



Hotel Management System

Group 2

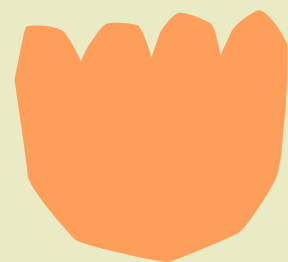
- Erick Choewandy / 2501997224
- Hisyam Abdul Malik / 2502008170
- Mario Vinandy / 2502027365
- Robertus Ferdinand / 2502006663
- Vanessa Chans / 2502004172



Agenda



<div><div>*</div><div>—</div></div>	ACTIVITY FOCUS
<div><div>*</div><div>—</div></div>	ENTITY RELATIONSHIP DIAGRAM (ERD)
<div><div>*</div><div>—</div></div>	FLOWCHART
<div><div>*</div><div>—</div></div>	DUMMY DATABASE
<div><div>*</div><div>—</div></div>	NORMALIZATION - 1NF
<div><div>*</div><div>—</div></div>	2NF
<div><div>*</div><div>—</div></div>	3NF
<div><div>*</div><div>—</div></div>	BCNF (BOYCE-CODD/3.5 NF)
<div><div>*</div><div>—</div></div>	4NF
<div><div>*</div><div>—</div></div>	5NF

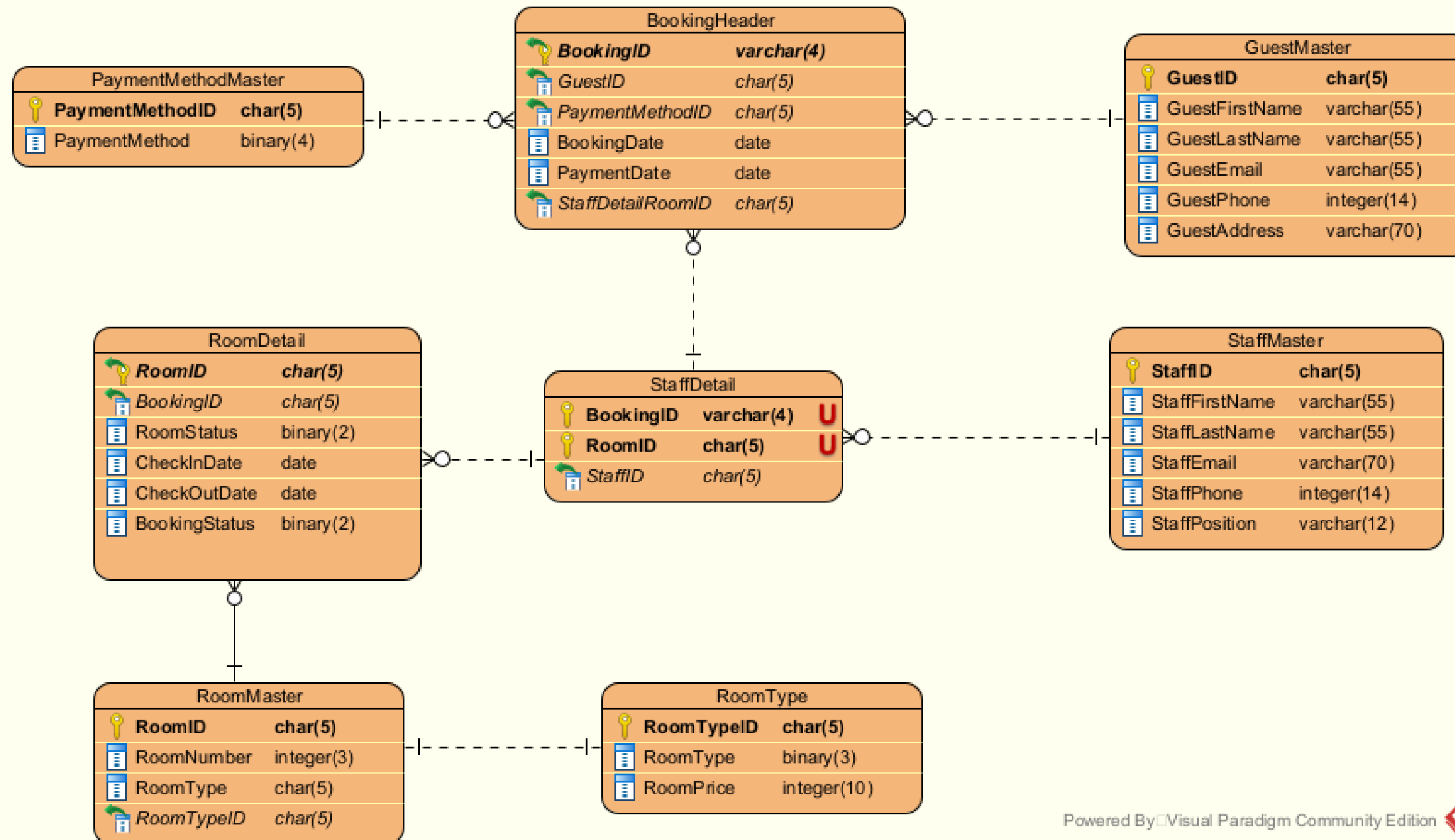


Activity Focus: Hotel Room Booking

Customer telah memesan ruangan hotel, tetapi kemudian ingin melakukan pergantian tanggal inap (reschedule).

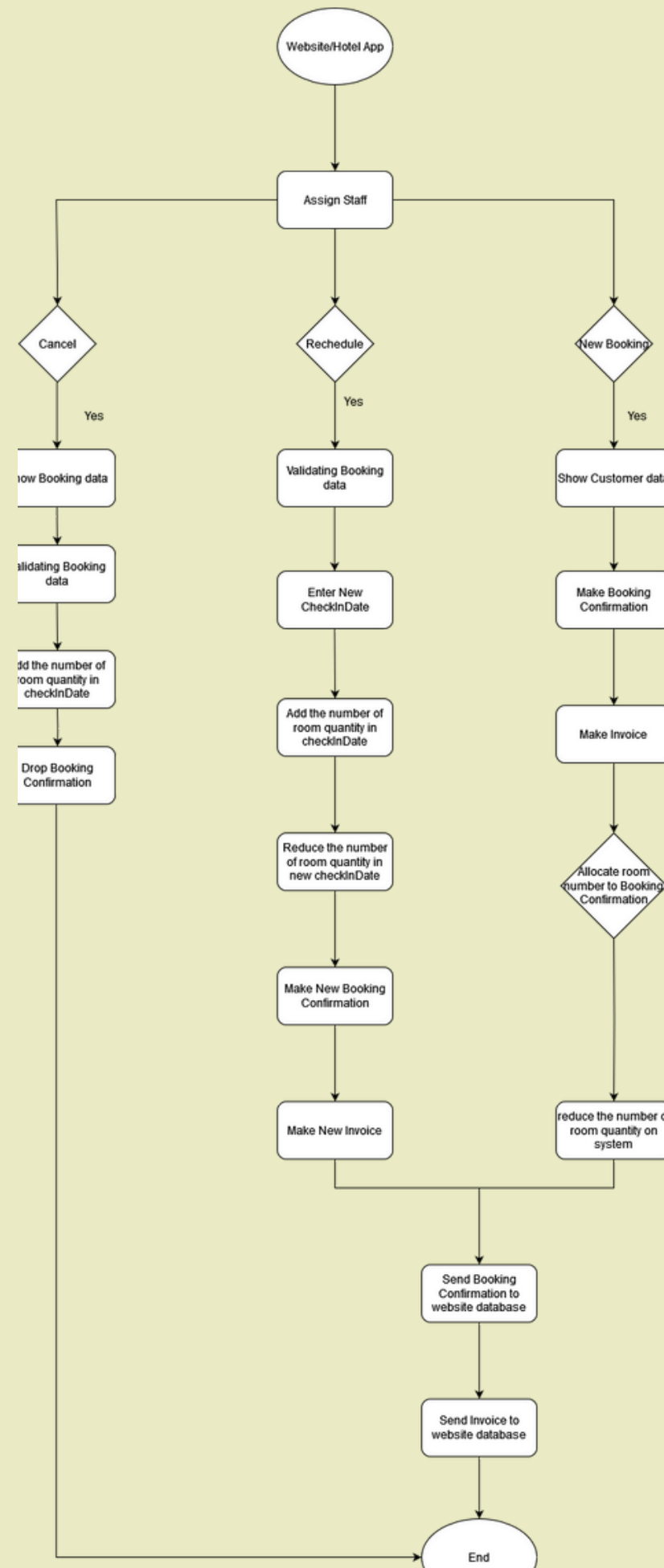


Entity Relationship Diagram (ERD)



