Writeup : mAadhar Application - Course-end Project 6

Github link : https://github.com/akshansha9/JAVA-FSD.git

Introduction:

The mAadhar Application is a comprehensive solution designed to streamline and automate the process of applying for an Aadhar Card, making it more efficient for Indian citizens. This project is developed in collaboration with Varniraj Service PVT. LTD, in close association with the Government of India. The primary goal is to create a user-friendly application that simplifies the registration, application, and management processes related to Aadhar cards.

Features of the Application:

1. Registration:
   - Users can register on the mAadhar platform by providing essential details.
   - The registration process ensures the secure creation of user accounts.

2. Login:
   - Registered users can log in to their accounts securely using their credentials.
   - The login functionality is designed to protect user information and ensure privacy.

3. Apply for a New Aadhar Card:
   - Citizens can initiate the process of obtaining a new Aadhar card by submitting required information.
   - The application captures relevant details and guides users through the necessary steps.

4. Place a Request for Updating Aadhar Details:
   - Users can request updates to their Aadhar card details, ensuring that the information is current and accurate.

- This feature facilitates a seamless process for users to keep their Aadhar information up to date.

5. Apply for a Duplicate Aadhar Card:
- In case of loss or damage, users can apply for a duplicate Aadhar card through the application.
- The system ensures that the new card retains the same unique Aadhar number as the original.

6. Admin Functionality: Approve Aadhar Application and Issue New Aadhar Number:
- Admins have the authority to review and approve Aadhar card applications.
- Upon approval, the system issues a new Aadhar number and updates the records accordingly.

7. Apply to Close Aadhaar Card (Due to Death):
- In unfortunate situations such as the demise of an Aadhar cardholder, the system allows for the formal closure of the Aadhar card.

Recommended Technologies:

1. Database: MySQL:
- MySQL is employed to store and manage the data securely, ensuring the integrity of user information.

2. Backend: Java Programming (Spring Boot, JPA, Hibernate):
- Java, along with Spring Boot, JPA, and Hibernate, forms the robust backend of the application, handling data processing, storage, and retrieval.

3. Frontend: Angular, Bootstrap, and HTML/CSS:
- The frontend is developed using Angular for a dynamic and responsive user interface, with Bootstrap and HTML/CSS enhancing the application's visual appeal and usability.

4. Automation and Testing Technologies: Selenium and TestNG:
- Selenium and TestNG are utilized for automated testing, ensuring the reliability and functionality of the mAadhar application.

5. DevOps Tools/Technologies: Git, GitHub:
   - DevOps practices are implemented using Git and GitHub for version control, collaboration, and continuous integration.

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