

Miguel Alexis E. Morgia

Karlo Louis Dongon

Yldevier John Magpusao

Carl Raymund Suello

ORIGINAL ERD in table format:

User Masterlist				
User_ID (PK)	Name	User_Type	UP_Email	Password

Reservation Details			
Reservation_Details_ID(PK)	User_ID(Organizer, FK)	Reservation_Room_Details_ID(FK)	Reservation_Status_Log_ID(FK)

Reservation Status Log			
Reservation_Status_Log_ID(PK)	Admin_ID(FK, Admin_In_Charge)	Status_Chosen	Date_And_Time

Reservation Room Details				
Reservation_Room_Details_ID(PK)	Room_ID(FK)	Preferred_Time	Preferred_Date	No. of pax indicated

Room			
Room_ID(PK)	Room_Number(Label)	Calendar_ID(FK)	Capacity

Calendar			
Calendar_ID(FK)	Room_ID(FK)	Room_Number(Label)	List of TimeReserved_ID(FK)

Time Reserved				
Calendar_ID(PK)	Date	Starting_Time	Ending_Time	Event_ID

Event				
Event_ID (PK)	Event_Name	Event_Description	Reservation_Details_ID(FK)	Attendance_ID(FK)

Attendance			
Attendance_ID(PK)	User_ID(FK)	Name	Email

QR Code	
Event_ID(FK)	

Feedback			
Feedback_ID(PK)	Message	User_ID(FK)	Event_ID(FK)

Notifications					
Notification_ID(PK)	User_ID(FK)	Notification_Message	Date	Time	Event_ID(FK)

CHANGES

Notice: Majority of these are already Normalized. Thus, majority is actually just adding lacking entities that were found in hindsight, or modifying entities that did not make sense / deleting duplicated data fields, then normalizing after

- User_Masterlist already 1NF, 2NF, and 3NF
- Admin_Masterlist added

Admin_Masterlist			
Admin_ID (PK)	Name	UP_Email	Password

- Reservation Details already Normalized
- Reservation Room Details already Normalized; however, it lacks 2 functionalities, namely: having the list of people that are supposed to be in the event, and letter of endorsement. Since there is a list, there is a need for 2NF.

Reservation Room Details						
Reservation_Room_Details(PK)	Room_ID(FK)	PreferredTime	PreferredDate	No_of_Pax	Attendee_List_ID(FK)	Letter_of_Endorsement

Attendee List	
Attendee_List_ID(PK)	User_ID(FK)

- Calendar has Room ID, and Room has Calendar ID, causing a circular reference. Solution; since calendar is dependent on room, remove calendar_ID from room. Room remains normalized

Room		
Room_ID(PK)	Room_Number	Capacity

- Calendar will also have to remove Room Number since Room has that data already. Rather than only holding the ambiguous 'list of timeReserved', Specify a date, and an FK of a list of timereserved in said date, which will require 2NF, then 3NF yet again for 'Time Reserved' table to make sense.

Calendar			
Calendar_ID(FK)	Room_ID(FK)	Date	List_of_Time_Reserved_ID(FK)

List of Time Reserved		
List_of_Time_Reserved_ID(PK)	Calendar_ID(FK)	Time_Reserved_ID(FK)

- That being said, 'Calendar' already holds 'Date', so remove 'Date' within 'Time Reserved'

Time_Reserved_ID(PK)	Starting Time	Ending Time	Event_ID(FK, For those events already approved)

- Reservation Status Log already has Admin_ID mentioned in its fields as a foreign key, but the table it references does not exist. Therefore, create Admin Masterlist.

Admin Masterlist			
Admin_ID (PK)	Name	UP_Email	Password

- Event is already normalized; however, all the FK within it/ entities dependent on it is not, such as [QR code][Attendance][Feedback][Notifications]. Handle them accordingly.
- QR Code is too vague. Add in details, then normalize.

Event QR Code		
Event_ID(PK)	QRCodeID(PK)	Generated QR Code

- It is currently 1NF. It could use further normalization, thus 2NF.

Event QR Code	
Event_ID(PK)	QR_Code_ID(FK)

QR_Code_ID(PK)	Generated QR Code

- Attendance duplicated data by adding name and email which User_ID already possesses. Simplify.

Attendance	
Attendance_ID(PK)	User_ID(FK)

- Feedback already normalized, apply 3NF for robust query potential

Feedback			
FeedbackID (PK)	Message	UserID (FK)	EventID (FK)

User's Feedback List	
User_ID (FK)	Feedback_ID(FK)

Event's Feedback List	
EventID (FK)	FeedbackID (FK)

- Notifications already normalized, apply 3NF for robust query potential

Notifications				
Notification_ID (PK)	User_ID (FK)	Date	Time	Event_ID(FK)

User's Notification	
UserID (FK)	Notification_ID(FK)

Event's Notification	
EventID (FK)	Notification_ID(FK)

