**Currency Converter with Role-Based Access Control**

**Project Description:**

This project is a Role-Based Currency Converter System with both Admin and User Management functionality. It implements Authentication, Authorization, and Role-Based Access Control (RBAC) to ensure secure access to resources. The application showcases practical implementation of the core security principles mentioned in the assignment:

Authentication: Ensures that only registered users can log in and access the system.

Authorization: Restricts actions based on user roles (e.g., Admin, User).

Role-Based Access Control (RBAC): Controls what each role can access or modify within the system.

This project serves as a comprehensive example of a secure system with well-defined access control mechanisms.

**Features**

Authentication

User Registration: New users can register with a unique username, email, and password.

Secure Login: Registered users can log in using their credentials. Passwords are securely hashed.

Logout: Users can securely log out of their session.

Role-Based Access Control (RBAC)

Admin Role:

Can view all registered users.

Can delete users from the system.

Access to the Admin Dashboard.

User Role:

Access to the currency converter feature.

Cannot access admin functionalities or manage users.

Currency Conversion

Convert between multiple currencies with real-time rates (using APIs for exchange rate data).

User-friendly interface for seamless conversion.

Secure Design

Password Hashing: Passwords are hashed using secure algorithms before being stored in the database.

Session Management: Uses PHP sessions to manage user login and restrict unauthorized access.

SQL Injection Prevention: Ensures queries are parameterized to prevent SQL injection attacks.

Here’s a detailed README file and project description tailored to your Currency Converter with Admin and User Management Project, formatted to meet the VRV Security internship assignment requirements.

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**Tech Stack**

Frontend: HTML, CSS, Bootstrap

Backend: PHP

Database: MySQL

APIs: Integrated with real-time currency exchange rate APIs.

Security: Session-based authentication, password hashing, and role-based access control.

**OUTPUTS**









