Kush Gandhi

CSCI 466-PE1

ER Diagram Explanation

1. The first entity I made was “Employee” which represents the people who are working at the spa. The attributes for the entity are Address, Email, Specialty, Name, Phone Number, Pay Rate, and EmployeeID as the identifier.

2. The next entity is “Service” which serves as what kind of services the spa provides to clients. The attributes are Date/Time, Name, Price, and ServiceID. The relationship between Employee and Service are (1,1) to Employee and (1,m) to service when an employee can perform many services to clients.

3. The 3rd entity is “Client” with the attributes as Address, Name, ClientID as the identifier, Phone Number, and Email. The relationship between “Employee” and “Client” is “prefers” since a client has a preferred employee. For Client, it would be (1,1) and (1,m) for Employee.

4. The last entity is “Appointment” with the attributes as ServiceID, ClientID, AppointmentID, Date/Time, and EmployeeID. There are 2 relationships for this entity which connects to “Employee” and “Client”. For Employee there can only be 1 of them working so it would (1,1) and can have many appointments (1,m). The same thing applies to Client (1,1) and Appointment (1, m).

Relational Schema for ER Diagram

Employee (Address, Job tittle, Email, Specialty, Name, Phone Number, Pay Rate, EmployeeID)

Client (Address, Name, ClientID, Phone Number, Email)

Service (Name, ServiceID, Date/Time, Price)

Appointment (ServiceID+, ClientID+, AppointmentID+, EmployeeID+, Date/Time)

Prefers (ClientID+, EmployeeID+)

Performs (ServiceID+, EmployeeID+)

HasAppointment (EmployeeID+, ClientID+, AppoinementID+, ServiceID+)