**Capital University of Science & Technology**

**Term Project Proposal**

Department of Electrical and Computer Engineering

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| **Project Title** | | *Currency Converter with Fixed Exchange Rates* | |
| **Course Title** | | Applications of Information and communication technology | |
| **Sr. No.** | **Student Name** | | **Registration Number** |
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| **Idea:**  This project aims to develop a user-friendly application that allows users to convert amounts between different currencies using a set of fixed exchange rates. The application will provide a simple and intuitive interface for users to input the amount to be converted, select the source and target currencies, and receive the converted amount.  **Key Features:**  **Currency Selection**:  • Users can select from a predefined list of currencies.  • The list of supported currencies can be easily updated or expanded.  Fixed Exchange Rates:  •The application will utilize a set of fixed exchange rates for each currency pair.  • These rates can be manually entered or imported from a separate file (e.g., CSV).  **Objectives:**  **Functional Objectives:**  • Accurate Conversion: Ensure precise currency conversions based on the provided fixed exchange rates.  • User-Friendly Interface: Create an intuitive and easy-to-navigate interface for users of all levels.  • Comprehensive Currency Support: Offer a wide range of supported currencies to cater to diverse user needs.  • Data Management: Implement efficient methods for storing, managing, and updating fixed exchange rates.  •Error Handling: Gracefully handle invalid inputs and provide informative error messages to the user.  **Applications:**  Some of the applications of a Currency Converter with Fixed Exchange Rates: 1**. Travel Planning:** •Budgeting: Travelers can use the converter to estimate costs in their local currency for accommodation, transportation, food, and other expenses in their destination. This helps them create a realistic travel budget and avoid overspending. •Comparison Shopping: The converter allows travelers to compare prices of similar goods and services in different currencies. For example, they can compare the cost of a hotel room in different cities or countries to find the best deal. •Expense Tracking: Travelers can use the converter to track their spending in foreign currencies and monitor their budget throughout the trip. This helps them stay within their budget and avoid unexpected costs. 2**. Online Shopping:**  **•**Price Comparisons: Online shoppers can easily convert prices from foreign online stores to their local currency. This allows them to compare prices from different vendors around the world and find the best deals. •Understanding Total Costs: The converter helps shoppers understand the total cost of imported goods, including shipping, potential customs fees, and any applicable taxes, all expressed in their local currency. 3. **International Trade:**  **•**Cost Calculations: Businesses involved in international trade can use the converter to accurately calculate the costs of importing and exporting goods, including the cost of raw materials, production, and transportation. •Invoice Generation: Businesses can use the converter to generate invoices in the local currency of their international clients. 4. **Educational Purposes:** •Learning Currency Concepts: Students can use the converter to learn about exchange rates, how they are determined, and the relationships between different currencies.  **Block Diagram:**  **Explanation:** **User Input:**   •Source Currency: User selects the initial currency.   •Target Currency: User selects the desired currency to convert to.   •Amount: User enters the amount to be converted. **Exchange Rate Data:**   •Storage: Fixed exchange rates are stored in a data structure (e.g., array, dictionary, database).   •Retrieval: The system retrieves the appropriate exchange rate based on the selected source and target currencies. **Conversion Calculation:** •Formula: The system applies the formula: Converted Amount = Amount \* Exchange Rate •Calculation: The system performs the calculation to determine the converted amount. **Output:**  •Display: The system displays the converted amount to the user. |

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| **Instructor Remarks** | **Student 1 Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
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| **Instructor’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |