# Report on

Currency Converter

(CSE IV semester)

*2024-2025*



**SUBMITTED TO: SUBMITTED BY:**

Mrs. Manvi Bohra Aman pundir

(Ass. Prof.) Roll NO. 2218321

CSE/C1 2024-2025

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GRAPHIC ERA HILL UNVERSITY, DEHRADUN

# CERTIFICATE

Certified that Mr. Aman pundir (Roll no- 2218321) have

# Completed project report on “Currency converter”, for the fulfilment of CSE IV Semester Mini Project in Graphic Era Hill University, Dehradun. I have successfully Completed this project report as best of my knowledge.

Date: 12/07/2024 Mrs. Manvi Bohra Class Coordinator CSE Department GEHU, Dehradun

**Currency converter project**

1. Introduction

This report details the development and functionality of the Currency Converter project, a web application designed to provide users with real-time currency conversion. Utilizing modern web technologies such as HTML, CSS, and JavaScript, the application integrates external APIs to fetch live exchange rates and country flags, ensuring an accurate and dynamic user experience.

2. Project Description

The Currency Converter allows users to convert an amount from one currency to another by selecting the source and target currencies from a dropdown menu. The conversion rates are fetched in real-time from an external API, ensuring that the user always has access to the most current exchange rates.

3. Features

* **Input Fields:**
  + Users can enter the amount they want to convert.
  + Source and target currencies are selectable from dropdown menus.
* **Live Exchange Rate Retrieval:**
  + The application fetches live exchange rates via JavaScript, keeping conversions accurate and up-to-date.
* **Conversion Calculation:**
  + JavaScript dynamically calculates the converted amount based on user input and current exchange rates.
* **Result Display:**
  + The converted amount is prominently displayed with source and target currencies, along with clear guidance messages.
* **Styling:**
  + The application features a visually pleasing and responsive layout designed with CSS.
* **Responsive Design:**
  + Ensures a seamless experience across various devices including desktops, tablets, and smartphones.

4. Technologies Used

* **HTML:** Provides the structural framework of the application.
* **CSS:** Responsible for the visual styling and layout of the application.
* **JavaScript:** Handles the logic for fetching live exchange rates, performing the conversion, and updating the UI dynamically.

5. APIs Used

* **Currency Exchange Rate API:** [Currency API by fawazahmed0](https://github.com/fawazahmed0/currency-api)
* **Country Flag Generation API:** [Flags API](https://flagsapi.com/)

6. Project Structure

* README.md: Contains project description, features, setup instructions, and other relevant information.
* app.js: JavaScript file responsible for fetching exchange rates and performing currency conversions.
* codes.js: Additional JavaScript functionalities possibly related to currency codes.
* index.html: Main HTML file structuring the web page.
* style.css: CSS file for styling the web page.

7. Implementation

To get started with the project, follow these steps:

1. Clone the repository to your local machine.
2. Open index.html in your preferred web browser to access the application.

The primary JavaScript functionality is housed in app.js, where the exchange rates are fetched using the Fetch API, and the conversion logic is implemented. The HTML and CSS files provide the structure and styling, respectively.

8. Potential Enhancements

* **Additional Currencies:**
  + Expand the list of available currencies for conversion.
* **Graphical Features:**
  + Implement features such as a currency rate graph for visual representation of historical data.
* **User Interface Improvements:**
  + Enhance the UI with animations and transitions for a smoother user experience.

9. Conclusion

The Currency Converter project is a robust application that combines real-time data retrieval with user-friendly interface design. The integration of APIs ensures that the currency conversions are accurate and up-to-date. Future enhancements could further extend the functionality and improve the user experience.

10. References

* Currency Exchange Rate API: [Currency API by fawazahmed0](https://github.com/fawazahmed0/currency-api)
* Country Flag Generation API: [Flags API](https://flagsapi.com/)