([**RV Inst~~i~~tute of Technology**](https://rvit.edu.in/index.php)

**Chebrolu, Andhra Pradesh-590018**

**PROJECT REPORT**

**ON**

# “Recipe Finder Website”

***Submitted In the Partial Fulfillment of the Requirements for the Award Of the***

***“PROJECT” 3rd Semester***

**BACHELOR OF ENGINEERING**

**IN**

**COMPUTER SCIENCE AND ENGINEERING (AI&ML)**

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### 2024-2025

Page |





### CERTIFICATE

Certified that the Project report on **“Recipe Finder Website”** is a bonafied work carried out by **Syed.Shabna** bearing **22HU1A4292, Syed.Noorjahan** bearing **22HU1A4291, Shaik.Jasmine** bearing **22HU1A4280** And **Shaik.Anshu** bearing **22HU1A4274 a 3rdsemester student of RV Institute of Technology** in partial fulfillment for the award of degree of **Bachelor of Engineering in Computer Science and Engineering** during the year 2024-2025. It is certified that all corrections / suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The Project Report has been approved as it satisfies the academic requirements in respect to project work prescribed for the degree of Bachelor of Engineering.

**Signature Of Guide Signature Of HOD**

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**Name of examinator Signature With Date**

**1.**

# ACKNOWLEDGMENT

I would like to convey my hearty thanks to **RV Institute of Technology** for giving me the right platform for our engineering studies and help us complete our Project.

I am thankful to our Principal **Dr. R. Krishnaiah** B.E,M. Tech. Ph.D., MISTE**,** RVIT, Chebrolu, for giving us the necessary encouragement and guidance.

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# DECLARATION

We are **Syed.Shabna, Syed.Noorjahan, Shaik.Jasmine** and **Shaik.Anshu** students of 3rd semester Bachelor of Engineering, **RV Institute of Technology**, hereby declare that the Project Work entitled **“Recipe Finder Website”** submitted to the **RV Institute of Technology,** during the academic year 20242025, is a record of an original work done by me under the guidance of **Mr.** **Ashoka M,** Trainer, Department of Computer Science and Engineering.

This Project report is submitted in partial fulfillment of the requirements for the award of the Bachelor of Engineering. The results embodied in this report have not been submitted to any other university or institute for the award of any degree.

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**Date: 31-03-2025**

**Place: Chebrolu**

## ABSTRACT

The Recipe Finder Website is a user-friendly platform designed to help individuals discover, organize, and create delicious meals with ease. The website allows users to search for recipes based on ingredients, dietary preferences, cuisine type, cooking time, and difficulty level. A smart filtering system ensures personalized recommendations, while an AI-powered suggestion engine helps users find recipes based on available ingredients.

The platform features an intuitive interface with step-by-step instructions, nutritional information, and user-generated reviews. Additional functionalities include meal planning, grocery list generation, and integration with social media for recipe sharing. The website aims to simplify meal preparation by providing a vast database of diverse and healthy recipes, catering to different tastes and dietary needs.

This innovative solution enhances the cooking experience for beginners and experienced chefs alike, promoting a more accessible and enjoyable approach to home-cooked meals.

Built using HTML, CSS, and JavaScript, the dashboard offers an intuitive and user-friendly experience with responsive design and interactive charts for temperature trends.

## TABLE OF CONTENTS

|  |  |  |
| --- | --- | --- |
| **S.NO** | **CONTENT** | **PAGE NO** |
| 1 | TITLE | I |
| 2 | CERTIFICATE | II |
| 3 | ACKNOWLEDGEMENT | III |
| 4 | ABSTRACT | IV |
| 5 | DECLARATION | V |
| Chapter-1 | INTRODUCTION | **7** |
| Chapter-2 | Features, Technology Stack Objective,  Implementation | 8-9 |
| Chapter-3 | Code | 10- 16 |
| Chapter-4 | Webpage Details | 16-20 |
| Chapter-5 | Resources | 21-22 |
| Chapter-6 | Challenges & Solutions API Rate Limits,  CONCLUSION AND FUTURE SCOPE | 22 |

**CHAPTER 1**

# INTRODUCTION

Recipe Finder Website is a web-based. In today’s fast-paced world, finding the perfect recipe can be a challenge, especially when considering dietary restrictions, available ingredients, and time constraints. The Recipe Finder Website is designed to simplify the cooking experience by providing a comprehensive database of recipes tailored to users' needs.This platform enables users to search for recipes based on ingredients they have, cuisine preferences, cooking difficulty, and dietary requirements. Whether someone is looking for a quick weekday dinner, a healthy meal option, or a gourmet dish, the website ensures they find the perfect match.

With features like personalized recommendations, step-by-step cooking instructions, nutritional information, and user reviews, the website serves as a reliable guide for home cooks of all skill levels. Additional tools, such as meal planning and grocery list generation, enhance convenience, making cooking more efficient and enjoyable.

By offering a seamless and engaging experience, the Recipe Finder Website encourages users to explore new flavors, minimize food waste, and enjoy the process of home cooking like never before.

**CHAPTER 2**

## Objective

The main objective of Recipe Finder Website is to offer an accessible and accurate weather forecasting platform. Users can view temperature trends, humidity levels, wind speeds, and other essential weather parameters for multiple locations. The dashboard ensures ease of navigation and real-time data updates using an integrated weather API.

## Technology Stack

• Frontend: HTML, CSS, JavaScript • API: OpenWeatherMap API (or any weather API used) • Design Tools: Adobe Lightroom (if used for UI design), Figma (if applicable) • Frameworks/Libraries: Bootstrap (if used for responsiveness), Chart.js (if used for visualizing temperature trends)

## Features

• Real-Time Weather Data: Displays current weather conditions and temperature. • 5-Day Forecast: Provides future weather predictions. • Search Functionality: Users can search for weather updates by city or location. • Graphical Representation: Charts displaying temperature trends over time. • User-Friendly UI: Clean and responsive design for an enhanced user experience

## Implementation

* Data Retrieval: The dashboard fetches data from a weather API using JavaScript’s fetch API or Axios.
* Data Processing: Extracted JSON data is processed to display key weather details.
* UI Integration: The weather details are structured using HTML and styled with CSS for an engaging design.
* Interactivity: JavaScript enables user interactions, such as searching for different cities.
* Visualization: Temperature trends are plotted using a library like Chart.js. 8 6. Challenges & Solutions API Rate Limits: Implemented caching mechanisms to reduce API calls. Data Accuracy: Chose a reliable API to ensure accurate and up-to-date weather information. Responsive Design: Used CSS media queries and Bootstrap to ensure mobile-friendly accessibility. Cross-Browser Compatibility: Tested on different browsers and fixed inconsistencies.

## CHAPTER 3

**Code:**

|  |
| --- |
| <!DOCTYPE html>  <html lang="en">  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>TempTrend | Home🔆</title>  <style> @import  url('https://fonts.googleapis.com/css2?family=Poppins:ital,wght@0,100;0,200;0,300;0,400;0,5 00;0,600;0,700;0,800;0,900;1,100;1,200;1,300;1,400;1,500;1,600;1,700;1,800;1,900&display=sw ap');  @keyframes fadeIn {  from { opacity: 0; transform: translateX(-20px); } to { opacity: 1; transform: translateX(0); }  }  @keyframes slideIn {  from { opacity: 0; transform: translateX(-50px); } to { opacity: 1; transform: translateX(0); }  }  \*{  margin: 0; padding: 0;  box-sizing: border-box;  } body {  font-family: "Poppins", sans-serif; animation: fadeIn 1.2s ease-in-out; animation: slideIn 1.2s ease-in-out;  }  .weather-logo{ height: 50px;  }  .navbar { display: flex;  justify-content: space-between; align-items: center;  /\* background: #333; \*/ |

|  |
| --- |
| padding: 15px 30px;  }  .navbar .logo { color: white; font-size: 24px; font-weight: bold; text-decoration: none; display: flex; align-items: center; gap:5px;  }  .navbar ul { list-style: none; display: flex;  }  .navbar ul li { margin: 0 15px;  }  .navbar ul li a { color: white; text-decoration: none; font-size: 18px; transition: 0.3s ease;  }  .navbar ul li a:hover { color: #e68a00; transition: 0.3s ease; transform: scale(1.7);  }  .nav-links a:hover::after { width: 100%;  }  .nav-links { list-style: none; display: flex; gap: 20px; padding: 0;  }  .nav-links li { position: relative;  }  .nav-links a {  text-decoration: none; color: white; font-size: 18px; |

|  |
| --- |
| padding: 10px 0; position: relative;  transition: color 0.3s ease-in-out;  }  /\* Underline effect \*/ .nav-links a::after { content: ""; position: absolute; left: 50%;  bottom: -1px; /\* Adjust distance of underline \*/ width: 0; height: 3px; background: white;  transition: all 0.3s ease-in-out; transform: translateX(-50%);  }  /\* Expand underline on hover \*/ .nav-links a:hover::after { width: 100%;  }    /\* main section stylings\*/ main {  padding: 20px;  }  .main-headings{ display: flex; flex-direction: column; justify-content: center; align-items: center;  }  .main-headings h2{ font-size: 2.5rem; color: white;  }  .main-headings h2 span{ color: #f08228;  }  .main-headings p{ color: white;  }  .background-clip{ position: absolute; right: 0; bottom: 0; |

|  |
| --- |
| z-index: -1;  }  .temperature-logo{ height: 40px;    }  .weather-widget div{ display: flex; align-items: center; justify-content: center; gap: 10px;    }  .weather-widget {  backdrop-filter: blur(4px); padding: 15px ; border-radius: 10px;  box-shadow: 2px 2px 10px rgba(0, 0, 0, 0.1); width: 650px; margin: 50px auto; text-align: center; color:white; font-size: 1.5rem;  }  .description{ color:#5f5d5d; text-align: center;  }    .typewriter { overflow: hidden; white-space: nowrap;  border-right: 3px solid orange; /\* Blinking cursor \*/ width: 0; font-size: 36px; font-weight: bold; color: #fff;  animation: typing 5s steps(40, end) forwards, blink 0.75s step-end infinite; }    @keyframes typing { from { width: 0; } to { width: 46%; }  } |

|  |
| --- |
| @keyframes blink {  50% { border-color: transparent; }  }  </style>  </head>  <body>  <!-- Nav bar starts-->  <nav class="navbar">  <a href="#" class="logo">  <img src="sun.png" alt="" class="weather-logo"><p>TempTrend.</p></a>  <ul class="nav-links">  <li><a href="index.html">Home</a></li>  <li><a href="hourly.html">Hourly</a></li>  <li><a href="weekly.html">Weekly</a></li>  <li><a href="about.html">About</a></li>  <li><a href="contact.html">Contact</a></li>  </ul>  </nav>  <!-- Nav bar ends -->  <!-- main section starts -->  <main>  <video autoplay loop muted plays-inline class="background-clip">  <source src="home-baground.mp4" type="video/mp4">  </video>  <div class="main-headings">  <h2 class="typewriter">Welcome to the <span> TempTrend!</span></h2>  <p>Get real-time weather updates and forecasts for your location.</p></div>  <section class="weather-widget">  <div> <img src="icons8-weather-48.png" alt="" class="temperature-logo"> <h3> Current Weather</h3></div>  <p><strong>Location:</strong> <span id="city">Loading...</span></p>  <p><strong>Temperature:</strong> <span id="temperature">--°C</span></p>  <p><strong>Condition:</strong> <span id="condition">--</span></p> </section>  <p class="description">Stay ahead of the weather with TempTrend, your go-to platform for real-time weather updates and forecasts. Whether you’re planning your day or preparing for the week ahead, our intuitive dashboard provides accurate temperature readings, current conditions, and a detailed outlook for your location. With a sleek design and easy-to-read format, TempTrend ensures you stay informed, no matter the weather. Start exploring now and never get caught off guard by unexpected changes! 🌦️✨</p> |

|  |
| --- |
| </main>  <!-- main section ends -->  <!-- javascript starts -->  <script>  const apiKey = "f00c38e0279b7bc85480c3fe775d518c"; // Replace with your OpenWeatherMap  API key  async function fetchWeather(lat, lon) { try {  const apiUrl =  `https://api.openweathermap.org/data/2.5/weather?lat=${lat}&lon=${lon}&units=metric&appid=$  {apiKey}`;  const response = await fetch(apiUrl); const data = await response.json();    // Extract weather details and update the UI document.getElementById("city").innerText = data.name;  document.getElementById("temperature").innerText = `${data.main.temp}°C`; document.getElementById("condition").innerText = data.weather[0].description;  } catch (error) {  console.error("Error fetching weather data:", error);  document.getElementById("city").innerText = "Error loading data";  }  }  function getUserLocation() { if (navigator.geolocation) {  navigator.geolocation.getCurrentPosition(  (position) => {  const { latitude, longitude } = position.coords; fetchWeather(latitude, longitude);  },  (error) => {  console.error("Geolocation error:", error);  document.getElementById("city").innerText = "Location access denied";  }  ); } else {  console.error("Geolocation is not supported by this browser."); document.getElementById("city").innerText = "Geolocation not supported";  }  }    // Fetch weather when the page loads |

document.addEventListener("DOMContentLoaded", function() { getUserLocation();

// Typewriter effect styling

const heading = document.querySelector(".typewriter"); if (heading) { heading.style.width = "50%";

}

});

</script>

<!-- java script ends -->

</body>

</html>

**Recipe Finder Website 2024-2025**

## CHAPTER 4

### Home Page

• Purpose: Acts as the landing page for the dashboard. **Recipe Finder Website** • Key Features: o Displays a welcome message and an introduction to the platform. o Uses JavaScript to fetch real-time weather updates based on the user’s location. o Includes a navbar with links to different sections of the website. o A weather widget showing location, temperature, and condition. o Typewriter animation for headings. • Technologies Used: HTML, CSS, JavaScript, OpenWeatherMap API. • Notable Elements: o Background video for visual appeal. o Uses geolocation API to fetch weather based on the user’s location. o Typewriter effect implemented using CSS animations. o Navigation links to other sections.

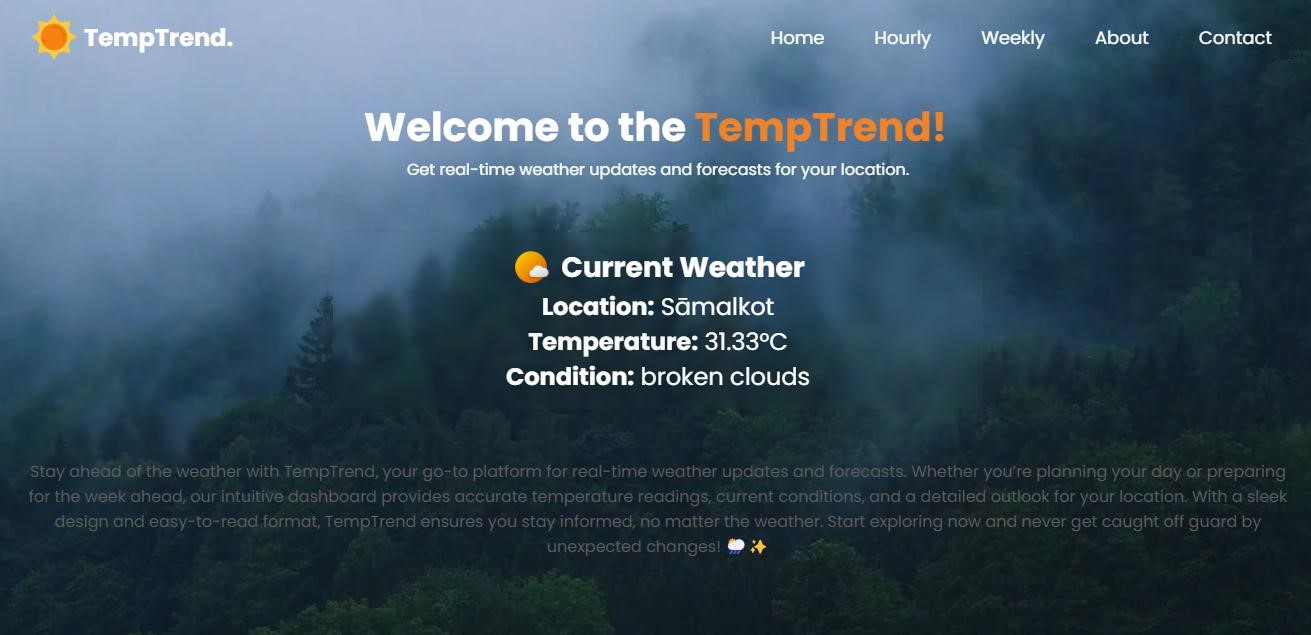


Figure: Home page

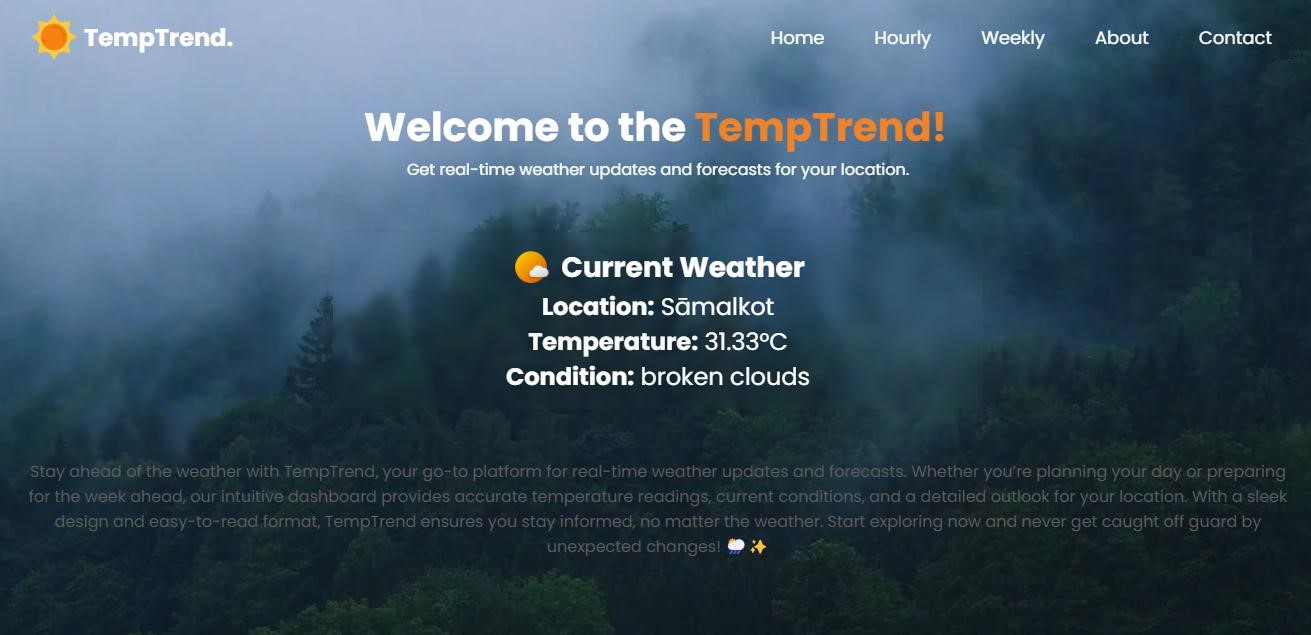
Web Pages details

1. Home Page
2. Hourly Page
3. Weekly Page
4. About Page

4. Contact Us Page

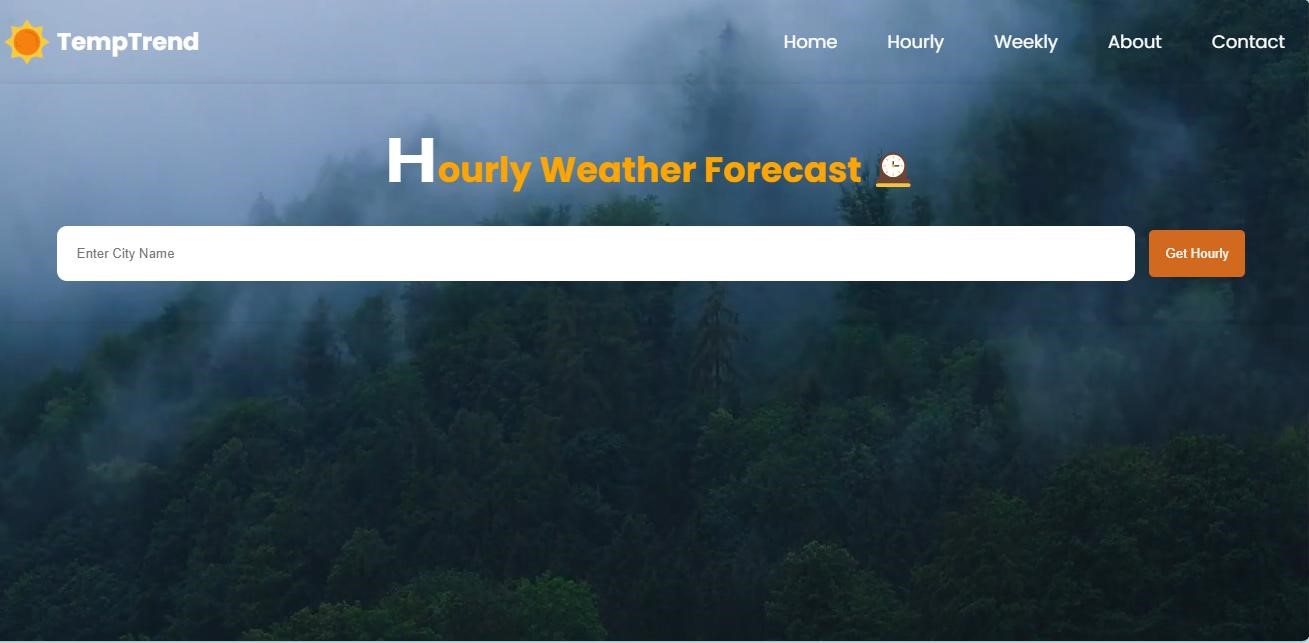
**Home Page:**

Home Screen will consist of screen were one can browse through the products which we have on our website. The following figure shown in figure 3.2



