

Seat & Meeting Room Booking – Developer Specification

1. SharePoint Data Schema

1.1 SeatsList

Column	Type	Required	Description
Title (DeskID)	Text	Yes	Unique desk identifier e.g., D-014
Floor	Text	Yes	Floor number e.g., 3
Location	Text	Yes	Building/Campus e.g., BLR-EC-1
Category	Choice	Yes	Quiet Standard Window Standing
IsAvailable	Yes/No	Yes	Derived; updated by flows if using check-in/out
Notes	Multiline	No	Optional notes

1.2 MeetingRoomsList

Column	Type	Required	Description
Title (RoomID)	Text	Yes	Unique room ID e.g., R-3A
RoomName	Text	Yes	Display name e.g., Coral
Capacity	Number	Yes	Max people
Equipment	Choice (multi)	No	TV VC Whiteboard Speakerphone
Floor	Text	Yes	Floor number
IsAvailable	Yes/No	Yes	Derived; updated by flows if desired
Notes	Multiline	No	Optional

1.3 BookingsList (shared)

Column	Type	Required	Description
Title (BookingID)	Text	Yes	GUID
User	Person	Yes	Requester
BookingType	Choice	Yes	Seat MeetingRoom
ResourceID	Lookup	Yes	Lookup to SeatsList OR MeetingRoomsList
Date	Date	Yes	Date
StartTime	DateTime	Yes	Start
EndTime	DateTime	Yes	End
Purpose	Text	No	Optional
Status	Choice	Yes	Booked Checked-In Cancelled No-Show

2. Power Apps (Canvas) – Screens & Key Formulas

- Screens: Home, SeatBooking, RoomBooking, MyBookings.
- SeatBooking: DatePicker + dropdowns (Floor, Category) + Gallery of Filter(SeatsList, Category=selCat && Floor=selFloor && IsAvailable).

- OnSelect(Book): Patch(BookingsList, Defaults(BookingsList), {Title: GUID(), User: User().Email, BookingType: 'Seat', ResourceID: SeatGallery.Selected.ID, Date: DatePicker.SelectedDate, StartTime: StartSel.SelectedTime, EndTime: EndSel.SelectedTime, Status: 'Booked'}).
- RoomBooking: Similar pattern with Room filters (Capacity >= selCapacity && Equipment has selEquipment).
- MyBookings: Filter(BookingsList, User.Email = User().Email && Date >= Today()).

3. Power Automate – Flow Specs

Flow A – Booking Confirmation

- Trigger: When item is created (BookingsList).
- Check: Validate Start < End; user has no overlapping booking of same type.
- Action: Send Teams/Email confirmation; (optional) create Outlook event.

Flow B – Conflict Guard

- Trigger: When item is created (BookingsList).
- Action: Query BookingsList for same ResourceID, overlapping Date/Time, Status in (Booked, Checked-In).
- If overlap found: Update new item → Status='Cancelled'; notify user.

4. Acceptance Criteria

- User can book seat/room without errors.
- No double-booking for same resource/time.
- Confirmation notification sent within 30s.