**SIX WEEK INDUSTRIAL TRAINING REPORT**



**Submitted By :**

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Under the Guidance of :

Mr. Zippenderpal Singh

**Weather Web Application**

Submitted in partial fulfilment of the

Requirements for the award of

Semester Training

At

ALPHANUMERICIDEAS PVT. LTD.

(JUNE12,2023 – JULY 26,2023)

**ABSTRACT**

Industrial training is an important phase of a student life. A well planned, properly executed and evaluated industrial training helps a lot in developing a professional attitude. It develops an awareness of industrial approach to problem solving, based on a broad understanding of process and mode of operation of organization. During a period of training at Alphanumericideas pvt. Ltd., most of the theoretical knowledge that has been gained during the course of studies is put to test. I have been assigned to accomplish various tasks which included measurement of work done. Throughout my industrial training, I was able to apply the skill and knowledge acquired from lecture to complete my work in practice. I learn and experience new things which helpful for me to put in various tasks done by me. On the other hands, as a trainee, good attitude is a must to have in order to follow and complete the instructions given although it is miscellaneous works.

**DECLARATION**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SHAHEED BHAGAT SINGH STATE UNIVERSITY

STUDENT’S DECLARATION

I, Nazam Kalsi hereby declare that I have undertaken six weeks industrial training at Alphanumericideas pvt. Ltd. during a period from 21st of June 2023 to 26th of July 2023 in partial fulfilment of requirements for the award of degree of B-Tech (Computer Science Engineering) at Shaheed Bhagat Singh State University, Ferozepur. The work which is being presented in the training report is an authentic record of training work.

Nazam Kalsi

211462

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# **CERTIFICATE OF TRAINING**



# **CHAPTER 1**

# INTRODUCTION TO THE PROJECT

## INTRODUCTION

Weather plays a significant role in our daily lives, influencing our decisions about clothing, travel, and outdoor activities. Accurate and timely weather information is crucial for making informed choices and ensuring safety. A weather web app offers a convenient and accessible platform to access real-time and up-to-date weather data, catering to the diverse needs of users.

The world of weather forecasting has evolved significantly in recent years, with advancements in technology enabling the development of sophisticated web applications that provide comprehensive weather information. Weather web apps have become an indispensable tool for individuals, businesses, and organizations, offering a wealth of benefits:

* **Real-time weather updates**: Users can access current weather conditions for any location, including temperature, humidity, wind speed, and weather description.
* **Detailed forecasts:** Weather web apps provide detailed forecasts for the upcoming days. These forecasts include temperature, humidity, wind speed, precipitation probability, and weather descriptions, allowing users to plan their activities accordingly.
* **Location-based services**: Users can search for locations by city name to view the corresponding weather information. Geolocation features enable the app to automatically detect the user's current location and display the weather data for their surroundings.
* **Alerts and notifications**: Provide users with customizable alerts and notifications based on specific weather conditions, such as severe weather warnings or sudden changes in temperature.

# **CHAPTER 2**

# PROJECT OBJECTIVES

## **PROJECT OBJECTIVES**

The Weather Web App project has several key objectives to ensure the development of a functional, user-friendly, and reliable platform for accessing real-time weather information. The primary project objectives include:

**Accuracy of weather data :**

Provide real-time weather conditions for any specified location, including temperature, humidity, wind speed, and weather description. Allow users to access historical weather data for a specified location to track weather patterns and trends over time.

**User-Friendly Interface :**

An intuitive and responsive user interface to cater to users with varying levels of technical expertise. Prioritize user experience by creating a visually appealing and easy-to-navigate design.

**Performance :**

Optimize data retrieval and processing to minimize latency and improve response times. Implement caching mechanisms to store frequently accessed data and reduce server load.

**Geographical Coverage :**

Ensure that the application covers a wide range of geographical locations to make it globally applicable. Provide users with the ability to access weather information for diverse regions around the world.

