A3: Design Model

- *Jóhann Bjarki Hall*
- *Jóhannes Nordal*
- *Magnús Þór Valdimarsson*
- *Þorri Már Sigurþórsson*

UML Sequence Diagram
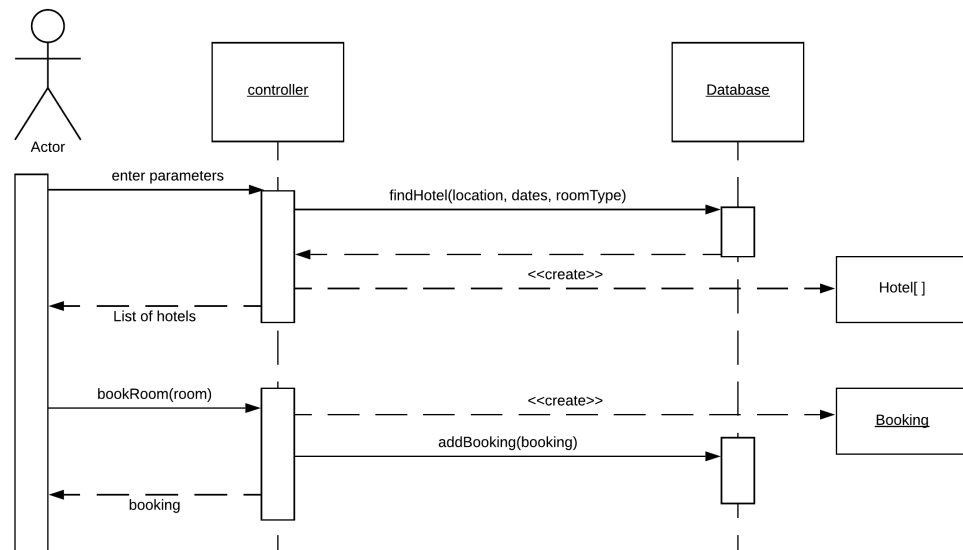

Figure 1:
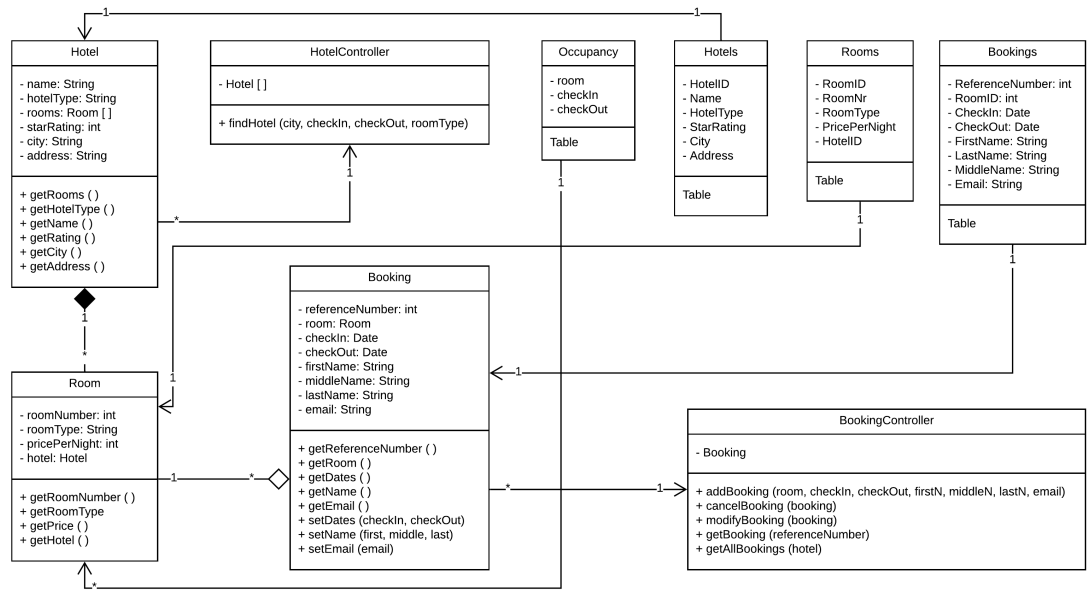
UML Class Diagram

Hotel

- name: String
- hotelType: String
- rooms: Room [ ]
- starRating: int
- city: String
- address: String

+ getRooms ( )
+ getHotelType ( )
+ getName ( )
+ getRating ( )
+ getCity ( )
+ getAddress ( )

HotelController

- Hotel [ ]

+ findHotel (city, checkIn, checkOut, roomType)

Occupancy

- room
- checkIn
- checkOut

Table

Hotels

- HotelID
- Name
- HotelType
- StarRating
- City
- Address

Table

Rooms

- RoomID
- RoomNr
- RoomType
- PricePerNight
- HotelID

Table

Bookings

- ReferenceNumber: int
- RoomID: int
- CheckIn: Date
- CheckOut: Date
- FirstName: String
- LastName: String
- MiddleName: String
- Email: String

Table

Booking

- referenceNumber: int
- room: Room
- checkIn: Date
- checkOut: Date
- firstName: String
- middleName: String
- lastName: String
- email: String

+ getReferenceNumber ( )
+ getRoom ( )
+ getDates ( )
+ getName ( )
+ getEmail ( )
+ setDates (checkIn, checkOut)
+ setName (first, middle, last)
+ setEmail (email)

Room

- roomNumber: int
- roomType: String
- pricePerNight: int
- hotel: Hotel

+ getRoomNumber ( )
+ getRoomType
+ getPrice ( )
+ getHotel ( )

BookingController

- Booking

+ addBooking (room, checkIn, checkOut, firstN, middleN, lastN, email)
+ cancelBooking (booking)
+ modifyBooking (booking)
+ getBooking (referenceNumber)
+ getAllBookings (hotel)

Figure 2: