

User

attributes

Attribute name	Notes
Id *	Number, read only, auto-increment
Name *	String, min 3 max 30
Phone *	String, matches Egypt phone numbers format
Profile image	String, image link
Password *	String, min 8 max 16
Wishlist	[room-ref]

Business Operations

Business Operation: **create user**

Validation Rules

- Phone must be unique

ACL Rules

- Anonymous

1- Available services

attributes

Attribute name	Notes
Id *	Number, read only, auto-increment
Name *	String, min 3 max 30

Business Operations

Business Operation: **create/ update/ delete**

Overview

- Example:
 - Available-Service-TV
 - Available-Service -Wi Fi
 - Available-Service -Kitchen
 - Available-Service -Laptop
 - Available-Service -Iron

Validation Rules

ACL Rules

- Admin

2- Room

attributes

Attribute name	Notes
Id *	Number, read only, auto-increment
User id *	Number Read only, User ref
Name *	String, min 3 max 30
Images *	Min 1 max 5
Location *	map location
Night price *	Number, min 0
Capacity *	Number, min 1
Available Services	[available-service ref]
Notes	String
Active	Boolean, default true

Business Operations

Business Operation: **create room**

ACL Rules

- User

Business Operation: **search rooms**

Search Criteria

- Available-Services
- Night price range (from/to)
- Booking duration (search duration doesn't intersect with orders with status: PENDING, ACCEPTED)
- Capacity
- Location (default: user's location)
- Distance

Sort criteria

- By distance (default sorting: the distance between the room location and the search-location)
- By Night Price (ascending / descending)

Business Operation: **get my rooms list**

Validation Rules

- User id

ACL Rules

- User

Business Operation: **add to/ remove from Wishlist**

Overview

- The user can review rooms and add them to/ remove from his Wishlist

Validation Rules

- The user can't add his rooms to his Wishlist

ACL Rules

- User

Business Operation: **update room**

ACL Rules

- User

Business Operation: **delete room**

Overview

- When deleting a room, delete if from wish-lists if existed.

ACL Rules

- User

3- Order

attributes

Attribute name	Notes
Id *	Number, read only, auto-increment
User id*	Number, read only, User ref
Room *	Number, Room ref
Booking Period *	[from: number, to: number] Default hour: 12:00PM Ex: the user sets: 16/11/2021 the system saves it as 16/11/2021 12:00PM
Notes	String
Order price *	Number, calculated (booking period in days * room-night-price)
Paid	Boolean, default: false
Status *	String, default PENDING, options: [PENDING, ACCEPTED, REFUSED, COMPLETED, CANCELLED, EXPIRED]
Cancel notes	String

Business Operations

Business Operation: **create order**

Overview

- a user can book a specific room for a specific period
- the user determines the booking period start and end days (and the system sets a default time 12:00PM)
- booking-period-start date must be greater than current-date by 1 day at least
- a notification will be sent to the room-owner to inform him with the created-order ("new booking order created on room {id}")

Validation Rules

- The user can't create order on his rooms
- Booking period must be in the future (greater than current-date by 1 day at least)
- The user can't create an order with a period intersected with an order with status (pending, accepted)

ACL Rules

- User

Business Operation: **edit order**

Validation Rules

- Status = PENDING

ACL Rules

- Order-owner

Business Operation: **expire pending orders**

Overview

- If the room owner didn't take any action in 3 hours before booking-period_start-date, the pending order will be expired
 - Status will be updated to be EXPIRED
 - A notification will be sent to the room-owner to inform him with the expired-order ("order {id} on room {id} has been expired")
 - A notification will be sent to the order-owner to inform him with the expired-order ("order {id} on room {id} has been expired")

Validation Rules

- status = PENDING

ACL Rules

- automatically by the system

Business Operation: **accept order**

Overview

- The room owner can accept pending orders on his rooms
- A notification will be sent to the order-owner to inform him that his order has been accepted and he has 2hours to pay for that order ("order {id} on room {id} has been accepted")

Validation Rules

- status = PENDING

ACL Rules

- room owner

Business Operation: **refuse order**

Overview

- The room owner can refuse pending orders on his rooms
- The status will be updated to be REFUSED
- A notification will be sent to the order-owner to inform him that his order has been refused ("order {id} on room {id} has been refused").

Validation Rules

- status = PENDING

ACL Rules

- room owner

Business Operation: **expire accepted orders**

Overview

- if the order owner didn't pay for an accepted order within 2hours after his order being accepted by the room-owner, his order will be expired.
 - Status will be updated to be EXPIRED
- A notification will be sent to the room-owner to inform him with the expired-order ("order {id} on room {id} has been expired")
- A notification will be sent to the order-owner to inform him with the expired-order ("order {id} on room {id} has been expired")

Validation Rules

- status = ACCEPTED
- paid = false
- 2 hours passed after being accepted without being paid

ACL Rules

- automatically by the system

Business Operation: **complete accepted orders**

Overview

- when the booking-period_end-date reached, the system updates the status of the accepted and paid orders to be COMPLETED
- a notification will be sent to both room-owner and order-owner ("order {id} on room {id} has been completed")

Validation Rules

- status = ACCEPTED
- paid = true

ACL Rules

- automatically by the system

Business Operation: **pay for an order accepted orders**

Overview

- If an order being accepted, the order-owner must pay for that order within 2hours
- (paid) attribute will be updated to be (true)
- A notification will be sent to the room-owner to inform him with the payment ("order {id} on room {id} has been paid")

Validation Rules

- status = ACCEPTED
- paid = false
- paying within 2hours after acceptance

ACL Rules

- order-owner

Business Operation: cancel pending orders

Overview

- status will be updated to be CANCELLED
- a notification will be sent to the room owner
- (Cancel notes) will be updated to be (cancelled by the order-owner)

Validation Rules

- status = PENDING

ACL Rules

- order-owner

Business Operation: cancel accepted orders

Overview

- status will be updated to be CANCELLED
- when cancelled by the room-owner:
 - a notification will be sent to the order-owner
 - (Cancel notes) will be updated to be (cancelled by the room-owner)
- when cancelled by the order-owner:
 - a notification will be sent to the room-owner
 - (Cancel notes) will be updated to be (cancelled by the order-owner)
- If (paid == true), a REFUND process will be implemented automatically.

Validation Rules

- status = ACCEPTED

ACL Rules

- order-owner
- room-owner

Business Operation: reminder with a room-booking

Overview

- when reaching the start-date of the booking period, the system sends a notification to both the room-owner and the order-owner to notify them with the booking ("order {id} on room {id} has been started")

Validation Rules

- status = ACCEPTED
- paid = true

ACL Rules

- automatically by the system

Business Operation: **check room availability**

Model

- Room

Overview

- Return (true or the room is available, if there is no pending or accepted order intersected with the search period)

Search criteria

- from date/ to date

Business Operation: **get my orders**

Search criteria

- User id

Sort criteria

- Booking-period_start-date (asc)

ACL Rules

- User

Business Operation: **get orders received on my rooms**

Search criteria

- Room.user-id

Sort criteria

- Booking-period_start-date (asc)

ACL Rules

- User

4- Room (update)

Business Operation: **update room**

Overview

- Updates on rooms assigned to orders (especially updating the night-price), affects only the subsequent orders.

ACL Rules

- User

Business Operation: **delete room**

Overview

- Rooms assigned to orders can't be deleted

ACL Rules

- User

Business Operation: **activate / deactivate room**

Overview

ACL Rules

- **User**

5- Chat module (general chat)

Overview

- The app users can chat with each other