Weather.com



Introduction

This article provides a detailed outline for developing a climate application project, emphasizing user stories as essential requirements. Over a twomonth period, guided by instructor directives and class content. The application aims to provide users with weather updates for their location and others on an interactive map, along with real-time notifications on climate changes, all supported by a connected database.

Methods

For the development of our weather application, we have followed an object-oriented approach, using the Python programming language. Next, we will describe the methods and techniques used during the development process:

Technology Selection:

Python was selected as the primary programming language due to its versatility, readability, and extensive community support.

Application Architecture:

A monolithic architecture was chosen for the weather application, meaning that all application components are integrated into a single system.

This simplifies the initial development and deployment of the application, resulting in a faster and less complex process.

OpenWeatherMap API Integration:

The OpenWeatherMap API will be used to obtain accurate and up-to-date weather data for the application.

This will be achieved by integrating HTTP requests to the OpenWeatherMap API within our application.

SQLAlchemy will be used to handle the interaction with the database. Methods will be implemented to store, retrieve, update and delete user data in the database, ensuring adequate persistence of user information.

Goal

The goal of this project is mainly to increase knowledge in different aspects of the programming field, mainly such as frontend, backend and database, and to be able to reflect what has been learned through a weather application with many similar functions as any weather application would have., generating a very pleasant experience for the user.