A white background with black and white clouds

Description automatically generated

Internet Software Architecture

(4CS017)

**Report on**

**Weather App**

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# Introduction:

# This report (Prototype I) provides real-time weather reports based on user-input cities through an intuitive web application called The Weather App. Using CSS for styling and HTML for structure, the application makes use of the vital get weather function method to communicate with the OpenWeatherMap API and retrieve and display temperature, wind speed, humidity, and other critical weather information.

# Discussion:

Efficient integration with the OpenWeatherMap API, through the dynamic and basic get weather function, is a key feature of the Weather App. This function, which automatically updates HTML elements with current weather information, not only manages user input for city selection but also retrieves and parses API responses as well. The app's ability to handle errors efficiently, ensuring a user-friendly experience and delivering reliable weather information is evidence of its commitment to reliability.

However, a lack of user feedback during data loading, which could lead to uncertainty, is a potential weakness of the app. In addition, exposing the API key is a security risk when using client scripting. Users may be left without adequate instructions due to the simplicity of error notifications.

# Conclusion:

Finally, by using a user-friendly interface, the Weather App is successfully fulfilling its objective to provide timely and precise weather reports. Future improvements could address issues such as improving user feedback during data loading, implementing Server-Side scripting to improve security, and improving error notifications. To improve the overall user experience, the app's commitment to continuous improvement allows it to make further advances, such as extended forecasts, interactive maps, or configurable unit preferences.