constructor for initializing these properties and a factory constructor for creating Weather instances from JSON data.

****weather_service****

This class provides functionalities to fetch weather information for a specified city and to determine the user's current city based on their geographical location.

****weather_page****

This class fetches and displays weather information, with interactive elements like a search field and notifications icon. It also includes a NotificationsPage for navigation.

Getting Started

Before you begin, make sure you have a GitHub account and that you're familiar with basic GitHub workflows. If you're new to Git or GitHub, check out this [Git Handbook] (<https://guides.github.com/introduction/git-handbook/>).

Setting Up Development Environment

1. Fork the repository on GitHub.

2. Clone your fork locally:

```
```bash
git clone git@github.com:your-username/Weatherly.git
```
```

3. Install the necessary dependencies:

```
```bash
cd Weatherly
npm install
```
```

4. Create a new branch for your feature or bugfix:

```
```bash
git checkout -b feature/your-feature-name
```
```

Making Changes

1. Make your changes in the newly created feature branch.

2. Write tests for your changes and ensure all tests pass:

```
```bash
npm run test
```
```

3. Add or update documentation as needed.## Committing Your Changes

1. Commit your changes using a clear commit message.

2. Push your changes to your fork:

```
```bash
git push origin feature/your-feature-name
```
```

Submitting a Pull Request

1. Navigate to the original `Weatherly` repository you created your fork from.

2. Press the "New pull request" button.

3. Choose your fork and the feature branch you've created.
4. Fill in the pull request description and submit it.