Level 1 – Task 3: Temperature Converter

---

1. Introduction

As part of the OASIS INFOBYTE Web Development Internship (Level 1), Task 3 involved developing a Temperature Converter web application. The aim of this task was to understand how JavaScript can be used along with HTML and CSS to create an interactive and functional web application. This task focused on handling user input, performing calculations, and dynamically displaying results on a webpage.

---

2. Objective of the Task

The main objectives of Task 3 were:

- To create a temperature conversion tool using web technologies
- To use JavaScript for performing logical calculations
- To handle user inputs and display dynamic results
- To integrate HTML, CSS, and JavaScript into a single project
- To improve problem-solving and logical thinking skills

---

3. Tools and Technologies Used

- **HTML5** – For structuring the user interface
- **CSS3** – For styling the layout and improving visual appearance
- **JavaScript** – For implementing temperature conversion logic
- **Visual Studio Code** – Code editor used for development
- **Web Browser** – For testing and validating functionality

---

4. Description of the Temperature Converter Application

The Temperature Converter application consists of a simple and user-friendly interface placed at the center of the screen with a visually appealing gradient background.

a) Input Field

- Allows the user to enter a numerical temperature value
- Uses HTML input type number to ensure valid input

b) Conversion Selector

- Provides multiple conversion options using a dropdown menu:
    - Celsius to Fahrenheit
    - Fahrenheit to Celsius
    - Celsius to Kelvin

c) Convert Button

- Triggers the JavaScript function to perform conversion
- Demonstrates event handling using the onclick attribute

d) Result Display

- Displays the converted temperature dynamically
- Updates instantly after clicking the convert button

---

5. Key Features Implemented

- Clean and centered UI layout
- Gradient background for modern appearance
- Input validation using number input type
- Dropdown-based unit selection
- JavaScript-based calculation logic
- Dynamic DOM manipulation for result display

---

6. Learning Outcomes

Through this task, I learned:

- How to connect JavaScript with HTML elements
- How to read user input values and apply conditions
- How to perform mathematical calculations using JavaScript
- How to update content dynamically on a webpage

- How to design interactive web applications

---

7. Conclusion

The successful completion of Task 3 strengthened my understanding of JavaScript fundamentals and its role in web development. Building the Temperature Converter application helped me apply logic-based programming concepts and improved my ability to create interactive user interfaces. This task played an important role in enhancing my overall front-end development skills.

Submitted by: Tejaswini Pramod Sonawane
Internship Domain: Web Development
Organization: OASIS INFOBYTE