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4NF

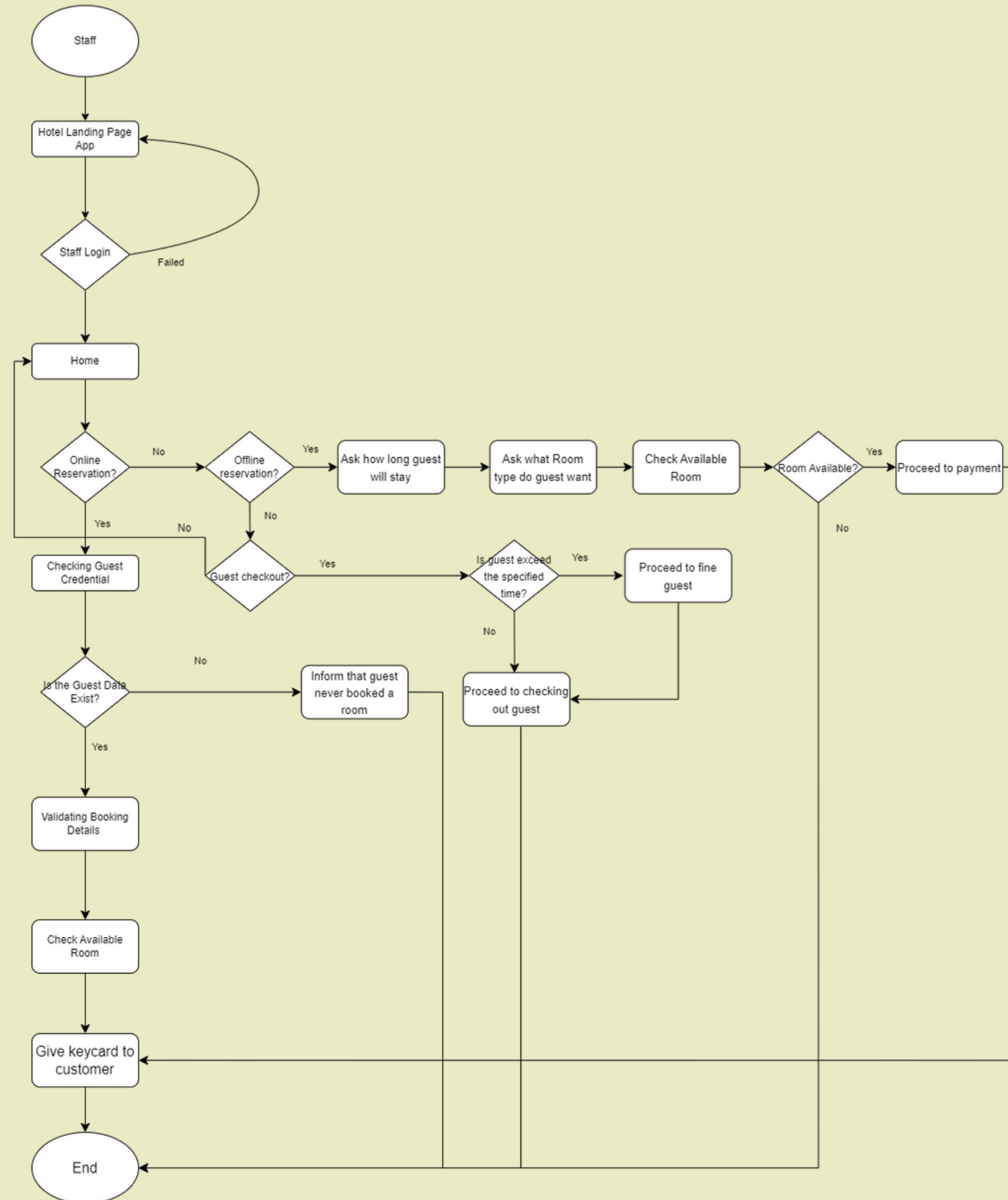


System Flowchart

Link:

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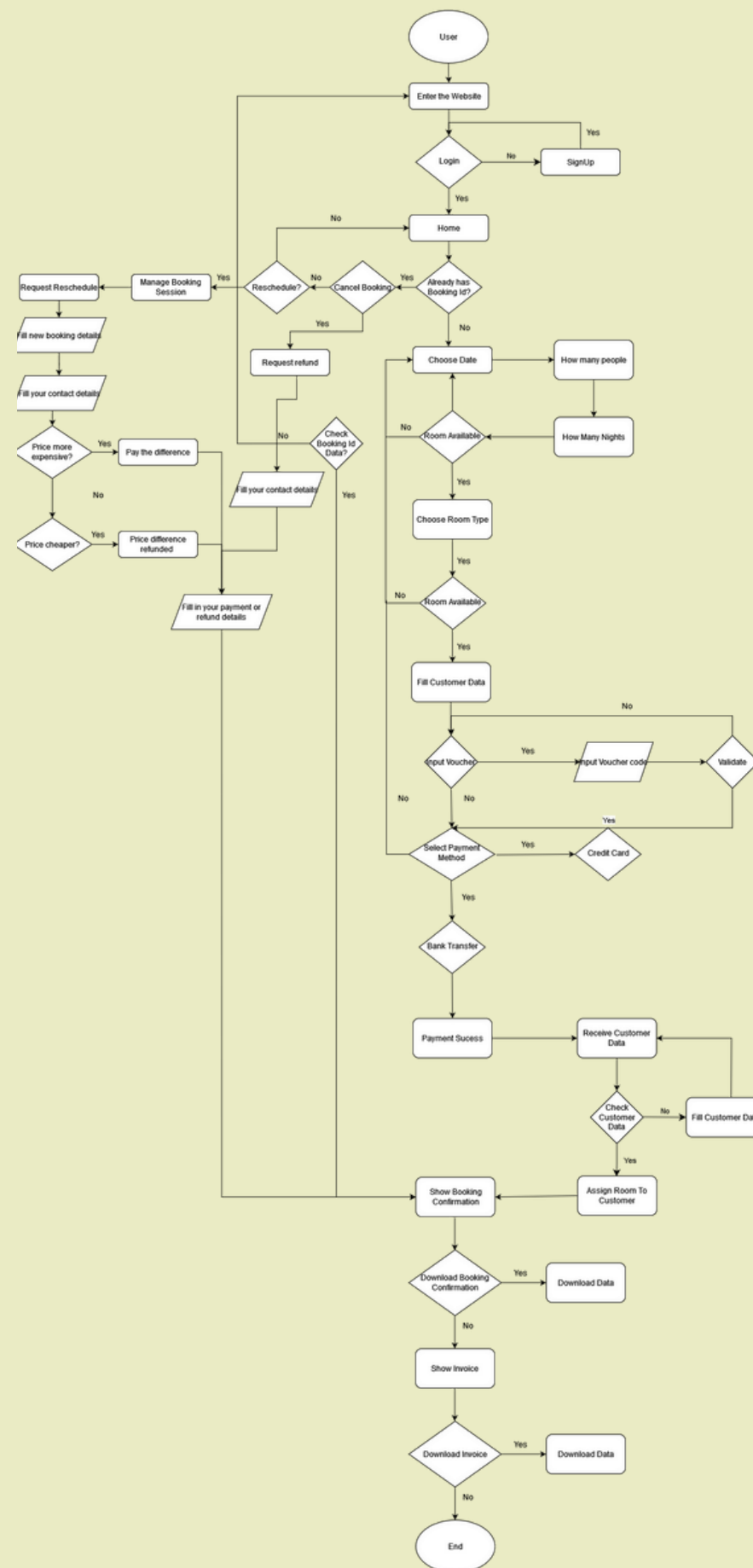
STAFF POV HOTEL
MANAGEMENT SYSTEM



