mAadhar Application

Writeup

Step 1: Begin

Step 2: Design the database schema to store user information, Aadhar application details

Step 3: Backend

Step 4: Implement RESTful APIs for registration, login, applying for a new Aadhar card, updating Aadhar details, applying for a duplicate Aadhar card, and applying to close Aadhaar card (due to death).

Step 5: Use Spring Boot to simplify API development.

Step 6: Utilize JPA and Hibernate for object-relational mapping to interact with the MySQL database.

Step 7: Frontend

Step 8: Develop a user-friendly web application where users can register, login, and perform other Aadhar-related operations.

Step 9: Use Angular as the frontend framework to build dynamic and responsive web pages.

Step 10: Utilize Bootstrap for easy styling and layout.

Step 11: Use HTML/CSS for designing the user interface.

Step 12: Admin Portal

Login through admin credentials

Approve new Aadhaar Card request

Verify request for duplicate Aadhaar

Display all issued Aadhaar Card

Delete Aadhaar card details for dead citizen

Step 13: User Portal

Sign in to apply for a new Aadhar Card

Login to see the Aadhar number assigned by the admin

Update address, phone number, and date of birth of Aadhaar

Request duplicate Aadhaar Card

Step 14: Automation and Testing

Step 15: Implement test automation using Selenium and TestNG for functional and integration testing.

Step 16: Write test cases to validate different functionalities of the application

DevOps

Use Git for version control to manage the source code.

Host the code repository on GitHub for collaboration and easy access.

Set up a Jenkins pipeline for continuous integration and deployment.

Use Docker to containerize the application for easier deployment and scalability

Step 17: End