UNIVERSITY PARTNER

UNIVERSITY OF WOLVERHAMPTON

HERALD COLLEGE KATHMANDU

Internet Software Architecture

(4CS017)

Report Writing

Weather Web Application Architecture Overview

Student Id	: 2065697
Student Name	: Dhiraj Kumar Sah Kanu
Group	: L4MCG1
Lecturer	: Mr. Pankaj Niraula
Word Count	: 318

Weather Web Application Architecture Overview

This weather web application uses HTML, CSS, and Javascript language. API is used to retrieve data from the server to the client-side. It uses serialization and deserialization processes using JSON (JavaScript Object Notation).

Strengths

The weather web application which I have created shows the weather of San Antonio. This is prototype 1 of the weather website application assigned by our module leader and needs more improvements. Though, this prototype includes basic HTML, CSS, and JavaScript code which is easily understandable. This web application shows details like temperature, weather conditions, pressure, humidity, wind speed, and wind direction. The main strength of this prototype is, it can extract real-time weather data without the help of any database system. It uses API (Application Programming Interface) from OpenWeatherMap API to fetch and show the weather data. OpenWeatherMap API provides a unique key to access their API. As this prototype uses API, it will be easier to extract and show the data to different platforms like internet browsers on computers and application software.

Weakness

This prototype is not a sophisticated weather application, hence it contains flaws. It is a static web application so there's only one-way communication. When compared to other weather applications accessible on the internet, the user interface of this application is not very excellent. The user cannot request weather data for any other city than San Antonio. It can only display a limited quantity of weather information and lacks information like longitutde, latitude, and more. Due to a lack of API ownership, the data cannot be changed or altered. As the application is dependent on API, the unavailability of OpenWeatherMap API may not help our application to run. Error handling is not more precised in this prototype. Furthermore, as this application lacks a database system, this application is unable to save weather data from previous days. Future weather prediction cannot be done using this prototype.