Staff Flowchart

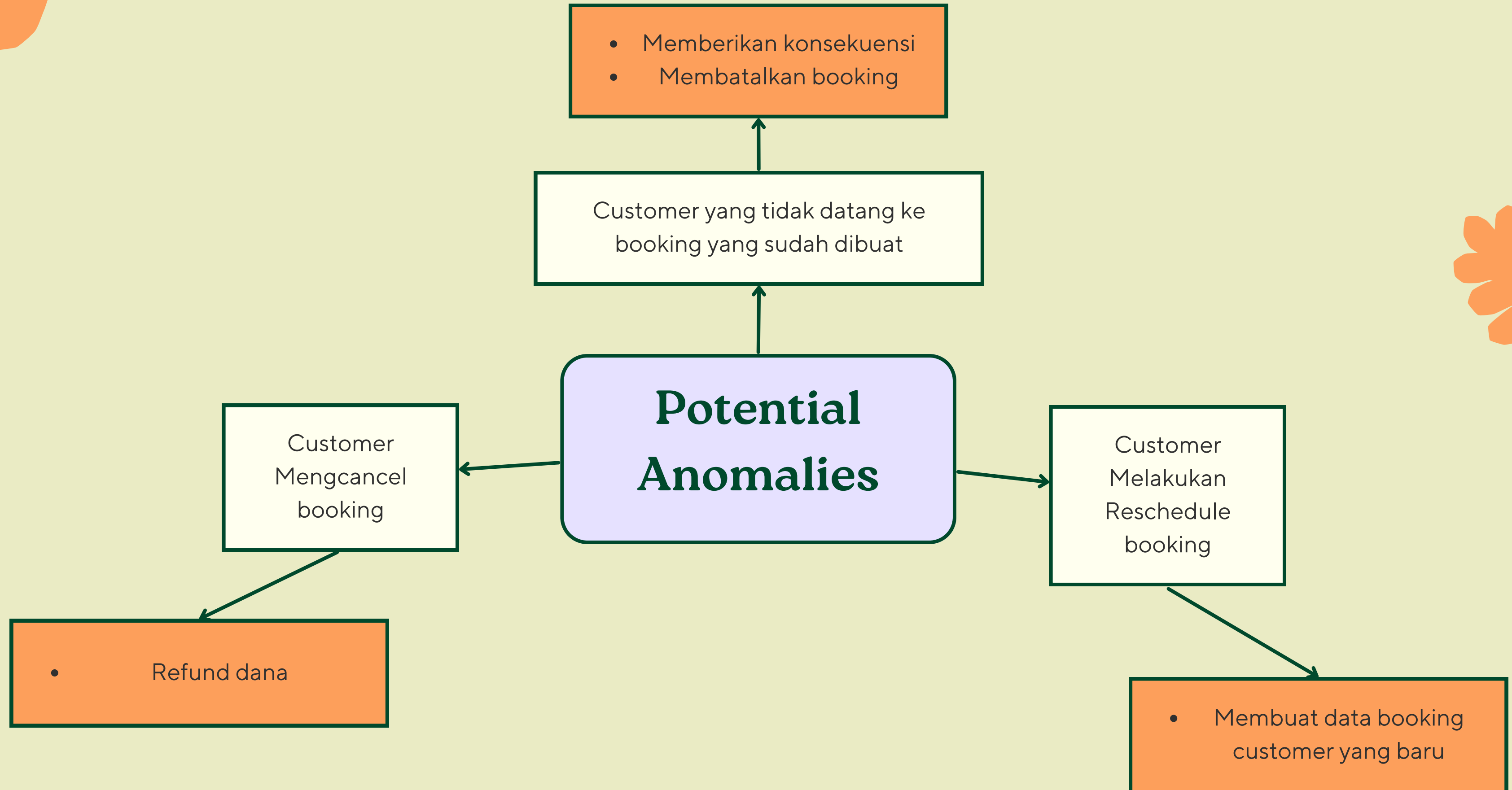
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User Flowchart

Link: <https://drive.google.com/file/d/1-uOS9vy97-A6JyzFlrKHQcCvzmZXA7dy/view?usp=sharing>



Normalization (UNF)

UNF										
GuestFirstName	GuestLastName	GuestEmail	GuestPhone	GuestAddress	StaffFirstName	StaffLastName	StaffEmail	StaffPhone	StaffPosition	RoomType
Ucup	Skuy	ucup.skuy@gmail.com	6281228284176	Jl. Sukamundur RT. 003 / RW. 001	Alexander	Junior	alexj@gmail.com	6287594736281	Front Office	Single
					Steven	Lim	limsteven@gmail.com	62851522451945	Front Office	Deluxe
Levi	Ackerman	ackermanlevi@gmail.com	6281212121391	Paradis Island Blok B. No. 13	Chandra	Liaw	liaw.chandra@gmail.com	6281231234978	Front Office	Family
Naruto	Uzumaki	narutoo@yahoo.com	6281278612270	Desa Konoha No.7	Alexander	Junior	alexj@gmail.com	6287594736281	Front Office	Deluxe
Sano	Manjiro	wibumikey@yahoo.com	6281212112351	Jalan Tokyo Manjiro No. 3	Roy	Alloy	roy4110y@gmail.com	62877248916281	Front Office	Single
					Karen	Goose	goose43@gmail.com	62914281248155	Front Office	Deluxe
Luvs	Darlington	ldarlington@gmail.com	628123194182	Malibu Island Blok A. No. 12	Roby	Ferdi	ferdirobby@yahoo.com	6285751741624	Front Office	Family
					Claudia	Brad	bradp43@yahoo.com	6282317247121	Front Office	Deluxe

RoomNumber	RoomPrice	RoomStatus	BookingDate	CheckInDate	CheckOutDate	BookingStatus	RoomCharge	ServiceCharge	TotalCharge	PaymentMethod	PaymentDate
404	1.500.000	Available	07 March 2023	15 March 2023	20 March 2023	Booked	129.000	0	6.429.000	BCA Transfer	07 March 2023
405	4.500.000	Available		20 April 2023	27 April 2023	Booked	300.000	0			
406	2.000.000	Available	18 April 2023	27 April 2023	1 May 2023	Booked	129.000	0	2.129.000	BCA Transfer	19 April 2023
703	4.500.000	Available	09 May 2023	13 May 2023	19 May 2023	Booked	450.000	0	4.950.000	OVO	09 May 2023
103	1.500.000	Available	11 May 2023	16 May 2023	19 May 2023	Booked	129.000	0	6.429.000	OVO	12 May 2023
115	4.500.000	Available		16 May 2023	20 May 2023	Booked	300.000	0			
304	2.000.000	Available	06 June 2023	7 June 2023	9 June 2023	Booked	129.000	0	7.079.000	BCA Transfer	06 June 2023
311	4.500.000	Available		21 June 2023	24 June 2023	Booked	450.000	0			

Normalization (1NF)

Header

1NF								
Header								
BookingId	GuestFirstName	GuestLastName	GuestEmail	GuestPhone	GuestAddress	BookingDate	PaymentMethod	PaymentDate
B001	Ucup	Skuy	ucup.skuy@gmail.com	6281228284176	Jl. Sukamundur RT. 003 / RW. 001	07 March 2023	BCA Transfer	07 Maret 2023
B002	Levi	Ackerman	ackermanlevi@gmail.com	6281212121391	Paradis Island Blok B. No. 13	18 April 2023	BCA Transfer	07 Maret 2023
B003	Naruto	Uzumaki	narutoo@yahoo.com	6281278612270	Desa Konoha No.7	09 May 2023	OVO	09 May 2023
B004	Sano	Manjiro	wibumikey@yahoo.com	6281212112351	Jalan Tokyo Manjiro No. 3	11 May 2023	OVO	12 May 2023
B005	Luvs	Darlington	ldarlington@gmail.com	628123194182	Malibu Island Blok A. No. 12	06 June 2023	BCA Transfer	06 June 2023

Detail													
RoomId	BookingId	RoomNumber	RoomType	RoomPrice	RoomStatus	StaffFirstName	StaffLastName	StaffEmail	StaffPhone	StaffPosition	CheckInDate	CheckOutDate	BookingStatus
RM404	B001	404	Single	1.500.000	Available	Alexander	Junior	alexj@gmail.com	6287594736281	Front Office	15 March 2023	20 March 2023	Booked
RM405	B002	405	Deluxe	4.500.000	Available	Steven	Lim	limsteven@gmail.com	62851522451945	Front Office	20 April 2023	27 April 2023	Booked
RM406	B003	406	Family	2.000.000	Available	Chandra	Liaw	liaw.chandra@gmail.com	6281231234978	Front Office	27 April 2023	1 May 2023	Booked
RM703	B004	703	Deluxe	4.500.000	Available	Alexander	Junior	alexj@gmail.com	6287594736281	Front Office	13 May 2023	19 May 2023	Booked
RM103	B005	103	Single	1.500.000	Available	Roy	Alloy	roy4110y@gmail.com	62877248916281	Front Office	16 May 2023	19 May 2023	Booked
RM115	B006	115	Deluxe	4.500.000	Available	Karen	Goose	goose43@gmail.com	62914281248155	Front Office	16 May 2023	20 May 2023	Booked
RM304	B007	304	Family	2.000.000	Available	Roby	Ferdi	ferdiroby@yahoo.com	6285751741624	Front Office	7 June 2023	9 June 2023	Booked
RM311	B008	311	Deluxe	4.500.000	Available	Claudia	Brad	bradp43@yahoo.com	6282317247121	Front Office	21 June 2023	24 June 2023	Booked
PK	FK												

Detail

Normalization (2NF)