*Figure 3.2: Home page*

**Horly Page** This page consists of details about the hourly weather forecast. This page appears same for both visitors and users. The following figure shown in figure 3.3



*Figure 3.3: Hourly page*

**Weekly Page:**

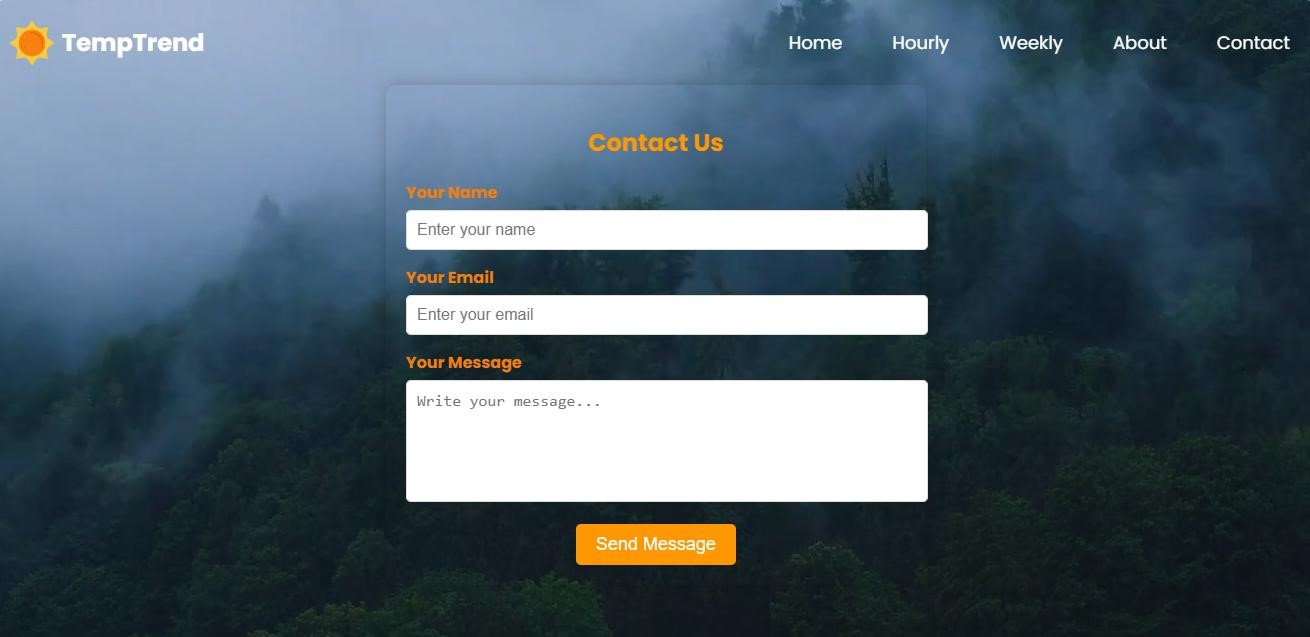
Weekly weather forecast will be shown from here. The following figure shown in figure 3.4



