

CMPE 138
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Outdoor Buddy App

Group 12
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Problem:

Outdoor enthusiasts often face challenges in planning their activities around **unpredictable weather**. There are many factors to consider for outdoor activities such as temperature, precipitation, wind, humidity, and air quality. These impacts can affect both safety and enjoyment. Without reliable, real-time information, users may find themselves unprepared and risking health issues due to unexpected weather changes.

Solution:

The dataset we chose from the bigquery-public-data is **noaa_global_forecast_system** as it provides crucial information that is needed for our application. The information that we need is weather temperature, humidity, wind speed, etc. We plan to design an application that will keep you informed of the weather forecast for any outdoor activity. This may include snowboarding, surfing, or hiking and suggesting if the weather forecast is suitable for the activity. This app provides a number of features to enhance outdoor activities and safety: activity recommendations and planning, allergy air quality alerts, weekly weather forecast, safety alerts for severe weather, heat and uv index.

Application:

Our app will allow users to input a specific day or a range of days they plan to do an outdoor activity, along with the location and chosen activity (such as snowboarding, surfing, hiking, or a general suggestion). The app will then query data from the database, process it through an algorithm to determine the suitability of the weather for the selected activity or recommend optimal activities based on weather conditions for that time and location. If there are hazardous weather conditions then the app will give the user a warning of it. The goal is to help users maximize their outdoor experiences and enjoyment while also alerting them to potential hazards, ensuring they are well-prepared.

Tentative Schedule:

CMPE 138 Project				
Team	Week 1 (Nov 4-10)	Week 2 (Nov 11-17)	Week 3 (Nov 18-24)	Week 4 (Nov 25-Dec 1)
Quan	Project Abstract	Project Implementation	Project Report	Project Presentation and Demo
Ruben				
Rudy				