

# 4CS017 - Internet Software Architecture

# Weather App: Prototype-3

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# 1.Introduction:

The protoype-3 is the final version of the project weather app assigned to us students. This final iteration of project uses browser API(local storage for data caching). The data fetched from the PHP(local API) is stored in an object, which is then cached into the local storage, making the data more accessible and allows for faster response(data is displayed directly from the local storage if it is fresh),else data needs to fetched from php local API and displayed, while also caching it into local storage.

# 2.Body

We have come far from early iteration. From just being able to access data with internet to caching it in local server and making local API of our own to access data now we use browser caching to store data in local storage make data more accessible and faster to provide response.

## 2.1 Strength of the project

Prototype-3 is simple upgrade from prototype 2 with all of its features being almost same with slight upgrade in response time of the data loaded in page.

1.use of browser caching limits accessing of local API(PHP,MYSQL).

2.local storage is session based so we can set condition to fetch new data after certain time.

3.use of both sider server caching and local storage allows application to store and retrieve data in offline mode while also having a faster response time.

## 2.2 Weakness of the project

1.both side server caching and browser caching are limited to device itself, meaning the app can work effectively only on primary device.

2.the data provided is not accurate to real time data ,since (data is fetched from stored data in database which is only updated once every hour or time set by programmer).

3.The weather data provided is limited to single city.

# 3.conclusion

Overview: use of browser caching with local storage makes data more accessible ,limits frequent access of API(PHP,MYSQL), resulting in reduced latency(faster response).

## 3.1 Improvements.

1.making functionality made available to the user(search bar to provide data of all cities ).

2.store data of multiple days to get results of predicted weather data.