

For the development of the project a couple of interviews were taken from which key points were obtained from where they can highlight options such as the creation of a history of the receipts payments to the administration in addition to the creation of some function which of a reminder on the payment of these same receipts, also the implementation of a system that shows the availability of common spaces, and the ability to have a way to access services such as cleaning or maintenance in a more agile manner, these points under the premise of being able to have more ease at the time of obtaining information regarding the activity of the apartments.

For the elaboration of this project is separated into three parts being Front-end, Back-end and database, separating each component in smaller parts seeking greater independence between modules, the database will use a relational database in which all data of both users and the same apartment facility will be stored. In addition, the project will be managed under Scrum with the objective of being able to deliver the project in optimal conditions and in future allow the client much faster and more effective corrections and system improvements

1. Define Components

List of apartments

Receipts

Reservation of spaces

Availability of spaces

2. Define Entities

- | | |
|-------------|-----------------------|
| • User | • Common Spaces |
| • apartment | • Roles |
| • Payments | • History of activity |
| • Reserve | • Notifications |

3. Define Attribute per Entity

- | | |
|--|--------------------------------|
| • User | • Payments |
| Name, email, password, phone, registration | Quantity, payment date, status |
| • Apartment | • Reserve |
| Block, number, size, state | Date of booking, status |

- Common Spaces

Name, persons, availability

Type, description, date

- Notifications

Message, Date

- Roles

Name, description

- Type of service

Name, description

- History of activity

4. Define Relationships

	E1	E2	E3	E4	E5	E6	E7	E8	E9
E1		-	-	-		-	-	-	
E2	-								
E3	-						-		-
E4	-				-		-		
E5				-					
E6	-								
E7	-		-	-					
E8	-								
E9			-						

5. Define Relationship Types

User one ... many Payments

User one ... many Reserve

User one ... many Notification

User one ... one Apartment

Roles one ... much User

Activity history one ... one User

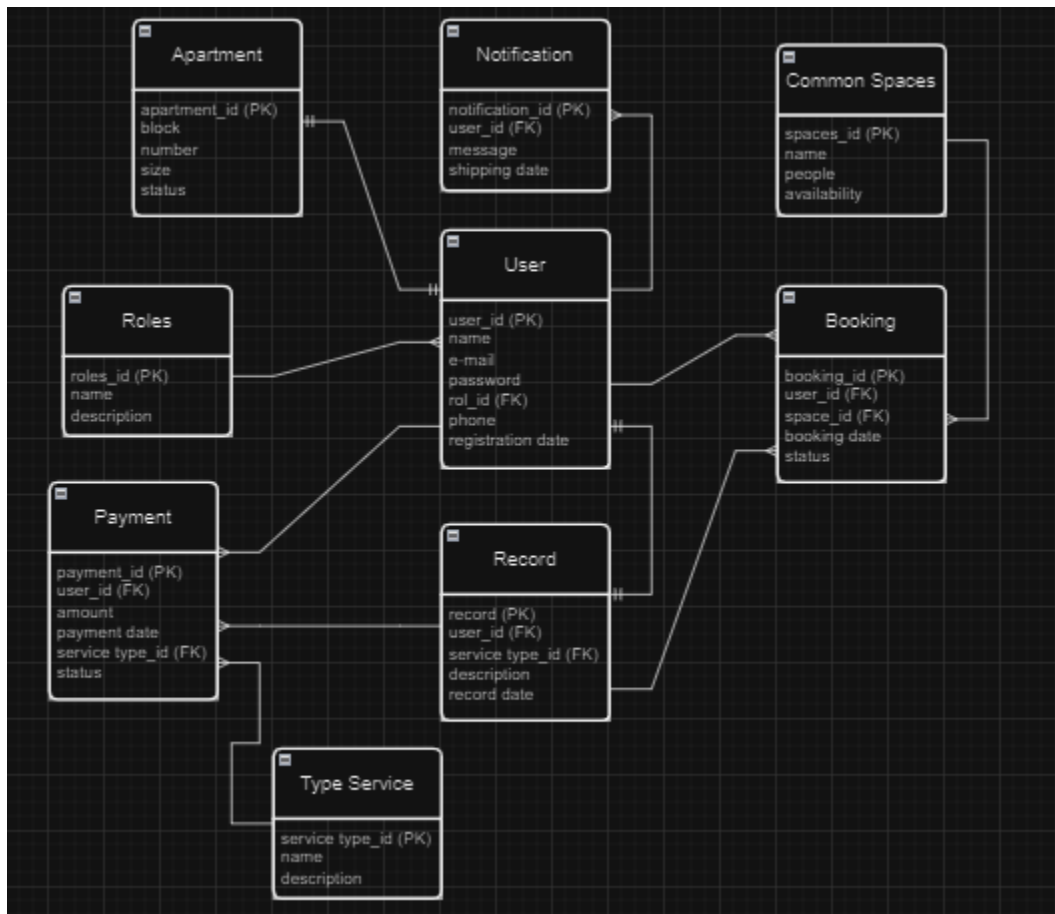
Common Spaces one ... many Reservations

Activity history one ... many Payments

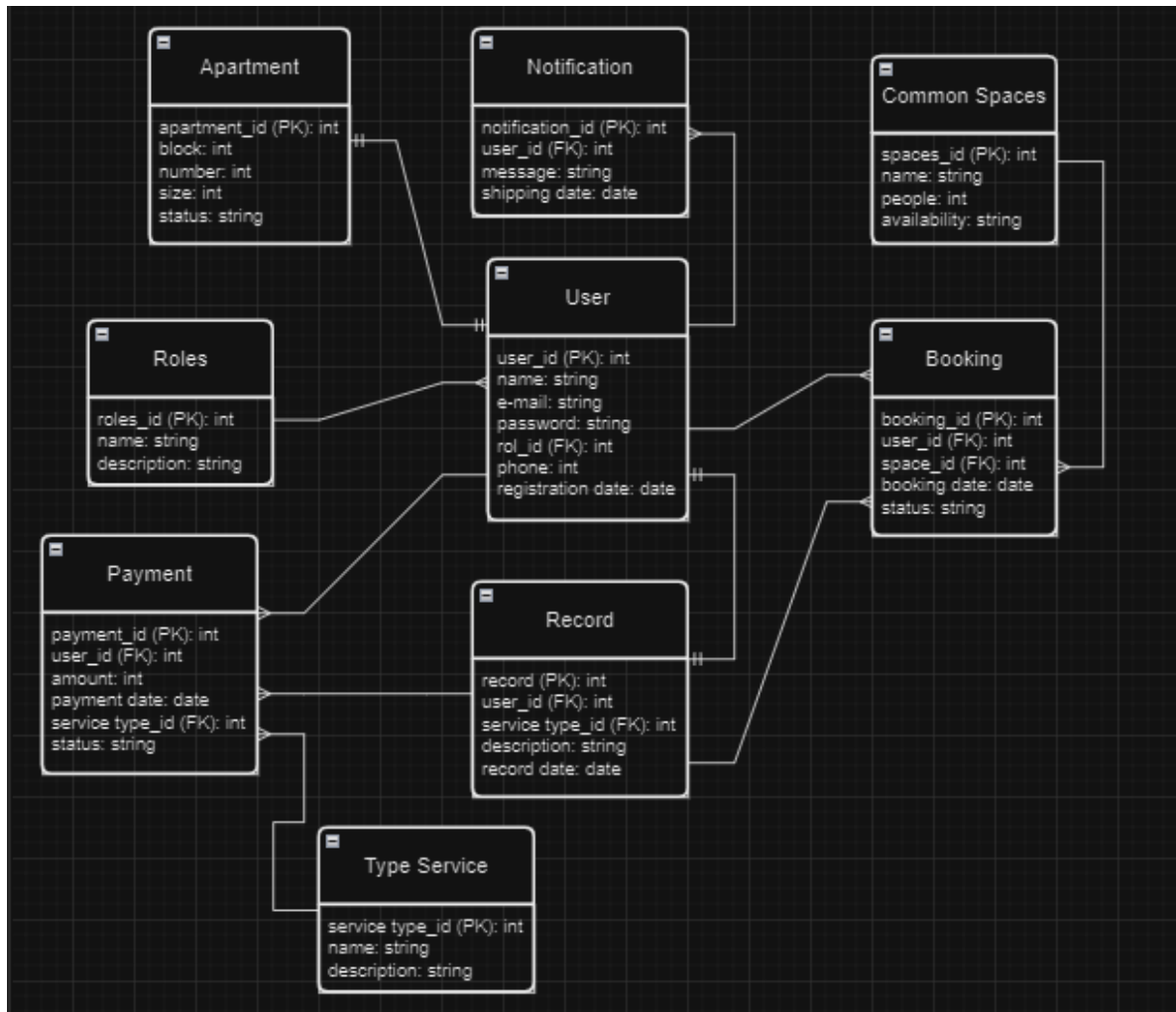
Activity history one ... many Reserve

Service type one ... many Payments

6. Entity-Relationship Draw



7. Get Data-Structure



8. Define Constraints and Properties of Data

