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# PROJECT 2: GROUP 2

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CS/DSA-4513 - DATABASE MANAGEMENT

INSTRUCTOR:  
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## **Problem 1**

### **Part a:**

This database relates companies to various venues. Each venue in the database has an organizer and a unique name and address. A company can reserve a venue with a reservation agreement on a certain date. Each reservation agreement has a payment amount and a unique ID.

Each company has a location and a unique name. Additionally, the database stores the relationship between a company and its parent and child companies with the date of acquisition.

Moreover, a venue may have many rooms that have a number unique to that venue as well as a certain capacity. Furthermore, a venue can either be an unstaffed venue or a staffed venue. If it is unstaffed, the database should also store the total area of the venue; if it is staffed, it should include the budget of the venue.

Additionally, the database also records the staff members that is employed by a staffed venue. A staff member must be associated with a single staffed venue, though many staff members may be employed for a single staffed venue. The database stores the staff member's name, first and last, and any phone numbers that they provide as well as a unique ID.

A staff member may also work on any number of jobs. A job has a start and end date, the payment amount and a unique job ID. Furthermore, when a staff member works on a job, they may also sign a contract. If a contract is signed, it must be associated with a single staff member that works on a job. Similarly, a staff member that signs a contract can only sign a single contract. A contract has a sign date and the details of the contract and a unique contract ID.

### **Part b:**

Reservation\_Agreement(reservation\_id, payment)  
Company(company\_name, location)  
Venue(venue\_name, address, organizer)  
Unstaffed\_Venue(venue\_name, address, total\_area)  
Staffed\_Venue(venue\_name, address, budget)  
Room(number, venue\_name, address, capacity)  
Staff\_Member(staff\_id, venue\_name, address, first\_name, last\_name)  
Staff\_Member\_Phone(staff\_id, phone\_number)  
Job(job\_id, start\_date, end\_date, payment)  
Contract(contract\_id, staff\_id, job\_id, date\_signed, details)  
Reserves(reservation\_id, company\_name, venue\_name, address, date)  
Owned\_By(child\_name, parent\_name, date\_acquired)  
Works\_On(staff\_id, job\_id)

**Part c:**

