



## **Prototype 2**

### **Weather forecasting App**

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## Introduction

In the Internet Software Architecture module, we were required to work on a third prototype, which is this weather app. In this prototype our aim was to add client-side weather data caching in this prototype so that we wouldn't have to access the server-side cache as frequently. This will be done by getting real-time weather information from the OpenWeatherMap API, storing it in the database with PHP, getting real-time weather information from the database with JavaScript, storing data in Local Storage, and showing it on the HTML page.

For prototype 3, by default, my website can show the Wolverhampton weather data for the current day. It also shows the current weather information for every area that has been searched. Along with the Celsius temperature, it displays the important meteorological conditions. Additionally, it shows the date, time, humidity, wind speed and direction, and pressure. The data that was stored in the database from the OpenWeatherMap API is retrieved in order to display these details.

## Strength and Weakness:

### Strength:

This application was created using the HTML, JavaScript, and PHP programming languages, along with CSS for styling and enhancement and MySQL and local storage for storing data. To make the code easier to design and understand, I separated the code using the div element. To obtain the aforementioned data, an API for a city was requested and stored in the Database using PHP and then it was stored in local storage and retrieved using JavaScript.

It displays all the information on the city assigned to us like in prototype 1 and 2.

### Weakness:

- The HTML and CSS codes have a few unneeded elements and CSS styles, which makes them look a little disorganized in some spots.
- UI is not responsive in small in smaller screens although it is functional.