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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING (DATA SCIENCE)

PROJECT REPORT ON

"CURRENCY CONVERTOR"

*2nd Year - 3rd Sem – **A sec***

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BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE & ENGINEERING

(DATA SCIENCE)

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CERTIFICATE

has been carried out at Dayananda Sagar University, Bangalore, by

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Bonafide students of third Semester, B.tech.in partial fulfilment for the award of degree in Bachelor of Technology in Computer Science & Engineering (Data Science) during academic year 2024-25. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work for the said degree.

Signature of the guide

10/12/24

Signature of the chairperson

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<u>ABSTRACT</u>

This Currency Convertor Website project is based on Web Development . The project is based on the existing personal visual identity of the student . This website is developed using HTML , CSS and JS .Code editor used for this is VS code .

It displays the professional background of the individual . It displays brief information about the work experience till date , skills , projects , contact information and also to create your own personal currency convertor . All the elements are rendered distinctively on the website.

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<u>INTRODUCTION</u>

- Currency converters are tools that allow users to convert amounts from one currency to another.

- They are essential for travelers, businesses, and anyone dealing with international transactions.

- Understanding how to use a currency converter can save time and money.

- Currency converters use current exchange rates to calculate the equivalent value of different currencies.

- The rates are usually sourced from financial markets, banks, and currency exchange services.

- Many converters allow users to input an amount and select currencies to receive an instant conversion.

- There are various types of currency converters, including online tools, mobile apps, and physical kiosks.

- Online converters are often free and accessible from anywhere with an internet connection.

- Specialized converters may offer additional features such as historical data and rate alerts.

<u>TECHNOLOGY USED</u>

The Currency Convertor Website is developed using a combination of HTML , CSS , and Javascript .

- ➢ Basic HTML (Hyper Text Markup Language) is used for structuring the content of the website.
- ➢ CSS (Cascading Style Sheets) is used for layout , color schemes , to control the presentation and design aspects of the website.
- ➢ Javascript is used for navigation , smooth scrolling , form validation.

OBJECTIVE

The objective of a currency converter is to provide a tool that enables users to easily and accurately convert one currency into another based on the current exchange rate.

Key Objectives:

1. Facilitate International Transactions:

Allow individuals and businesses to calculate the value of a currency when converted into another for trade, travel, or investment.

2. Provide Real-Time Exchange Rates:

Fetch and display the latest exchange rates to ensure accurate conversions.

3. Enhance Accessibility:

Provide a simple and user-friendly interface for users with little to no financial knowledge.

4. Support Financial Planning:

Help users plan budgets for travel, investments, or business by understanding the equivalent value in another currency.

5. Convenience:

Eliminate the need for manual calculations, saving time and reducing the chances of errors.

6. Multicurrency Support:

Allow users to choose from a wide range of global currencies for conversion.

7. Educational Use:

Serve as a learning tool for individuals to understand the dynamics of foreign exchange markets.

Feasibility Study / Motivation

Feasibility:

This project is technically feasible and can be completed within the allocated timeframe. The use of widely recognized web development technologies such as **HTML**, **CSS**, and **JavaScript** ensures the project is manageable, even for a beginner to intermediate web developer. These technologies are well-documented and supported by a vast community, which makes it easier to find resources and solve problems during development. Furthermore, using **Bootstrap** will expedite the creation of a responsive layout, eliminating the need to manually code responsiveness from scratch.

Need for the Project:

A personal portfolio website is an essential tool for any professional in today's digital world. It provides a centralized, easily accessible platform for employers and clients to learn more about an individual's work. With the increasing trend of remote work and freelancing, having an online portfolio is even more crucial for establishing credibility and attracting opportunities. This portfolio will allow the user to share their background, skills, projects, and achievements in a cohesive manner, creating a lasting impression on visitor.

__Methodology / Planning of Work__

The development of the personal portfolio website will be carried out in a structured, step-by-step approach:

1. Stage 1: Planning & Requirements Gathering

    o   Define project requirements: Decide the sections to be included in the website (e.g., About Me, Skills, Projects, Contact).

    o   Research best practices: Study examples of successful personal portfolios to gather design inspiration and understand common features.

    o   Create a wireframe: Sketch the layout of the website to decide where each section will be placed, how the navigation will work, and the overall flow of the user experience.

2. Stage 2: Design & Layout

    o   Create high-fidelity mock-up's: Use tools like Figma or Adobe XD to design the visual layout, including colours, fonts, and imagery.

    o   Design mobile-first: Ensure that the website is designed to work seamlessly on mobile devices first, and then scale up for larger screens.

    o   Choose a consistent color scheme and typography: Select a professional color palette that reflects the individual's style and ensure consistency across all pages.

3. Stage 3: Front-End Development

    o   Develop the structure using HTML: Create the base structure of the website using HTML.

    o   Style the website with CSS: Use CSS for layout and design, implementing styles for typography, colors, margins, padding, and more. Implement CSS Flexbox or Grid for layout management.

- o Add interactivity with JavaScript: Implement smooth scrolling, image sliders, form validation, and other interactive features using JavaScript.

- o Integrate Bootstrap: Use Bootstrap to create a responsive design that works across devices of all sizes.