*Figure 3.4: Weekly Forecast page*

**Contact Us Page:**

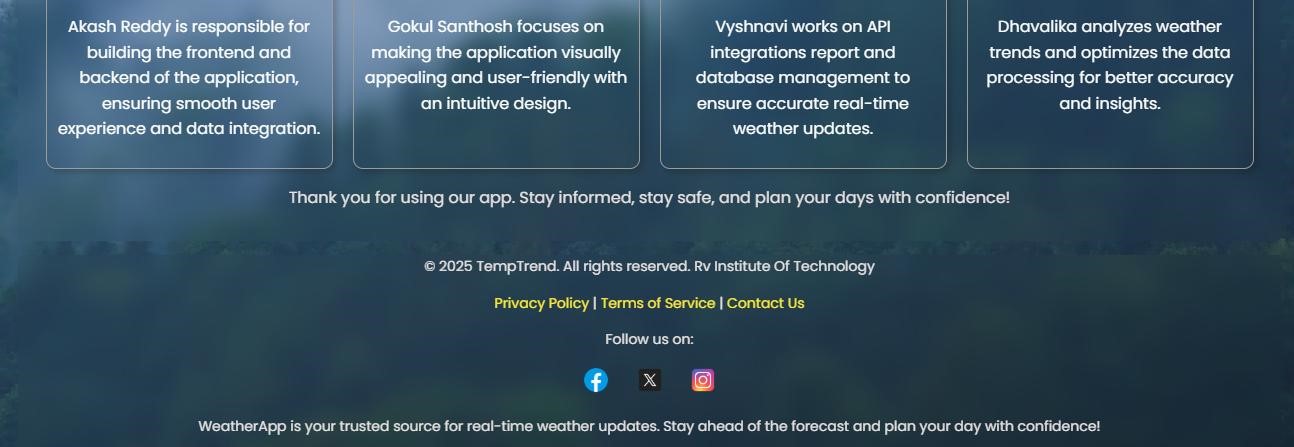
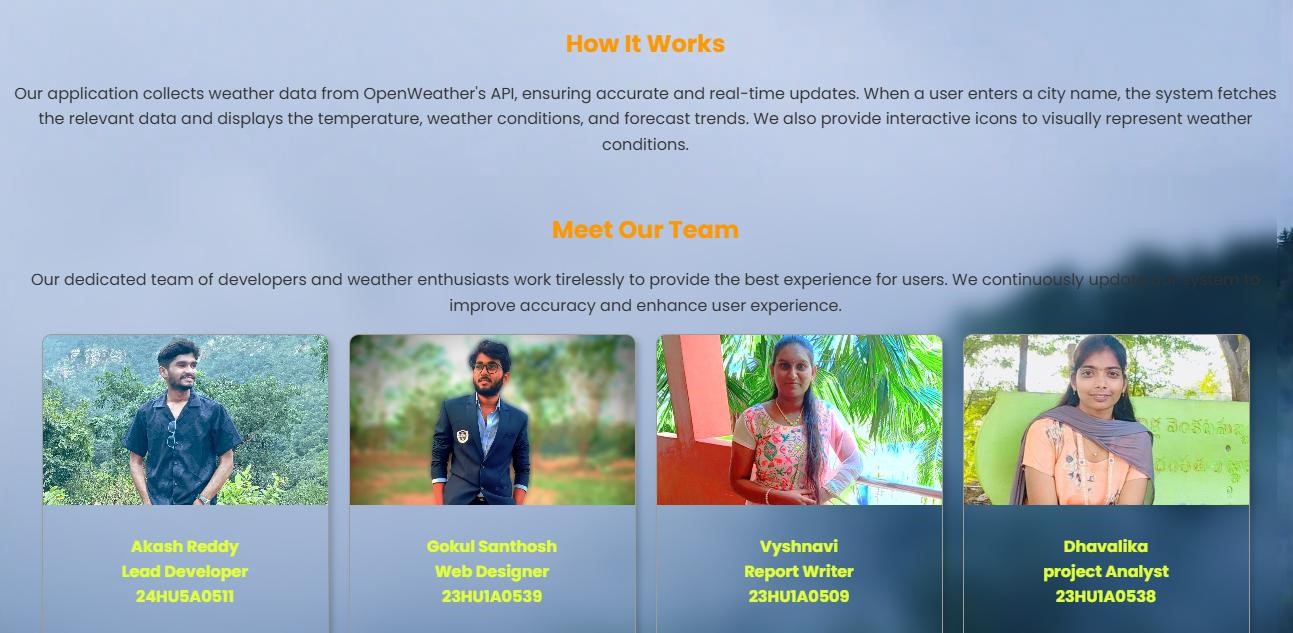
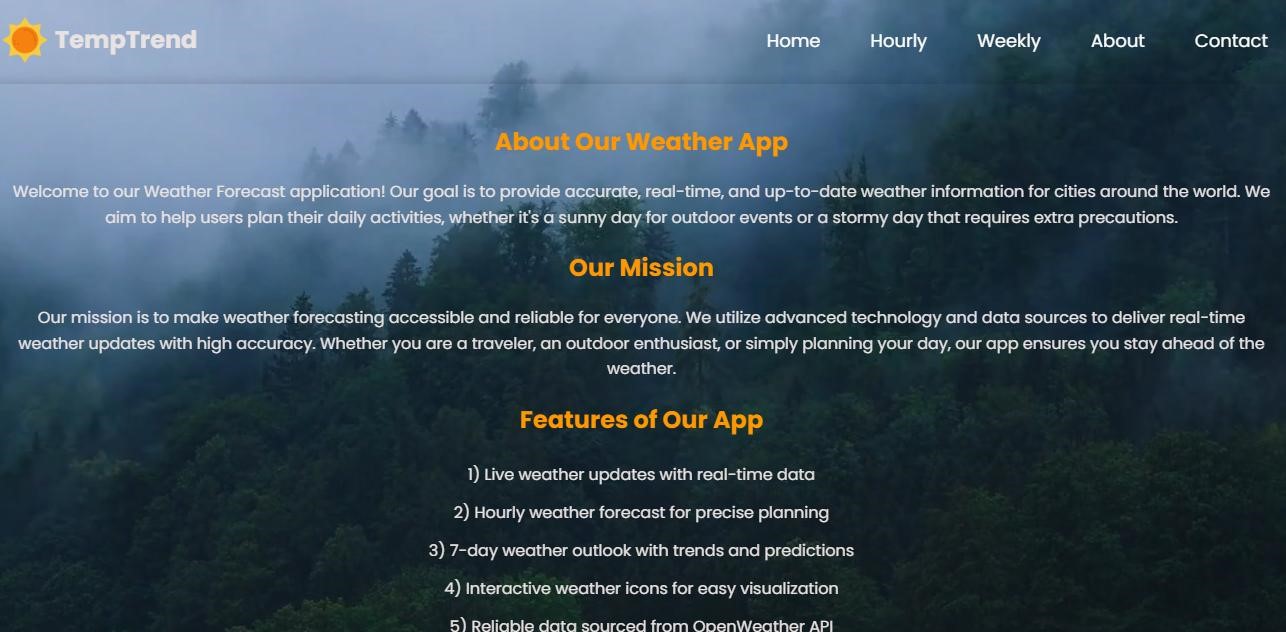
Visitors and Registered users can contact website owners or administrators from here. The following figure shown in figure 3.5



