

Security Features

INTERNET APPLICATION DEVELOPMENT

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Orphanage's Establishment System

1. Introduction

In many orphanages, records of children, donors, staff, and donations are still maintained manually, leading to inefficiencies, lack of transparency, and difficulty in access. The project aims to digitalize orphanage management with a user-friendly and secure web application that simplifies operations and enhances trust among stakeholders. It's my lifelong dream to establish an orphanage, manage it solely and give a beautiful life to all the forgotten children of the world.

2. Objectives

- To provide a centralized platform for managing children profiles, staff, donors, and donations.
- To ensure data security and validation at all stages.
- To support role-based access for Admins, Staff, and Donors.
- To automate reports, notifications, and tracking of daily orphanage activities.

3. Security Features

The **7 essential security features** for the Orphanage Management System are:

1. User Authentication (Login System)

Only registered users (Admins, Staff) can log in using their credentials. This ensures that only authorized personnel can access and manage the system.

2. Role-Based Access Control

Users are assigned roles (Admin, Staff). Each role can access only their relevant features (e.g., Staff can view but not delete donations).

3. Input Validation and Sanitization

All user inputs (such as in forms) are validated and sanitized to prevent malicious entries, such as SQL injection or script attacks.

4. Session Management

Sessions are used to manage user login status and automatically log out users after inactivity to prevent unauthorized access.

5. Password Encryption

Passwords are stored in the database in encrypted form (e.g., using SHA256 or MD5) instead of plain text to prevent password theft.

6. Audit Trail / Logging

All login attempts, record additions, and deletions are logged in a file or a database for security auditing and misuse detection.

7. Access Timeout / Auto Timeout

If a logged-in user remains inactive for a fixed period (e.g., 15 mins), they are automatically logged out for security.