# Room/Seat Booking System – ServiceNow

## 1. Project Objective

The objective of this project is to design and implement a Room/Seat Booking System in ServiceNow that allows users to easily request rooms/seats, prevents double-bookings, and automates confirmation notifications. The solution ensures scheduling efficiency, data integrity, and enhances the user experience.

## 2. Features

- Submit booking requests with date, time, room, and purpose.
- Auto-assign booking to the logged-in user.
- Prevent double-booking of rooms with business rules.
- Email confirmation sent to user on successful booking.
- Booking status tracking (Confirmed / Cancelled).
- Booking records accessible from a central list.

## 3. Concepts Used

- Custom Tables: u_booking (booking details), u_room (room master data).
- Service Catalog with Record Producer.
- Record Producer Script for variable → field mapping.
- Business Rules for validation and automation.
- Notifications for booking confirmations.
- Update Sets for migration and reusability.

## 4. Technical Implementation

Step 1: Create Tables (u_booking, u_room).

Step 2: Create Catalog Item (Record Producer).

Step 3: Record Producer Script (maps variables to fields, auto-fills logged in user).

Step 4: Business Rules (validations to prevent overlap and invalid dates).

Step 5: Notifications (email confirmations).

## 5. Testing

Positive Test Cases:

- Booking created with valid date, time, and room.
- Auto-populated requested_by with logged-in user.
- Email confirmation received.

Negative Test Cases:

- Overlapping booking prevented.
- Past date booking blocked.
- Empty fields prevented.

Edge Cases:

- Start time later than end time → blocked.
- Cancelled booking does not trigger new emails.


## 7. Future Enhancements

- Add approval workflow for restricted rooms.
- Add calendar view (Service Portal widget).
- Extend for seat-level booking.