Header

2NF								
Header								
BookingId	GuestFirstName	GuestLastName	GuestEmail	GuestPhone	GuestAddress	BookingDate	PaymentMethod	PaymentDate
B001	Ucup	Skuy	ucup.skuy@gmail.com	6281228284176	Jl. Sukamundur RT. 003 / RW. 001	07 March 2023	BCA Transfer	07 Maret 2023
B002	Levi	Ackerman	ackermanlevi@gmail.com	6281212121391	Paradis Island Blok B. No. 13	18 April 2023	BCA Transfer	07 Maret 2023
B003	Naruto	Uzumaki	narutoo@yahoo.com	6281278612270	Desa Konoha No.7	09 May 2023	OVO	09 May 2023
B004	Sano	Manjiro	wibumikey@yahoo.com	6281212112351	Jalan Tokyo Manjiro No. 3	11 May 2023	OVO	12 May 2023
B005	Luvs	Darlington	ldarlington@gmail.com	628123194182	Malibu Island Blok A. No. 12	06 June 2023	BCA Transfer	06 June 2023
PK								

Detail							
RoomId	BookingId	StaffId	RoomStatus	CheckInDate	CheckOutDate	BookingStatus	
RM404	B001	ST001	Available	15 March 2023	20 March 2023	Booked	
RM405	B002	ST002	Available	20 April 2023	27 April 2023	Booked	
RM406	B003	ST003	Available	27 April 2023	1 May 2023	Booked	
RM703	B004	ST001	Available	13 May 2023	19 May 2023	Booked	
RM103	B005	ST004	Available	16 May 2023	19 May 2023	Booked	
RM115	B006	ST005	Available	16 May 2023	20 May 2023	Booked	
RM304	B007	ST006	Available	7 June 2023	9 June 2023	Booked	
RM311	B008	ST007	Available	21 June 2023	24 June 2023	Booked	
CK	CK	CK					

Detail



Normalization (2NF)

RoomMaster			
RoomId	RoomNumber	RoomType	RoomPrice
RM404	40400%	Single	1.500.000
RM405	40500%	Deluxe	4.500.000
RM406	40600%	Family	2.000.000
RM703	70300%	Deluxe	4.500.000
RM103	10300%	Single	1.500.000
RM115	11500%	Deluxe	4.500.000
RM304	30400%	Family	2.000.000
RM311	31100%	Deluxe	4.500.000
PK			

StaffMaster					
StaffId	StaffFirstName	StaffLastName	StaffEmail	StaffPhone	StaffPosition
ST001	Alexander	Junior	alexj@gmail.com	6287594736281	Front Office
ST002	Steven	Lim	limsteven@gmail.com	62851522451945	Front Office
ST003	Chandra	Liaw	liaw.chandra@gmail.com	6281231234978	Front Office
ST004	Alexander	Junior	alexj@gmail.com	6287594736281	Front Office
ST005	Roy	Alloy	roy4110y@gmail.com	62877248916281	Front Office
ST006	Karen	Goose	goose43@gmail.com	62914281248155	Front Office
ST007	Roby	Ferdi	ferdiroby@yahoo.com	6285751741624	Front Office
ST008	Claudia	Brad	bradp43@yahoo.com	6282317247121	Front Office
PK					



Normalization (3NF)

3NF						
Header						
BookingId	GuestId	PaymentMethodId	BookingDate	PaymentDate		
B001	GU001	PM001	07 March 2023	07 Maret 2023		
B002	GU002	PM001	18 April 2023	19 April 2023		
B003	GU003	PM002	09 May 2023	9 May 2023		
B004	GU004	PM002	11 May 2023	12 May 2023		
B005	GU005	PM001	06 June 2023	6 June 2023		
PK	FK	FK				
Detail						
BookingId	RoomId	StaffId	RoomStatus	CheckInDate	CheckOutDate	BookingStatus
B001	RM404	ST001	Available	15 March 2023	20 March 2023	Booked
B002	RM405	ST002	Available	20 April 2023	27 April 2023	Booked
B003	RM406	ST003	Available	27 April 2023	1 May 2023	Booked
B004	RM703	ST001	Available	13 May 2023	19 May 2023	Booked
B005	RM103	ST004	Available	16 May 2023	19 May 2023	Booked
B006	RM115	ST005	Available	16 May 2023	20 May 2023	Booked
B007	RM304	ST006	Available	7 June 2023	9 June 2023	Booked
B008	RM311	ST007	Available	21 June 2023	24 June 2023	Booked
CK	CK	CK				

Normalization (3NF)

RoomMaster			
RoomId	RoomNumber	RoomType	RoomPrice
RM404	40400%	Single	1.500.000
RM405	40500%	Deluxe	4.500.000
RM406	40600%	Family	2.000.000
RM703	70300%	Deluxe	4.500.000
RM103	10300%	Single	1.500.000
RM115	11500%	Deluxe	4.500.000
RM304	30400%	Family	2.000.000
RM311	31100%	Deluxe	4.500.000
PK			

StaffMaster					
StaffId	StaffFirstName	StaffLastName	StaffEmail	StaffPhone	StaffPosition
ST001	Alexander	Junior	alexj@gmail.com	6287594736281	Front Office
ST002	Steven	Lim	limsteven@gmail.com	62851522451945	Front Office
ST003	Chandra	Liaw	liaw.chandra@gmail.com	6281231234978	Front Office
ST004	Alexander	Junior	alexj@gmail.com	6287594736281	Front Office
ST005	Roy	Alloy	roy4110y@gmail.com	62877248916281	Front Office
ST006	Karen	Goose	goose43@gmail.com	62914281248155	Front Office
ST007	Roby	Ferdi	ferdiroby@yahoo.com	6285751741624	Front Office
ST008	Claudia	Brad	bradp43@yahoo.com	6282317247121	Front Office
PK					

