

Currency & Temperature Converter

Full Project Documentation

Name: Utitbest Akpan

Internship Program: Flexisaf Internship Program

Date: August 1, 2025

Live URL: <https://currency-temperature.netlify.app>

1. Project Overview

This project is a single-page web application that allows users to convert currencies using live exchange rates and convert temperatures between Celsius, Fahrenheit and Kelvin. It is designed to be fast, easy to use, and visually engaging with smooth tab transitions and animations.

2. Problem Statement

Many users face challenges using cluttered or confusing conversion tools for currency and temperature. Existing apps are often filled with ads or require extra navigation to switch between functions. This project addresses those pain points by offering a clean and intuitive interface with accurate real-time conversion.

3. Objectives

- ✓ To build a user-friendly converter for both currency and temperature.
- ✓ To fetch and display live exchange rates from a free API.
- ✓ To improve the user experience with smooth tab navigation and simple animations.

4. Technologies Used

- ✓ HTML - for structuring the content
- ✓ CSS - for styling and layout
- ✓ JavaScript - for functionality and API integration
- ✓ Vite - for fast local development and production build
- ✓ Free Currency API - for real-time exchange rates
- ✓ Netlify - for deployment

5. Features

- ✓ Live currency conversion between any two currencies
- ✓ Temperature conversion between Celsius and Fahrenheit
- ✓ Tab-based navigation between currency and temperature sections
- ✓ Flip-style animation for a smooth UI experience

- ✓ Mobile-responsive layout
- ✓ Clean, minimal interface

6. How It Works

- ✓ The app has two main tabs: Currency Converter and Temperature Converter.
- ✓ The currency tab fetches live exchange rates using a public API.
- ✓ The temperature tab allows conversion between Celsius, Fahrenheit and Kelvin with built-in JavaScript calculations.
- ✓ A flip animation is used when switching conversion direction to enhance UX.

7. Limitations

- ✓ The app requires an internet connection to fetch live currency data.
- ✓ It does not currently support offline mode.

8. Conclusion

The project successfully delivers a clean, functional tool for users to convert both currencies and temperatures easily. It combines essential conversion features with a user-friendly design and demonstrates core front-end development skills using HTML, CSS, JavaScript, and Vite.