Logo, company name

Description automatically generated

**Database System I**

**Project Documentation**

**Car Rental System**

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| --- | --- | --- |
| **Team** | | |
| Members | | Group |
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| 3 | Remonda Malak Nageb | 3 |
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**Presented to**

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Car rental services

**Introduction**

Car rental services System. Our system provides that the customer can rent any car or motorcycle based on what model he wants and the kind of car he wants. Our system provides kind of services, and we will discuss these services below.

**There are five services our car rental System service:**

**Long term services:** this term is between 2 weeks to a month duration, and this service provides to the customer specific cars that will be useful to the long-term service and help him in what he wants the car for.

**Short term services:** this term is between a day to a week duration, and these services have specific cars for the short duration of the service.

**Wedding service**: this service is between 2 hours to maximally 1 day duration, this service provides the customers with and driver for the car and another option that the customer can customize the car as he wants.

**Motorcycle services:** this service is between a day to a week duration; this service helps the customer that don’t want to rent a car and want to make it easier on them and to prevent the car traffic etc...

**Special event:** this services our System provides every 2 months and event; like discounts on the cars, special offers, free prices, membership offers, etc…

# **As our system provides many services it must have a Database to organize the Data and Relations between all the actors that uses our system:**

# **Project’s Functional View**

# Maintain Basic Data

* **Car** **(**Car\_ID, Borrower\_ID, Department\_ID, Color, Manufacture company, Engine capacity, Horsepower, Maximum speed, Transmission Type, Year, Fuel, Trunk Size, Seats, Traction Type, Fuel tank capacity, Number of cylinders, Price, Rental Points**)**
* **Borrower (**Borrower\_ID, Name, Gender, Age, National ID, Phone number, Email, Password, Username, City, Country, Nationality)
* **Employee (**Employee\_ID, Department\_ID, Department ID, Name, Gender, Age, Email, Username, Password, City, Country, Nationality, Address, Salary, Banking information, Graduation state**)**
* **Department (**Department\_ID, Name, Location, Start Date**)**
* **Rent (**Renta**l**\_ID, Borrower\_ID, Car\_ID, Duration, Rental Date, Payment method, **)**
* **Works On** (Department\_ID, Car\_ID**)**
* **Manage (**Employee\_ID, Car\_ID, Employee Name, Department Name**)**
* **Works IN (**Employee\_ID, Department\_ID, Employee Name, Department Name, Hire Date**)**

# Issue Query Subsystems

* Search by CarID
* Search by Department ID
* Search by EmployeeID
* Search by BorrowerID

# Perform transactions

* What transactions need to Add (all entities).
* What transactions need to delete (all entities).
* What transactions need to update (all entities).

**Entity Relationship Diagram**