**CSC263 Database Systems**

**Semester Project**

**Requirement Collection and Analysis**

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I need to create a database schema design based on the following(simplified) requirements of the HOTEL Database:

* The Hotel organized into a few categories: each hotel branch, the employees at each hotel, the customers who stay at each hotel, the rooms that the customers stay in, and the billing system
* Each hotel has many rooms and many employees and is identified via its hotel\_id
* A hotel can have many employees all divided into positions, but an employee can only work at one hotel branch
* Each employee has an Employee\_Id unique to them
* Each hotel has a number of available rooms for booking, each room is identified via its room\_Id as well as the Hotel\_Id it is associated with
* Customers can book many rooms but only at one hotel
* Customers are identified via a Customer\_Id that is assigned to them
* The billing system keeps track of available rooms as well as arrival/departure dates

The Entities and their attributes are as follows:

* Hotel
  + Hotel\_Id
  + Address
  + Phone Number
  + Capacity(Rooms available)
* Employee
  + Employee\_Id
  + firstName
  + lastName
  + Position
  + Phone Number
* Customer
  + Customer\_Id
  + firstName
  + lastName
  + Phone Number
* Rooms
  + Hotel\_Id
  + Room\_Id
* Billing
  + Room\_Id
  + Hotel\_Id
  + Customer\_Id
  + Reservation\_Cost
  + Arrival\_Date
  + Departure\_Date