Online Room Booking System for Police Training College.

1. Web Based Application

- **1. Proposed System:** Automate the current manual system for room booking at the Police Training College. The system should have a userfriendly interface that allows employees in Police Department to browse available rooms, view room details, check availability, and make reservations. The interface should also allow customers to view and modify their reservations, view their booking history, and make Payments.
- **2. Booking System:** The booking system is responsible for managing room availability, creating and managing reservations, and sending confirmation emails to customers. The system should also be able to generate reports on room availability, occupancy rates, and revenue.
- **3. Payment Gateway:** The payment gateway is responsible for processing online payments securely. It should be integrated with the booking system to ensure that payments are processed in real-time and .that customer details are kept secure.
- **4. Database:** The database, is where all the information about rooms, reservations, and customer details are stored. It should be designed to ensure that it is scalable, secure, and able to handle high volumes of Data.
- 5. Admin Dashboard: The admin dashboard is where PTC staff can manage room availability, view reservations, and manage payments. The dashboard should also provide detailed reports on revenue. occupancy rates, and other key metrics.

- **6. APIs**: APIs are used to integrate the various components of the system. such as the user interface, booking system, payment gateway. and database. The single-user concept provides several benefits to both the user and the department, For users, it means they only have to remember one set of login credentials and can easily access all of the department services without having to create multiple accounts. The system should be integrated with the iAPS application to allow for user login using iAPS credentials through API. (Accordingly, the applicant's profile can be retrieved automatically from iAPs application through API, without the need for manual data entry. This can save time and reduce the risk of errors in the data entry process, improving the overall efficiency and accuracy of the room booking system.)
- 7. Security: The application should be security audited from a CERT in empanelled agency and host in State Data Centre. The system should be designed to ensure that applicant details are kept secure at all times. This includes using secure payment gateways, encrypting customer data, and implementing appropriate security measures to protect against hacking and other security threats.
- **8. Architecture:** The architecture should be designed to be scalable. secure, and user-friendly, to ensure that users can easily book rooms online and that PTC staff can manage reservations and payments Efficiently.

2, Mobile Application

 Proposed System: The mobile application should be a mini-version of a web application. The mobile app for an online room booking system with online payment in PTC is designed to provide a seamless and secure user experience. The mobile app can provide real-time updates on room availability, prices. and payment status. The payment gateway integrated with this ensures that all transactions are secure and reliable. This application provides a robust and efficient solution for booking rooms and processing payments through a mobile app.

- 2. User Interface: The mobile app's user interface should allow users to search for available rooms, select a room, and make a reservation. It Should also display details about the PTC, room types, prices, and availability.
- **3. Mobile Device:** Both Android and iOS version is required; the mobile device will be used by the user to interact with the mobile app. It will send requests to the application server, receive responses, and display information to the user.