

COLLEGE CODE: 9623

COLLEGE NAME: Amrita College of Engineering And Technology

DEPARTMENT: Computer Science and Engineering

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ROLL NO: 23CS025

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Completed the project named as

Phase 5

PROJECT NAME: LIVE WEATHER DASHBOARD

SUBMITTED BY,

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Phase 5

1. Project Overview

The Live Weather Dashboard is a web-based application that allows users to check real-time weather data for any city worldwide. It leverages the OpenWeatherMap API to

fetch temperature, humidity, wind speed, and weather descriptions dynamically. The user interface is responsive and visually appealing, featuring animated backgrounds that change according to weather conditions such as clear skies, clouds, rain, or snow.

2. Project Report

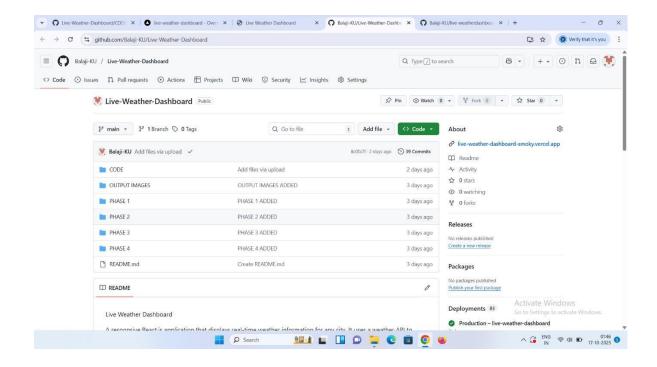
The project is built using HTML, CSS, and JavaScript. It integrates the OpenWeatherMap API for live data retrieval.

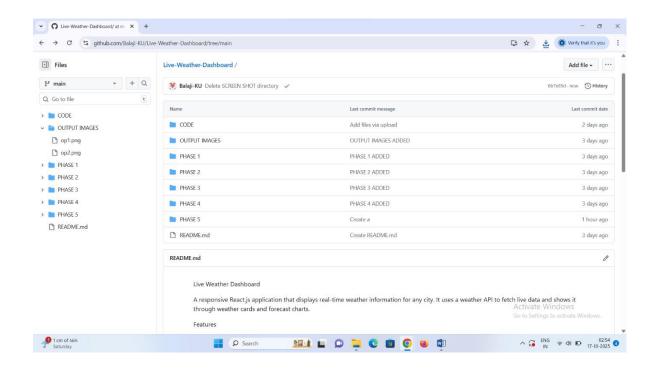
When a user enters a city name and clicks the 'Get Weather' button, the application sends an asynchronous API request and displays the current weather information, including icons representing the weather type.

Key Features:

- Dynamic UI with responsive design.
- Animated background transitions based on weather type.
- Error handling for invalid or empty city inputs.
- Real-time temperature, humidity, and wind data display.

3. Screenshots





Weather Dashboard

Search City

Search

Chennai, IN



32° °C

Clear Sky

- ♦ Hurnidity. 48%
 ⇒ Wind: 10 km/h
- © Pressure: 1012 hPa

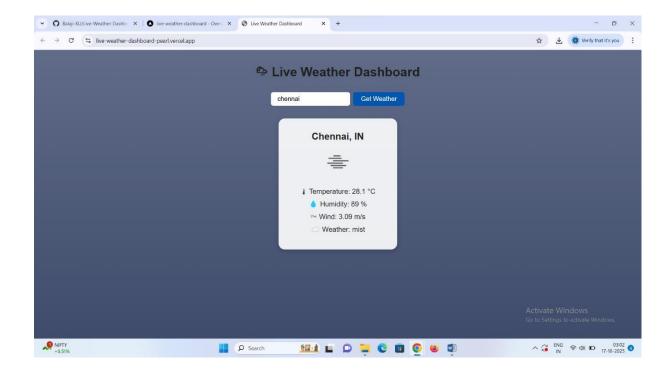
5-Day Forecast



Live Weather Dashboard







4. Challenges & Solutions

Challenges Faced:

- 1. Handling API errors and invalid city inputs.
- 2. Designing responsive layouts for both desktop and mobile screens.
- 3. Managing dynamic background transitions smoothly.

Solutions Implemented:

- Added JavaScript error handling for invalid API responses.
- Utilized CSS Flexbox for responsive design.
- Created a background mapping function to dynamically adjust the gradient based on weather type

5.GitHub Link				
Github repository lin	nk : https://github.com	m/Balaji- KU/Live-	Weather-Dashboard	
Deploy link : https://	live-weather-dashbo	ard- pearl.vercel.ap	<u>p/</u>	