Project Proposal - Weather Data Visualization App

1. Project Information

Project Name: Weather Data Visualization App

Team Name: Solo Development
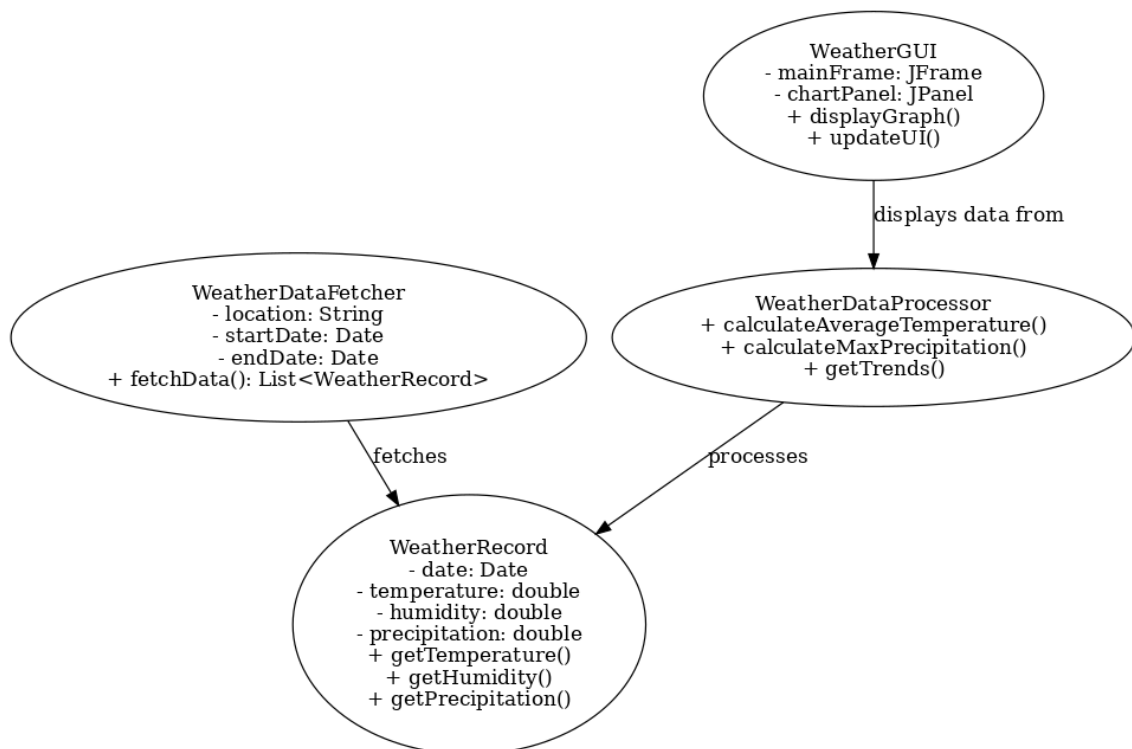
Team Member: Manideep Thalla

2. Project Description

The Weather Data Visualization App is a Java-based application designed to fetch, process, and visualize weather data. It allows users to interactively view temperature, humidity, and precipitation trends over time.

3. UML Class Diagram

The following UML class diagram represents the structure of the application:

- WeatherDataFetcher: Retrieves weather data.
- WeatherRecord: Stores temperature, humidity, and precipitation.
- WeatherDataProcessor: Handles computations and trends.
- WeatherGUI: Displays graphical weather trends.

4. Plan and Estimated Effort

The project is expected to be completed in the following phases:

- Research weather APIs & datasets: 3 days

- Design UML and plan GUI layout: 2 days

- Implement data fetching: 4 days

- Implement data processing logic: 5 days

- Build GUI and integrate with backend: 6 days

- Testing and debugging: 4 days

- Final presentation & documentation: 2 days

Total Estimated Effort: 26 days