4. Stage 4: Testing

- o Test for responsiveness: Ensure that the website looks and works well on different devices (desktop, tablet, mobile).

- o Test for browser compatibility: Test the website on popular browsers like Chrome, Firefox, and Safari to ensure it functions properly across platforms.

- o Conduct user testing: Ask a few people to navigate the site and provide feedback on the usability and design of the website.

5. Stage 5: Deployment

- o Deploy the website: Host the website using platforms like GitHub Pages or Netlify for free hosting.

- o Test live version: Ensure that the deployed website is fully functional and accessible to the public.

6. Stage 6: Documentation & Final Report

- o Prepare documentation: Write a report explaining the project, the technologies used, and the development process.

- o Submit the project: Submit the project along with the final report and all source files.

SOFTWARE REQUIREMENTS

Software:

- o Text Editors: Visual Studio Code, Sublime Text, or Atom for code editing.

- o Web Browsers: Google Chrome, Firefox, Safari for testing.

- o Version Control: Git and GitHub for source code management.

- o Design Tools: Figma, Adobe XD (for mock-up's and wireframing).

- o Framework: Bootstrap (for responsive design) and React (optional for dynamic features).

- o Hosting Platforms: GitHub Pages, Netlify for deployment.

Hardware:

A personal computer or laptop with an internet connection to write code and test the website.

SOURCE CODE

```
<!DOCTYPE html>

<html>

<head>

  <title>Currency Converter</title>

  <style>

    table {

      background-image:url('https://png.pngtree.com/thumb_back/fh260/background/20231027/pngtree-
hexagonal-abstract-background-with-a-black-textured-surface-image_13704307.png');

      padding: top 200px;

      margin: auto;

      border-collapse: collapse;

    }

    th, td {

      padding: 10px;

      text-align: center;

      color: brown;


    }

    th {

      font-size: 18px;

      font-weight: bold;

    }

    body{

      background-
image:url('https://as1.ftcdn.net/v2/jpg/02/05/78/28/1000_F_205782839_kxZLF6DlXeFqiShLTKc5UKwVU2OJlM
oM.jpg');

      background-repeat:no-repeat;
```

```
        background-size: cover;
    }
</style>
<script type="text/javascript">
    function calc(clicked_id) {
        var amount = parseFloat(document.getElementById("value1").value);
        if (isNaN(amount) || amount <= 0) {
            alert("Please enter a valid number.");
            return;
        }

        let conversionRates = {
            us: 0.012,
            er: 0.011,
            pd: 0.0094,
            ca: 0.016,
            au: 0.019,
            ar: 0.045,
            sr: 0.045,
            af: 0.22,
            me: 0.22,
            br: 0.059,
            rr: 1.17,
            ja: 1.76,
            ch: 0.089,
            sw: 0.011,
            si: 0.016,
        };

        var rate = conversionRates[clicked_id];
        document.getElementById("answer").value = (amount * rate).toFixed(2);
    }
```

```html
    function cls() {

        document.getElementById("value1").value = "";

        document.getElementById("answer").value = "";

    }

  </script>

</head>

<body >

  <table border="1">

    <tr><th colspan="4">Currency Converter</th></tr>

    <tr>

      <td>Amount:</td>

      <td colspan="3"><input type="text" id="value1" placeholder="Enter amount in INR" /></td>

    </tr>

    <tr>

      <td><input type="button" value="USD" id="us" onclick="calc(this.id)" /></td>

<td><input type="button" value="EURO" id="er" onclick="calc(this.id)" /></td>

      <td><input type="button" value="POUND" id="pd" onclick="calc(this.id)" /></td>

    </tr>

    <tr>

      <td><input type="button" value="CANADA" id="ca" onclick="calc(this.id)" /></td>

      <td><input type="button" value="AUSTRILIA" id="au" onclick="calc(this.id)" /></td>

      <td><input type="button" value="ARABED" id="ar" onclick="calc(this.id)" /></td>

    </tr>

    <tr>

      <td><input type="button" value="SOUTHAFRICA " id="sr" onclick="calc(this.id)" /></td>

      <td><input type="button" value="NEWZEALAND" id="af" onclick="calc(this.id)" /></td>

      <td><input type="button" value="MEXICON" id="me" onclick="calc(this.id)" /></td>

    </tr>

    <tr>

      <td><input type="button" value="BERLIAN" id="br" onclick="calc(this.id)" /></td>

      <td><input type="button" value="RUBE" id="rr" onclick="calc(this.id)" /></td>

      <td><input type="button" value="JAPAN" id="ja" onclick="calc(this.id)" /></td>

    </tr>
```

```
        <tr>

            <td><input type="button" value="CHINESE" id="ch" onclick="calc(this.id)" /></td>

            <td><input type="button" value="CHINA" id="sw" onclick="calc(this.id)" /></td>

            <td><input type="button" value="SINGAPORE" id="si" onclick="calc(this.id)" /></td>

        </tr>

        <tr>

</body>

</html>
```

OUTPUT

CONCLUSION

The objective of a currency converter is to provide a tool that enables users to easily and accurately convert one currency into another based on the current exchange rate.

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