1. Online Home Rental Marketplace Software

1.1 User Management & Authentication

- **1.1.1 Account Management:** Allow users to sign up for a new account and log in to an existing account.
- **1.1.2 Password Security:** Provide a secure way for users to reset their forgotten passwords.
- **1.1.3 User Profiles:** Store user information and provide a page where users can view their personal details and booking history.
- **1.1.4 Session Management:** Utilize authentication tokens (e.g., JWT) to monitor and maintain user sessions securely.

1.2 Property Listings

- **1.2.1 Listing Creation:** Provide functionality for property owners to create new listings with details like title, description, price, location, photos, and available amenities.
- **1.2.2 Listing Management:** Allow owners to edit and delete their existing property listings through a dedicated dashboard (CRUD operations).
- **1.2.3 Availability Management:** Enable owners to manage a calendar to show when their property is available or booked.
- **1.2.4 Listing View:** Display all property details, including photos, descriptions, price, and amenities, on a public-facing page.

1.3 Search & Filtering

- **1.3.1 Basic Search:** Allow users to search for properties based on location, check-in/check-out dates, and the number of guests.
- **1.3.2 Advanced Filtering:** Provide options to refine search results by a specific price range, home type (e.g., apartment, house), and preferred amenities (e.g., Wi-Fi, pool).
- **1.3.3 Results Display:** Show all matching listings on a single, continuously scrollable results page (infinite scroll).

1.4 Bookings & Payments

- **1.4.1 Booking System:** Enable users to select a property and book it for available dates.
- **1.4.2 Availability Check:** Automatically prevent double-booking by checking the property's availability in the database before confirming a reservation.
- **1.4.3 Mock Payments:** Simulate a secure payment and checkout process to confirm a booking.
- **1.4.4 Reservation History:** Link completed reservations to the corresponding user's profile for their records.

1.5 Reviews & Quality Assurance

- **1.5.1 User Reviews (Optional but recommended):** Allow users who have completed a stay to leave a written review and rating for the property.
- **1.5.2 Quality Testing:** Implement a test plan including unit tests and peer code reviews to ensure all features work as intended.
- **1.5.3 Documentation:** Create and maintain technical documentation (setup guides, API references) and user guides.

1.6 System Infrastructure & DevOps

- **1.6.1 Repository & CI/CD:** Set up the project's code repository and configure CI/CD pipelines for automated builds and testing.
- **1.6.2 Deployment:** Manage application deployment to staging and production environments.
- **1.6.3 Database Management:** Set up and maintain the database to store all user, listing, and booking information.