GuestMaster					
GuestId	GuestFirstName	GuestLastName	GuestEmail	GuestPhone	GuestAddress
GU001	Ucup	Skuy	ucup.skuy@gmail.com	6281228284176	Jl. Sukamundur RT. 003 / RW. 001
GU002	Levi	Ackerman	ackermanlevi@gmail.com	6281212121391	Paradis Island Blok B. No. 13
GU003	Naruto	Uzumaki	narutoo@yahoo.com	6281278612270	Desa Konoha No.7
GU004	Sano	Manjiro	wibumikey@yahoo.com	6281212112351	Jalan Tokyo Manjiro No. 3
GU005	Luvs	Darlington	ldarlington@gmail.com	628123194182	Malibu Island Blok A. No. 12
PK					

PaymentMethodMaster	
PaymentMethodId	PaymentMethod
PM001	BCA Transfer
PM002	OVO
PK	

Normalization (BCNF)

BookingHeader				
BookingId	GuestId	PaymentMethodId	BookingDate	PaymentDate
B001	GU001	PM001	07 March 2023	07 Maret 2023
B002	GU002	PM001	18 April 2023	19 April 2023
B003	GU003	PM002	09 May 2023	9 May 2023
B004	GU004	PM002	11 May 2023	12 May 2023
B005	GU005	PM001	06 June 2023	6 June 2023
PK	FK	FK		

PaymentMethodMaster	
PaymentMethodId	PaymentMethod
PM001	BCA Transfer
PM002	OVO
PK	

RoomDetail					
RoomId	BookingId	RoomStatus	CheckInDate	CheckOutDate	BookingStatus
RM404	B001	Available	15 March 2023	20 March 2023	Booked
RM405	B002	Available	20 April 2023	27 April 2023	Booked
RM406	B003	Available	27 April 2023	1 May 2023	Booked
RM703	B004	Available	13 May 2023	19 May 2023	Booked
RM103	B005	Available	16 May 2023	19 May 2023	Booked
RM115	B006	Available	16 May 2023	20 May 2023	Booked
RM304	B007	Available	7 June 2023	9 June 2023	Booked
RM311	B008	Available	21 June 2023	24 June 2023	Booked
PK	FK				

Normalization (BCNF)

StaffDetail		
BookingId	RoomId	StaffId
B001	RM404	ST001
B001	RM405	ST002
B002	RM406	ST003
B003	RM703	ST001
B004	RM103	ST004
B004	RM115	ST005
B005	RM304	ST006
B005	RM311	ST007
CK	CK	FK

RoomMaster			
RoomId	RoomNumber	RoomType	RoomPrice
RM404	40400%	Single	1.500.000
RM405	40500%	Deluxe	4.500.000
RM406	40600%	Family	2.000.000
RM703	70300%	Deluxe	4.500.000
RM103	10300%	Single	1.500.000
RM115	11500%	Deluxe	4.500.000
RM304	30400%	Family	2.000.000
RM311	31100%	Deluxe	4.500.000
PK			

RoomMaster			
RoomId	RoomNumber	RoomType	RoomPrice
RM404	40400%	Single	1.500.000
RM405	40500%	Deluxe	4.500.000
RM406	40600%	Family	2.000.000
RM703	70300%	Deluxe	4.500.000
RM103	10300%	Single	1.500.000
RM115	11500%	Deluxe	4.500.000
RM304	30400%	Family	2.000.000
RM311	31100%	Deluxe	4.500.000
PK			

StaffMaster						
BookingId	StaffId	StaffFirstName	StaffLastName	StaffEmail	StaffPhone	StaffPosition
B001	ST001	Alexander	Junior	alexj@gmail.com	87594736281	Front Office
B002	ST002	Steven	Lim	limsteven@gmail.com	851522451945	Front Office
B003	ST003	Chandra	Liaw	liaw.chandra@gmail.com	81231234978	Front Office
B004	ST001	Alexander	Junior	alexj@gmail.com	87594736281	Front Office
B005	ST004	Roy	Alloy	roy4110y@gmail.com	6287724891628	Front Office
B006	ST005	Karen	Goose	goose43@gmail.com	62914281248155	Front Office
B007	ST006	Roby	Ferdi	ferdiroby@yahoo.com	6285751741624	Front Office
B008	ST007	Claudia	Brad	bradp43@yahoo.com	6282317247121	Front Office
	PK					

Normalization (4NF)

BookingHeader				
BookingId	GuestId	PaymentMethodId	BookingDate	PaymentDate
B001	GU001	PM001	07 March 2023	07 Maret 2023
B002	GU002	PM001	18 April 2023	19 April 2023
B003	GU003	PM002	09 May 2023	9 May 2023
B004	GU004	PM002	11 May 2023	12 May 2023
B005	GU005	PM001	06 June 2023	6 June 2023
PK	FK	FK		

PaymentMethodMaster	
PaymentMethodId	PaymentMethod
PM001	BCA Transfer
PM002	OVO
PK	

GuestMaster					
GuestId	GuestFirstName	GuestLastName	GuestEmail	GuestPhone	GuestAddress
GU001	Ucup	Skuy	ucup.skuy@gmail.com	6281228284176	Jl. Sukamundur RT. 003 / RW. 001
GU002	Levi	Ackerman	ackermanlevi@gmail.com	6281212121391	Paradis Island Blok B. No. 13
GU003	Naruto	Uzumaki	narutoo@yahoo.com	6281278612270	Desa Konoha No.7
GU004	Sano	Manjiro	wibumikey@yahoo.com	6281212112351	Jalan Tokyo Manjiro No. 3
GU005	Luvs	Darlington	ldarlington@gmail.com	628123194182	Malibu Island Blok A. No. 12

