Cohort One

JAVA DEVELOPER – SUMMATIVE CAPSTONE PROJECT

Project Title

Car Rental Management

Start Date: 9th February, 2021

End Date: 17th May, 2021

Car Rental Management system

Purpose:

This project is being taken up for demonstrating skills acquired during the training. The scope of the project is described below:

Technical specifications:

The project will be developed using the following tools. Outlined here are the basic requirements and individuals can choose any other tools of their convenience.

- 1. Tools
 - a. Windows or Mac operating system as available
 - b. STS 4.0 or equivalent
- 2. Software & technologies to be used
 - a. Oracle database version 12c (or any similar)
 - b. SQL Developer
 - c. Java 8 or higher (version can be changed as needed)
 - d. JavaScript
 - e. CSS
 - f. HTML 4.0 or higher
 - g. jQuery
 - h. Thymeleaf
 - i. Balsamiq or equivalent for wireframing
 - j. https://erdplus.com/ or any other ER modeling tool, to determine the dB
- 3. Others
 - a. Upload the final code to a git folder that will be given later.

Business Requirements

- 1. Design an intuitive UI for the ease of use.
- 2. The facility for the user to login with his credentials as given during the registration.

- 3. The complete user data should only be visible to the administrator (individual user information can be amended by the user)
- 4. All the rights to remove data from the system will only be available with the "admin". Users can only add records for hire data and see the list of hires.
- 5. However, the Managers can be given a provision of editing /deleting the data across all the modules barring the user information.
- 6. Addition of vehicles into the system can be done only by the admin and not by any other users /managers.
- 7. The list of customers and their past bookings is to be displayed in the reports section.
- 8. An invoice should be generated internally by the system at the end of the trip.
- 9. Maintain the list of vehicles and allow the customer to book a vehicle.
- 10. The vehicles that are currently in the status of the "free" or any such status should be allowed to be booked.
- 11. Following will be details required in the system
 - a. Vehicle
 - i. Model
 - ii. Brand
 - iii. Status
 - iv. Hire details
 - 1. Rate plans
 - 2. All the data pertaining to the current and past hires
 - 3. The current hire will not have the end date.
 - 4. Employee who handled the hire (fulfillment agent)

b. Customer

- i. Details
 - 1. Name
 - 2. Address
 - 3. City
 - 4. Phone #
 - 5. Email
 - 6. Website
 - 7. Alternate contact details

- 8. Proof of identity (id captured or an image)
- ii. Invoice details per customer
- iii. Invoice status (paid or not)
- c. Users management
 - i. ID
 - ii. Username
 - iii. Firstname
 - iv. Lastname
 - v. Password
 - vi. Role
- d. Invoices (Printing the PDF can be optional, record will suffice)
 - i. Invoice date
 - ii. Payment date
 - iii. Amount
 - iv. Customer detail
 - v. Hire details (ID)