

## Prototype 3 (Weather application)

Same as before this weather application also uses Open weather API to obtain the necessary weather information used for displaying by using “.fetch( )” and it is stored in MySQL, using PHP and then those data’s are fetched( ) into JavaScript and also stored in Local Storage and at first the data’s are displayed directly from database but when we refresh it in between 10 seconds it doesn’t fetch new data’s but displays the data stored in the local storage of our browser in JavaScript which minimizes the time to load data into our application and makes it load faster than before. And the implementation of CSS was also one of the goals in this prototype 3 but I have already added it in my first prototype so I didn’t make any changes in it.

## Strengths of this Prototype

This prototype provides user the high-quality accurate results of a specific place and country. This prototype helps to show those accurate data fetched from weather API into more user-friendly manner rather than in the raw data in JSON format which is hard to analyze by the user and also boring. And also, one of the strengths is that it takes a little bit shorter time to display data in the application because it doesn’t always fetch data from API and store it in the database and display it which used to take a lot of time but in this prototype it stores data fetched first time and display same data for some time interval, in case of my app it will show same data for 10 seconds and after that it fetches a new data to display it to the user so as it doesn’t have to fetch every time we hit refresh button so it works bit faster than before.

## Weaknesses of this Prototype

As before in my application there is no search button so it can only display weather of a specific city and in my case, it only displays the weather info’s of Wolverhampton. Although it does not fetch all the time but still when it fetches in 10 seconds intervals, it’s still slow as before. Also, this app uses PHP and the more we use PHP the more it lags our application.

After completing this third prototype I got some knowledge about the working of the local storage in browser of how it stores data and how we can use it in our application and its advantages.