Normalization (4NF)


RoomMaster		
RoomId	RoomNumber	RoomType
RM404	404	RT001
RM405	405	RT002
RM406	406	RT003
RM703	703	RT002
RM103	103	RT001
RM115	115	RT002
RM304	304	RT003
RM311	311	RT002
PK		

RoomType		
RoomTypeID	RoomType	RoomPrice
RT001	Single	1.500.000
RT002	Deluxe	4.500.000
RT003	Family	2.000.000
PK		

RoomDetail					
RoomId	BookingId	RoomStatus	CheckInDate	CheckOutDate	BookingStatus
RM404	B001	Available	15 March 2023	20 March 2023	Booked
RM405	B002	Available	20 April 2023	27 April 2023	Booked
RM406	B003	Available	27 April 2023	1 May 2023	Booked
RM703	B004	Available	13 May 2023	19 May 2023	Booked
RM103	B005	Available	16 May 2023	19 May 2023	Booked
RM115	B006	Available	16 May 2023	20 May 2023	Booked
RM304	B007	Available	7 June 2023	9 June 2023	Booked
RM311	B008	Available	21 June 2023	24 June 2023	Booked
PK	FK				

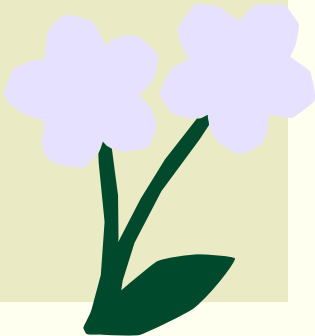


Normalization (4NF)



StaffMaster					
StaffId	StaffFirstName	StaffLastName	StaffEmail	StaffPhone	StaffPosition
ST001	Alexander	Junior	alexj@gmail.com	87594736281	Front Office
ST002	Steven	Lim	limsteven@gmail.com	851522451945	Front Office
ST003	Chandra	Liaw	liaw.chandra@gmail.com	81231234978	Front Office
ST004	Roy	Alloy	roy4110y@gmail.com	62877248916281	Front Office
ST005	Karen	Goose	goose43@gmail.com	62914281248155	Front Office
ST006	Roby	Ferdi	ferdiroby@yahoo.com	6285751741624	Front Office
ST007	Claudia	Brad	bradp43@yahoo.com	6282317247121	Front Office
PK					

StaffDetail		
BookingId	RoomId	StaffId
B001	RM404	ST001
B001	RM405	ST002
B002	RM406	ST003
B003	RM703	ST001
B004	RM103	ST004
B004	RM115	ST005
B005	RM304	ST006
B005	RM311	ST007
CK	CK	FK



Normalization (5NF)

BookingHeader	
BookingId	GuestId
B001	GU001
B002	GU002
B003	GU003

BookingPayment		
BookingId	PaymentMethodId	PaymentDate
B001	PM001	07 Maret 2023
B002	PM001	19 April 2023
B003	PM002	9 May 2023

BookingDate	
BookingId	BookingDate
B001	07 March 2023
B002	18 April 2023
B003	09 May 2023

GuestName		
GuestId	GuestFirstName	GuestLastName
GU001	Ucup	Skuy
GU002	Levi	Ackerman
GU003	Naruto	Uzumaki

PaymentMethodMaster	
PaymentMethodId	PaymentMethod
PM001	BCA Transfer
PM002	OVO
PK	

GuestAddress	
GuestId	GuestAddress
GU001	Jl. Sukamundur RT. 003 / RW. 001
GU002	Paradis Island Blok B. No. 13
GU003	Desa Konoha No.7

Normalization (5NF)

GuestEmail	
GuestId	GuestEmail
GU001	ucup.skuy@gmail.com
GU002	ackermanlevi@gmail.com
GU003	narutoo@yahoo.com

GuestPhone	
GuestId	GuestPhone
GU001	6281228284176
GU002	6281212121391
GU003	6281278612270

StaffPhone	
StaffId	StaffPhone
ST001	87594736281
ST002	851522451945
ST003	81231234978


StaffEmail	
StaffId	StaffEmail
ST001	alexj@gmail.com
ST002	limsteven@gmail.com
ST003	liaw.chandra@gmail.com

StaffPosition	
StaffId	StaffPosition
ST001	Front Office
ST002	Front Office
ST003	Front Office

StaffName		
StaffId	StaffFirstName	StaffLastName
ST001	Alexander	Junior
ST002	Steven	Lim
ST003	Chandra	Liaw

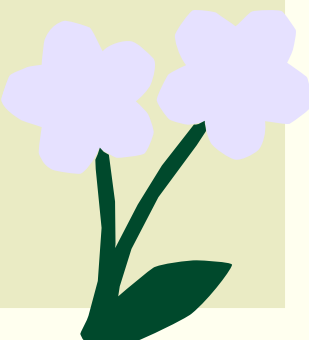


Normalization (5NF)



StaffRoom	
RoomId	StaffId
RM404	ST001
RM405	ST002
RM406	ST003

StaffBooking	
BookingId	StaffId
B001	ST001
B001	ST002
B002	ST003





Thank You.

