**Objective:**

The main aim of the application is to facilitate NYSC corpers in finding suitable accommodation easily when they relocate to a new state for their service year.

Database Schema

User Table:

This table stores information about users who register on the platform.

| Field | Type | Description |
| --- | --- | --- |
| user\_id | INTEGER | Primary Key, Auto-incremented |
| username | VARCHAR(100) | Unique username |
| email | VARCHAR(100) | Unique email address |
| password | VARCHAR(100) | Hashed password |
| role | ENUM | Role of the user (corper/property owner/admin) |

Property Table:

This table stores information about properties listed on the platform by property owners.

| Field | Type | Description |
| --- | --- | --- |
| property\_id | INTEGER | Primary Key, Auto-incremented |
| owner\_id | INTEGER | Foreign Key to User table |
| title | VARCHAR(255) | Title of the property |
| description | TEXT | Description of the property |
| location | VARCHAR(255) | Location of the property |
| rent\_amount | DECIMAL(10,2) | Rent amount per month |
| amenities | TEXT | List of amenities separated by commas |

Inspection Request Table:

This table stores information about corpers' requests to inspect properties.

| Field | Type | Description |
| --- | --- | --- |
| request\_id | INTEGER | Primary Key, Auto-incremented |
| property\_id | INTEGER | Foreign Key to Property table |
| user\_id | INTEGER | Foreign Key to User table |
| request\_datetime | DATETIME | Date and time of inspection request |

Review Table:

This table stores reviews and ratings provided by users for properties.

| Field | Type | Description |
| --- | --- | --- |
| review\_id | INTEGER | Primary Key, Auto-incremented |
| property\_id | INTEGER | Foreign Key to Property table |
| user\_id | INTEGER | Foreign Key to User table |
| rating | INTEGER | Rating given by the user (1-5) |
| comment | TEXT | Comment provided by the user |

**User Stories:**

As a NYSC corper, I want to be able to create an account on the platform so that I can start searching for accommodations.

As a property owner, I want to list my property on the platform with all the necessary details to attract potential renters.

As a corper, I want to be able to search for properties based on my preferences (location, price, amenities).

As a corper, I want to schedule a property inspection with an agent through the platform.

As a user, I want to be able to rate and review properties I have visited to help other corpers make informed decisions.

**Key Features:**

User Registration and Authentication:

Allow corpers to create accounts and log in securely.

**Property Listing:**

Property owners can list their accommodations for rent, providing details such as location, rent amount, amenities, etc.

**Property Search and Filtering:**

Corpers can search for properties based on location, price range, amenities, etc.

**Request Inspection:**

Corpers can request to inspect a property by scheduling a visit with an agent.

**Rating and Reviews:**

Users can rate and review properties they have visited, providing feedback for other corpers.

**Admin Panel:**

An admin panel to manage user accounts, property listings, reviews, etc.

**Sample plan outlining the overall structure and design of the web application:**

Homepage:

Welcome message and brief introduction to the platform.

Search functionality to allow users to search for properties by location, price range, etc.

Display recent property listings or featured properties.

User Authentication:

Sign-up and login options for users to create accounts or log in.

Separate registration flows for corpers and property owners, with relevant fields and validation.

Forgot password functionality to reset passwords via email.

User Dashboard:

Personalized dashboard for logged-in users displaying relevant information and actions.

For corpers:

Profile management: update personal information, change password, etc.

Property search: access to search functionality and saved searches.

Request inspection: option to schedule property inspections.

For property owners:

Profile management: update property listings, view inspection requests, etc.

Add new property: form to add new property listings.

Manage listings: view, edit, or delete existing property listings.

Property Listings:

Display detailed listings of available properties with essential information such as title, description, location, rent amount, amenities, etc.

Filter and sorting options to refine search results based on user preferences.

Property detail page: More detailed information about a specific property, including images, contact details, and a request inspection button.

Request Inspection:

Form for users to request a physical inspection of a property.

Schedule appointment: Calendar or date picker to select preferred inspection date and time.

Confirmation message and email notification sent to both user and property owner upon successful scheduling.

Rating and Reviews:

Allow users to rate properties they have visited and leave reviews.

Display average rating and total number of reviews for each property.

Review moderation: Admin panel to manage and moderate user reviews.

Admin Panel:

Secure admin dashboard for platform administrators to manage users, properties, inspections, reviews, etc.

User management: View, edit, or delete user accounts.

Property management: View, edit, or delete property listings.

Inspection management: View, approve, or reject inspection requests.

Review management: Moderate and respond to user reviews.

Footer:

Links to important pages such as About Us, FAQs, Terms of Service, Privacy Policy, Contact Us, etc.

Social media links for users to connect with the platform on various platforms.

Responsive Design:

Ensure that the web application is fully responsive and optimized for various devices and screen sizes (desktops, tablets, smartphones).

Security and Compliance:

Implement security measures such as HTTPS, data encryption, input validation, and protection against common web vulnerabilities (e.g., SQL injection, XSS).

Ensure compliance with data protection regulations such as GDPR, especially regarding the handling of personal data.