Project name : ActiveSky

Project Defination

Project summary :

Our project is a web application that allows users to receive personalized activity recommendations based on their current location and weather conditions. The platform aims to provide users with indoor and outdoor activities by analyzing real-time weather data.

Objectives :

-Determining the weather conditions by obtaining the user's location information.

-Suggesting activities suitable for different weather conditions.

-Creating a user-friendly interface.

-Retrieving the data to be used up-to-date via API

-Ensuring continuous integration and distribution with CI/CD integration

-Providing a smooth experience with minimum loading time and accurate results

Scope :

Included: User location acquisition, weather API integration, activity recommendation generation, user-friendly interface

Not Included: Advanced AI-based recommendation systems, social media integration, offline mode, and user authentication.

Target Audience :

-People looking for spontaneous activity ideas.

-Travelers exploring new places and looking for weather-appropriate activities.

-People planning weather-appropriate activities for families or groups.

Key Features :

-Automatically detect user location with Real-Time Location Detection.

-Offer appropriate activities based on current weather conditions.

-Show recommendations with User Interface

-Regularly update weather data and refresh recommendations with OpenWeatherApi

-Manage automatic testing and deploy processes with CI/CD pipeline

Deliverables :

-A working web application.

-Integration of the API to get weather data and tests to show that the data is pulled properly.

-User interface with weather display and activity suggestions.

-Documentation on the progress of the project.

-CI/CD integration via github

Budget and Resources :

-Software Development Tools: HTML/CSS ,Java , JavaScript,python

-API Usage: OpenWeatherMap API (free version will be used)

-Hosting: GitHub (free versions)

-Time Estimate: 4 weeks

Risks and Mitigation strategies :

-API access interruption: precaution: alternative API integration

-CI/CD pipeline failure precaution: improving testing processes

-UI issues precaution: iterative development with feedback

Project Success Criteria :

-At least 80% of users must find the recommendations useful and relevant.

-The web application must successfully retrieve real-time weather data for 95% of requests.

-Users must easily navigate the application and page load times must be short.

-At least 90% of automated tests performed during the CI/CD process must pass