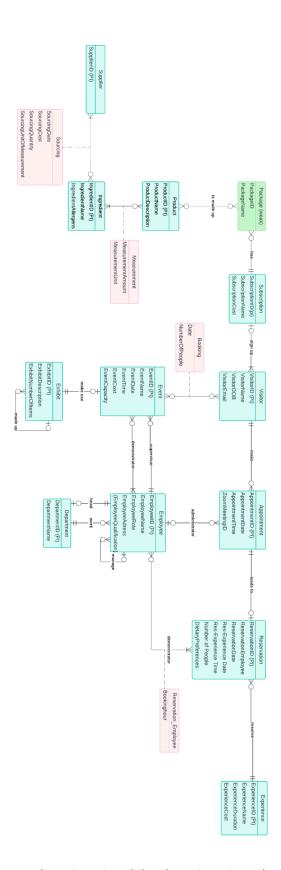
COMP1350 Assignment

Group Number:

| Student ID | Student Name | |
|------------|----------------|--|
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Solutions:

Task 1:



Assumptions:

• Employees work in one department and the department can have many employees

Task 2:

Step1: Strong Entity

Visitor(VisitorID(pk), VisitorName, VisitorDOB, VisitorEmail)

Event(**EventID(pk)**, EventName, EventDate, EventTime, EventCost, EventCapacity)

Exhibit(**ExhibitID(pk)**, ExhibitDescription, ExhibitNumberOfItem)

Appointment (**AppointmentID** (**pk**), AppointmentDate, AppointmentTime, ZoomMeeetingID)

Reservation(**ReservationID(pk)**, ReservationEmployee, ReservationDate, Res-ExperienceDate, Res-ExperienceTime, NumberOfPeople, DietaryPreferences)

Experience(ExperienceID(pk), ExperienceName, ExperienceDuration, ExperienceCost)

Employee(**EmployeeID(pk)**, EmployeeName, EmployeeRole, EmployeeAdresss)

Department(**DepartmentID(pk)**, DepartmentName)

Subscription(SubscriptionID(pk), SubscriptionName, SubscriptionCost)

Product(**ProductID(pk)**, ProductName, ProductDescription)

Ingredient(IngredientID(pk), IngredientName, IngredientAllergens)

Supplier(SupplierID(pk))

Step2: Weak Entity

Package(**SubscriptionID(pk,fk)**, PackageID(pk), PackageName)

Step 3 - 1 to 1

Event(**EventID(pk)**, <u>ExhibitID(fk)</u>, EventName, EventDate, EventTime, EventCost, EventCapacity)

Department(**DepartmentID(pk)**, <u>EmployeeID(fk)</u>, DepartmentName)

Reservation(**ReservationID(pk)**, <u>AppoinmentID(fk)</u>, ReservationEmployee, ReservationDate, Res-ExperienceDate, Res-ExperienceTime, NumberOfPeople, DietaryPreferences)

Step 4 - one to many

Event(**EventID(pk)**, <u>ExhibitID(fk)</u>, <u>EmolyeeID(pk)</u>, EventName, EventDate, EventTime, EventCost, EventCapacity)

Employee(*EmployeeID(pk)*, DepartmentID(fk), ManagerID (fk), EmployeeName, EmployeeAdresss)

Exhibit(**ExhibitID(pk,fk)**, **ExhibitParent(fk)**, **ExhibitDescription**, **ExhibitNumberOfItem**)

Visitor(visitorID(pk), SubscriptionID(fk), VisitorName, VisitorDOB, VisitorEmail)

Appointment(**AppointmentID (pk)**, <u>EmployeeID(fk)</u>, AppointmentDate, AppointmentTime, ZoomMeeetingID)

Reservation(**ReservationID(pk)**, <u>AppoinmentID(fk)</u>, <u>ExperienceID(fk)</u>, ReservationEmployee, ReservationDate, Res-ExperienceDate, Res-ExperienceTime, NumberOfPeople, DietaryPreferences)

Step 5 - many to many

Booking(<u>VisitorID(pk,fk)</u>, <u>EventID(pk,fk)</u>, Date, NumberOfPeople)

Demonstrator(<u>EventID(pk,fk)</u>, <u>EmployeeID(pk,fk)</u>)

Reservation_Employee(ReservationID(pk,fk), EmployeeID(pk,fk), Bookinghour)

Package_Product(<u>Product(pk,fk)</u>, <u>SubscriptionID(pk,fk)</u>, <u>PackageID(pk,fk)</u>)

Measurement(<u>ProductID(pk,fk)</u>, <u>IngredientID(pk,fk)</u>, MeasurementAmount, MeasurementUnit)

Sourcing(<u>IngredientID(pk,fk)</u>, <u>SupplierID(pk,fk)</u>, SourcingDate, SourcingCost, SourcingQuantity, SourcingUnitOfMeaturement)

Step 6 - multi values attributes (MVA)

EmployeeQualification(EmployeeID(pk,fk), EmployeeQualification (pk))

Step 7 - associative entity NA

FINAL SET OF TABLES

Visitor(visitorID(pk), SubscriptionID(fk), VisitorName, VisitorDOB, VisitorEmail)

Booking(<u>VisitorID(pk,fk)</u>, <u>EventID(pk,fk)</u>, Date, NumberOfPeople)

Event(**EventID(pk)**, <u>ExhibitID(fk)</u>, <u>EmolyeeID(pk)</u>, EventName, EventDate, EventTime, EventCost, EventCapacity)

Demonstrator(**EventID(pk,fk)**, **EmployeeID(pk,fk**))

Exhibit(ExhibitID(pk,fk), ExhibitParent(fk), ExhibitDescription, ExhibitNumberOfItem)

Appointment(**AppointmentID** (**pk**), <u>EmployeeID(fk)</u>, AppointmentDate, AppointmentTime, ZoomMeeetingID)

Reservation(**ReservationID(pk)**, <u>AppoinmentID(fk)</u>, <u>ExperienceID(fk)</u>, ReservationEmployee, ReservationDate, Res-ExperienceDate, Res-ExperienceTime, NumberOfPeople, DietaryPreferences)

Reservation_Employee(ReservationID(pk,fk), EmployeeID(pk,fk), Bookinghour)

Employee(*EmployeeID(pk)*, DepartmentID(fk), ManagerID (fk), EmployeeName, EmployeeAdresss)

EmployeeQualification(EmployeeID(pk,fk), EmployeeQualification (pk))

Department(**DepartmentID(pk)**, <u>EmployeeID(fk)</u>, DepartmentName)

Experience(ExperienceID(pk), ExperienceName, ExperienceDuration, ExperienceCost)

Subscription(**SubscriptionID(pk)**, SubscriptionName, SubscriptionCost)

Package(**SubscriptionID(pk,fk)**, PackageID(pk), PackageName)

Product(**ProductID(pk)**, ProductName, ProductDescription)

Measurement(<u>ProductID(pk,fk)</u>, <u>IngredientID(pk,fk)</u>, MeasurementAmount, MeasurementUnit)

Ingredient(IngredientID(pk), IngredientName, IngredientAllergens)

Sourcing(IngredientID(pk,fk), SupplierID(pk,fk), SourcingDate, SourcingCost, SourcingQuantity, SourcingUnitOfMeaturement)

Supplier(SupplierID(pk))