

INTERNET SOFTWARE ARCHITECTURE

Weather Application Report Individual Assessment

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ABSTRACT

The paper is about a small app that tells you what the weather is like now. I made this app all by myself. It is not hard to use. It is also not hard to see how it works. I chose simple things to make it. I used HTML to set all the parts in the right place on the page. I used CSS to help it look good and neat. I wrote some JavaScript so you can click, move around, and use the app in more ways. I used PHP to work on the hard things that go on in the back and that you do not see. The app has a place to store things, and I used SQL to do that part.

OBJECTIVES

The objective of this project is to design and develop a basic weather application that provides current weather information. Another objective is to learn how server-side programming using PHP works and how API data can be stored in a database for better performance.

AIMS

Primarily, we're looking at creating a simple application that will get Current weather-temperature and conditions without trying to do too much.
Ease of design should be kept in mind while this information is fed back.
The application needs to do what's needed. In addition, will improve the server code side of things and setting up using PHP, then there is the task of writing the application to save API data into a database that will increase performance dramatically.
Basically it's vital that API call is made less frequently to ease the load, but it's not easy to keep it on this way.

OVERVIEW

You can use the weather app to check out what's happening in any city you type in. Once you ask for the weather, PHP gets the info from the weather API and stores it in a database. If you look up the same city later, the app can show you the saved data, cutting down on time and extra API requests.

STRENGTHS

This system is designed to be straightforward and user-friendly, perfect for those who are just starting out. Storing API data in a database helps the application run faster. This project showcases how PHP, SQL, and API integration work together, which are key ideas for beginners studying web development.

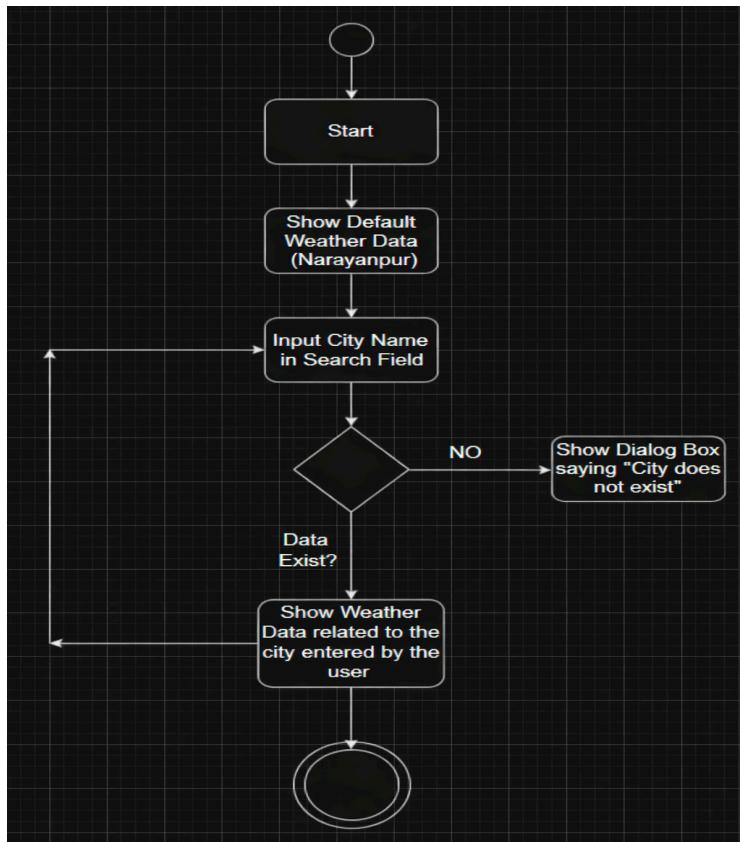
WEAKNESSES

To get the latest weather updates, the app needs to be online for data from the API. The interface is pretty simple right now but could definitely use some upgrades in the next updates. Just remember, since the system relies on an external API, any problems with it could impact how well the app works.

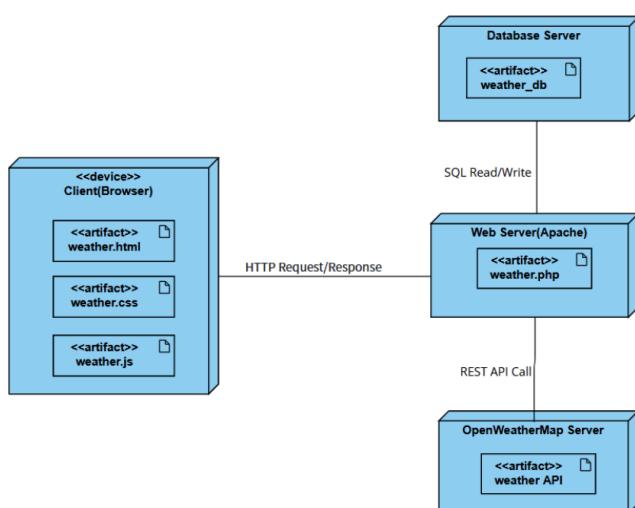
CONCLUSION

Building a simple weather app with PHP, SQL, and an external API is practical. You get to dive into server-side development. Plus, there's database management. To be honest, a great way to learn. Enhance its look and add features, and it really steps up. That's just how it goes. Keep pushing forward.

Activity Diagram:



Deployment Diagram:



Sequence Diagram:

