

BCA 3 YEAR _ 5TH SEM.

WEATHER FORECASTING



sky*Vision*

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INTRODUCTION

SkyVision Weather app is a web application which will tell the users about the weather details of any particular city .

The easy and Interactive User Interface will help our users to easily know about the temperature , wind speed , humidity and description about the weather .

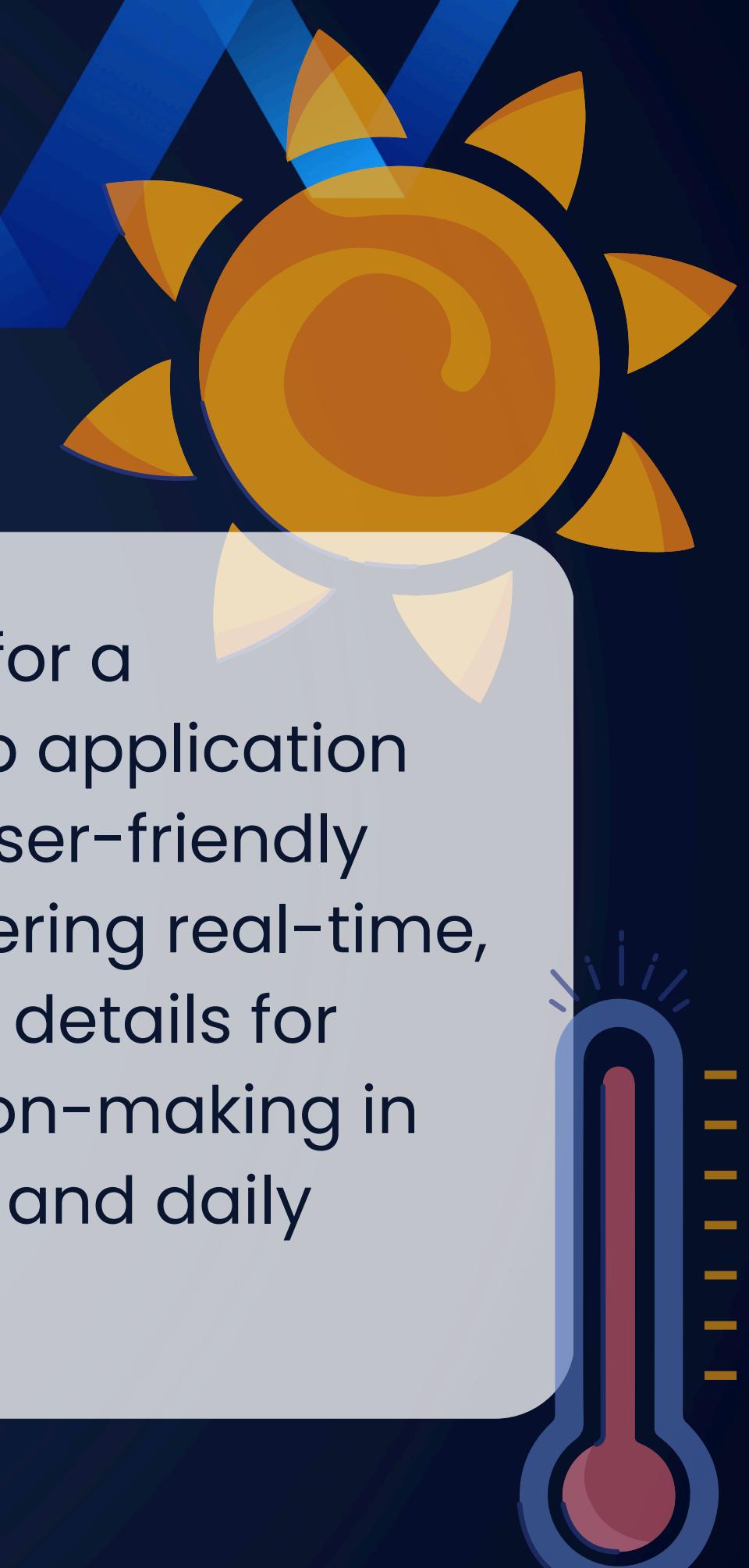
Objective of the Project

- The objective of the Todays weather project is to design and implement an efficient and user-friendly system that helps user to know about weather details of any city using its name only.
- Primary Goals of the project:
- User-friendly Interface
- Accurate weather Details
- Fast data Fetching

PROBLEMS



Current weather apps lack simplicity and speed, making it challenging for users to quickly access accurate information for specific cities.



There is a need for a streamlined web application that prioritizes user-friendly interfaces, delivering real-time, precise weather details for informed decision-making in travel, planning, and daily activities.

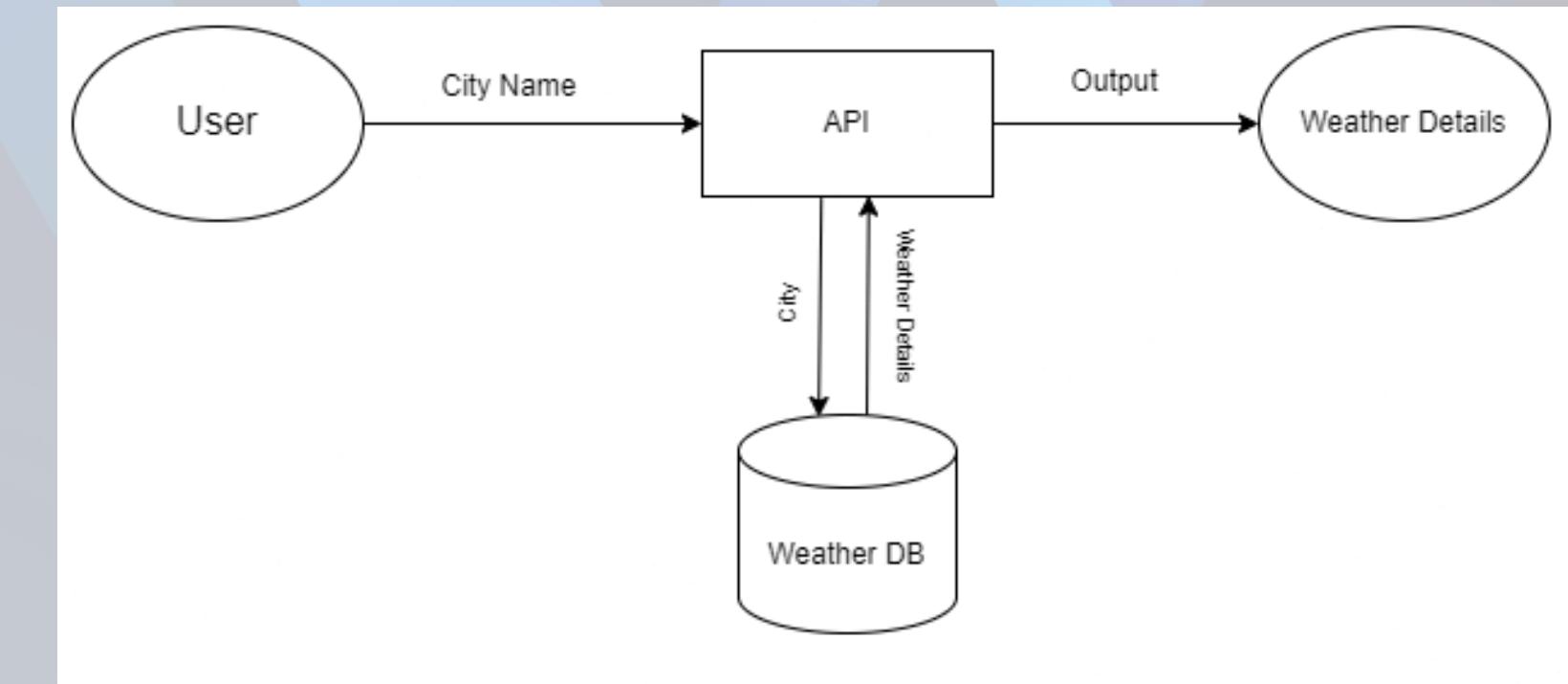
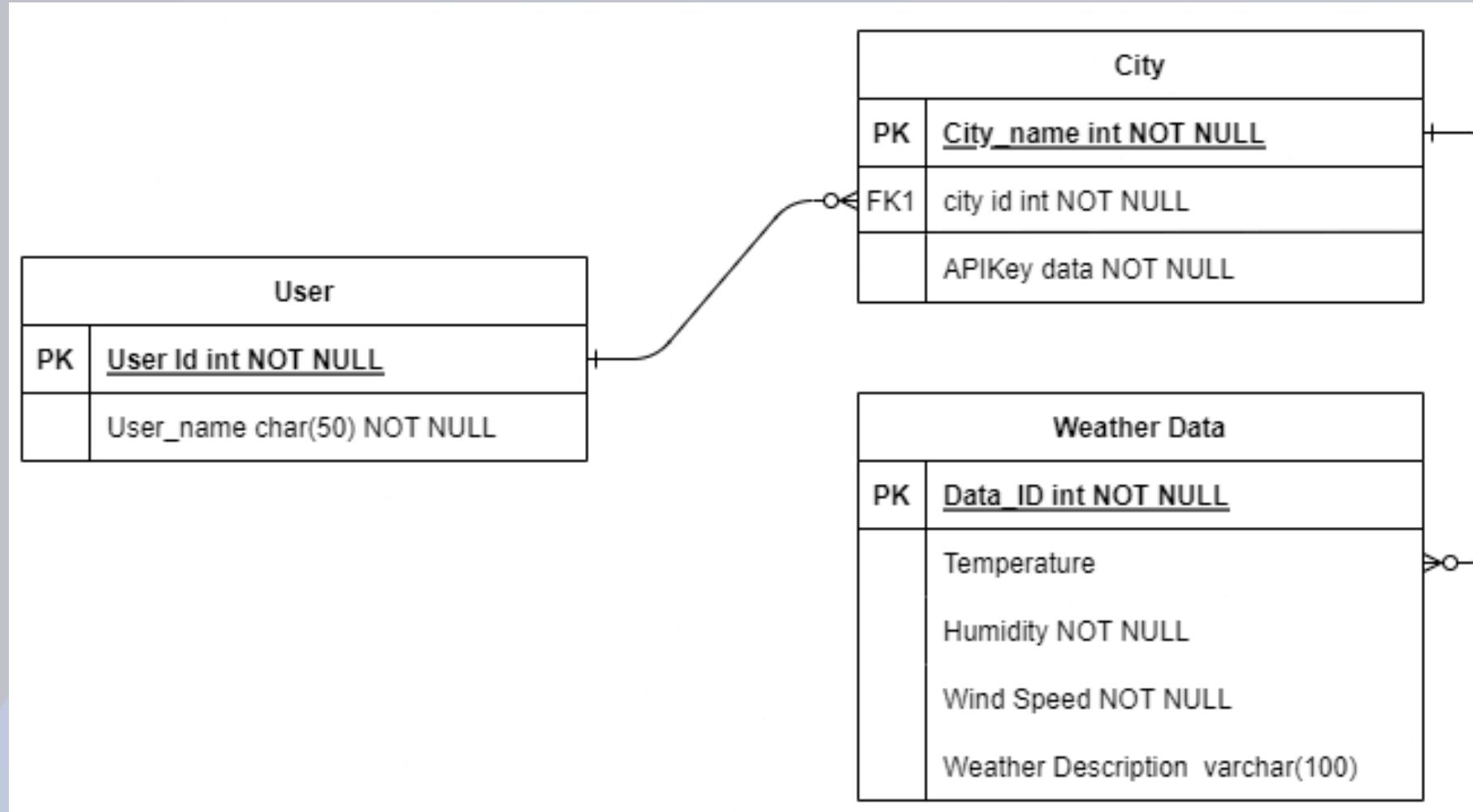
FUNCTIONALITIES & FEATURES.

