

## Problem Statement:

Create a simple hotel room management system using React. The application should allow users to view available rooms, book rooms, and cancel bookings. Each room should have a name, type (e.g., single, double), price, and availability status.

### Features:

1. **Room List:** Display a list of available rooms with options to view details, book, or cancel bookings.
2. **Room Details:** Show detailed information about each room, including type, price, and availability status.
3. **Booking Form:** Allow users to book a room by providing their name and contact information.
4. **Cancel Booking:** Allow users to cancel their bookings.
5. **Filter Rooms:** Allow users to filter rooms by type (e.g., single, double) and availability status.
6. **LocalStorage:** Save booking information locally to persist data across sessions.

### Additional Details:

- Use React for the front-end and manage state using hooks.
- Implement basic form validation (e.g., required fields, valid email).
- Use CSS or a styling library (e.g., Bootstrap, Material-UI) for a polished look.
- The focus is on functionality and usability rather than advanced features or design.

### Constraints:

- Aim to complete the project within a couple of hours.
- Keep the design and features simple and focused on the core requirements.
- Use only React and basic libraries if necessary to keep the project scope manageable.