*Figure 3.5: Contact us page*

**About Page:**

This page describes about website and owners.



*Figure 3.6: About us page*

**Recipe Finder Website 2024-2025**

**CHAPTER 5**

## Resources

APIs & Data Sources

* OpenWeatherMap API – Provides real-time weather data, forecasts, and weather conditions.
* Geolocation API – Used for detecting user location and fetching weather data accordingly.
* Time Zone API – If time-based weather data is adjusted based on user location.

2. Frontend Development Technologies

* HTML5 – For structuring web content.
* CSS3 – For enhancing the visual appeal and responsiveness of the website.
* JavaScript (ES6+) – For dynamic content, API integration, and interactivity. 3. Libraries & Frameworks • Bootstrap – For responsive layout design.
* Tailwind CSS – An alternative CSS framework for custom styling.
* Chart.js – For displaying temperature trends using interactive charts.
* jQuery – If used for simplifying JavaScript functionalities.

4. UI/UX Design Tools

* Google Fonts (Poppins) – The main font used in the project.
* Adobe XD / Figma – If wireframes or prototypes were designed.
* Font Awesome – If additional icons were used for UI elements. 5. Development &

Debugging Tools

* Visual Studio Code – The primary code editor.
* Git & GitHub – For version control and collaboration.
* Chrome DevTools – For debugging and optimizing performance.
* Lighthouse – For performance and SEO testing. 6. Hosting & Deployment Services
* Netlify – If the project was deployed here.

* Vercel – An alternative hosting platform.
* GitHub Pages – If used for free static site hosting. 7. Learning Resources &

Documentation

* MDN Web Docs – A primary reference for web development.
* W3Schools – A great resource for beginners.
* Stack Overflow – For troubleshooting errors and finding solutions**.**

**Recipe Finder Website 2024-2025**

### CHAPTER 6

**Challenges & Solutions API Rate Limits:**

Implemented caching mechanisms to reduce API calls. Data Accuracy: Chose a reliable

API to ensure accurate and up-to-date weather information. Responsive Design: Used CSS media queries and Bootstrap to ensure mobile-friendly accessibility. Cross-Browser Compatibility: Tested on different browsers and fixed inconsistencies.

**CONCLUSION AND FUTURE SCOPE**

#### Conclusion

The Recipe Finder Website is a powerful and user-friendly platform that revolutionizes the way people discover and prepare meals. By offering an extensive collection of recipes tailored to users’ preferences, dietary needs, and available ingredients, the website simplifies the cooking experience and encourages healthier eating habits.

#### Future Scopes

Especially if I don't have any experience. Finding work can be a real challenge. A successful internship can help me turn an experience into a career opportunity. So as a successful internship my future scopes will be:

User Authentication:

Allow users to save favorite locations.

Dark Mode Feature: Implement a theme toggle option.

Additional Weather Parameters: Include UV index, air quality, and precipitation levels. Voice Search Integration: Enable users to search via voice commands