- User can put the City name and get the weather details:
 - Temperature
 - Humidity
 - Wind Speed
 - Weather Description
- Easy User Interface

- After providing the city value by user the app will show us the Temperature of the city with weather description along with the humidity and wind speed in that city.

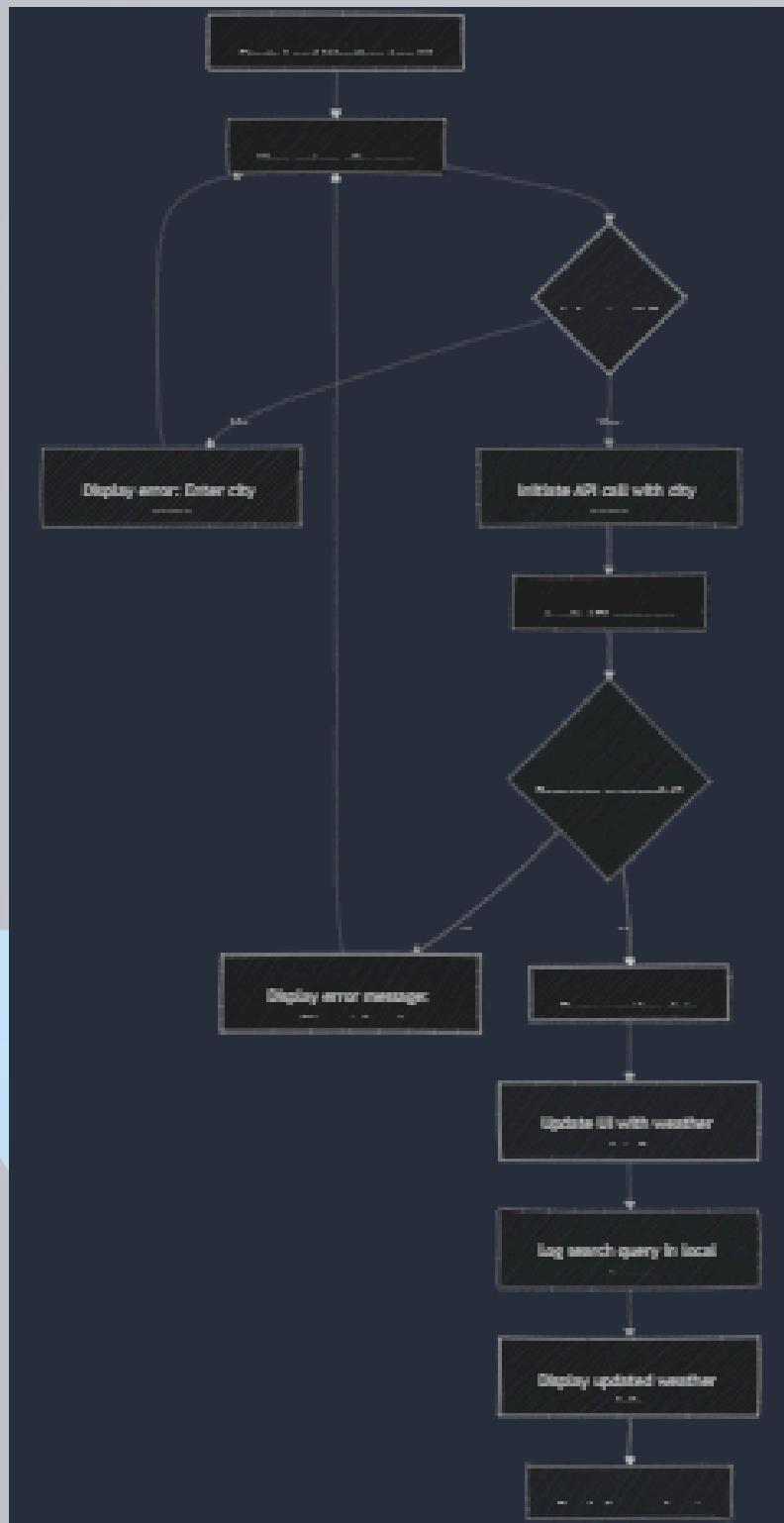
- If user provide the any invalid data in the search field then our page will respond with an 404 error.

DESIGN OF THE PROJECT



- The design phase in weather forecasting app development is a crucial stage where the conceptual ideas and requirements are transformed into a detailed and visually appealing blueprint. This phase involves creating the Data flow Diagrams, ER model design, and the overall architecture of the weather application

FLOW CHART OF THE PROJECT



- A: When the user first opens the application, the main interface is displayed.
- B: The user is prompted to enter a city name.
- C: The system checks whether the input is valid (i.e., not empty).
- D: If the input is invalid, an error is shown and the user is returned to the search field.
- E: For valid inputs, an API call is initiated using JavaScript's fetch (or similar method).
- F: The application waits for the API to return data.
- G: Once data is returned, the response is checked:
- H: If the API indicates an error (like a 404), an error message is displayed.
- I: If successful, the application parses the JSON data.
- J: The parsed data is used to update the UI (e.g., showing temperature, humidity, and updating background images based on the weather).
- K: Optionally, the search term is logged in local storage for search history.
- L: The user sees the updated weather information.
- M: The app stands by for the next search or interaction.

FUTURE ENHANCEMENTS FOR WEATHER FORECASTING APPLICATION:

- Integration of future weather prediction using Machine learning technologies.
- Integration of any natural disaster prediction in the location.
- Integration of local time and international time in that location, we can add this using any api.
- We can add top weather headlines in the nearby locations as well.
- We can add last 10 days time line of weather forecasting of the selected location as well.

SUMMARY

- Programming And Markup Languages
- HTML , CSS , JAVASCRIPT.
- Minimum Software Requirements for Weather Forecasting
Software run on a standard PC system. Hardware requirements are as follows: Processor-Celeron (R) Dual-Core CPU T3100@1.90 GHz; Installed Memory (RAM) at least 1GB; System type-32/64-bit Operating System; Model-Presario CQ42 Notebook PC; Resolution-1366/768;

THANK YOU