# **CHAPTER 3**

# TECHNOLOGY/TOOLS USED AND

# HARDWARE RUIREMENTS

## **TECHNOLOGIES AND TOOL USED**

**Hardware Used**

* Operating System : Windows
* Processor : Ryzen 5 5500U
* RAM : 8 G.B.
* System Type : 64-bit OS
* Version control : Git , GitHub
* Network : Standard high-speed internet connection

**Software Used**

* Code Editor : Visual Studio Code
* Programming Language : H.T.M.L , C.S.S. , JavaScript
* Graphics : Adobe Photoshop 2023,Figma
* Browser : Google Chrome

## **PROGRAMMING LANGUAGES**

**HTML**

HTML, or Hypertext Markup Language, is the fundamental language used in web development to structure and present content on the internet. Developed by Tim Berners-Lee in 1991, HTML serves as the backbone of web pages by utilizing tags to define elements such as headings, paragraphs, images, links, and more. These tags create a hierarchical structure, allowing browsers to interpret and display content accurately. HTML is integral to the World Wide Web Consortium (W3C) standards, ensuring consistency across different browsers. It provides the foundation for building responsive and interactive websites, supporting the integration of multimedia elements and linking to external resources. As technology evolves, HTML undergoes updates to accommodate new features and enhance the capabilities of web development, making it an essential language for both novice and experienced web developers.

**CSS**

CSS, or Cascading Style Sheets, is a crucial language in web development that complements HTML by defining the visual presentation of a document written in markup language. Developed by the W3C, CSS allows developers to control the layout, formatting, and design of web pages. By employing selectors and properties, CSS enables the customization of fonts, colors, spacing, and positioning of HTML elements. The "cascading" nature of CSS allows for the creation of style rules that can be inherited, overridden, or combined, providing flexibility in design. This separation of content (HTML) and presentation (CSS) enhances the efficiency and maintainability of web development projects. CSS3, the latest version, introduces advanced features like animations, transitions, and responsive design, empowering developers to create visually appealing and user-friendly websites across various devices and screen sizes.

**JAVASCRIPT**

JavaScript, often abbreviated as JS, is a versatile and essential programming language primarily used for creating dynamic and interactive content on the web. Developed by Netscape in 1995, JavaScript allows developers to manipulate and control the behavior of web pages in response to user interactions. As a client-side scripting language, it runs directly in the user's browser, reducing the need for constant communication with the server. JavaScript is instrumental in enhancing user experience by enabling features such as form validation, image sliders, and dynamic content updates without requiring page reloads. Its versatility extends beyond the browser with the advent of server-side frameworks like Node.js. JavaScript is a core technology in modern web development, fostering the creation of responsive, engaging, and feature-rich applications across a wide range of platforms.

## **TOOLS USED**

* Google Chrome (Web Browser)
* Visual Studio Code (I.D.E)
* Windows (O.S.)
* Photoshop 2023,Figma

Google Chrome is a preferred browser in website development due to its speed, compatibility, and robust developer tools. Its support for modern web standards ensures seamless testing and debugging.

Visual Studio Code (VS Code) is a lightweight yet powerful source code editor widely used in website development. Its intuitive interface, robust extensions, and debugging capabilities enhance coding efficiency and collaboration.

Windows OS is a popular choice for website development, providing a user-friendly environment for coding, testing, and deploying web applications. It supports various development tools and integrates seamlessly with web servers.

Figma is a cloud-based design and prototyping tool that enables collaboration among designers in real-time. It is widely used for UI/UX design, web design, mobile app design, and other digital product design projects.

Adobe Photoshop is a powerful graphics editing software developed by Adobe Inc. It is widely used by designers, photographers, and artists for various purposes, including photo editing, graphic design, digital painting, and more.

# **CHAPTER 4**

# OUTCOMES OF THE PROJECT

## **OUTCOMES OF THE PROJECT**

Aligning with the project objectives and contributing to the overall success of the application. The outcomes include :

**Accessible Real-Time Weather Information :**

Users can access accurate and up-to-date weather information for their specified locations. The application provides current weather conditions, forecasts, and additional meteorological data in a user-friendly format.

**Intuitive User Interface :**

The user interface is designed to be intuitive and responsive, catering to users with various levels of technical proficiency. Users can easily navigate the Web app, enhancing the overall user experience.

**Global Geographical Coverage :**

The application covers a wide range of geographical locations, allowing users to obtain weather information for different regions globally. Users can search for and retrieve weather data for specific locations of interest.

**Data Accuracy and Reliability :**

The implemented mechanisms ensure the accuracy and reliability of weather data. Robust algorithms and reliable data sources contribute to trustworthy weather forecasts and conditions.

THANK YOU !