Car Rental Management System

By:
Gaurav Saini 2K19/SE/044
Krish Saini 2K19/SE/063

Table Of Contents

Problem Statement

- Car and bus travel agencies need an effective management platform for handling their respective transportation services. So, the current system needs to be computerized using website.

- The proposed car booking management system is web application.

- In case of car rental services, this sort of system stands out as trustworthy and reliable in the travel business.

OBJECTIVE

- To produce a web-based system that allow customer to register and reserve car online and for the company to effectively manage their car rental business.

- To ease customer’s task whenever they need to rent a car.

SDLC Model Used: **Iterative Enhancement**

- In the Iterative model, the iterative process starts with a simple implementation of a small set of the software requirements and iteratively enhances the evolving versions until the complete system is implemented and ready to be deployed.

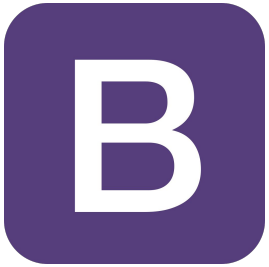
- An iterative life cycle model does not attempt to start with a full specification of requirements. Instead, development begins by specifying and implementing just part of the software, which is then reviewed in order to identify further requirements. This process is then repeated, producing a new version of the software at the end of each iteration of the model.

Client Side Requirements

- **Processor**: Intel Dual Core
- **HDD**: Minimum 1GB Disk Space free
- **RAM**: Minimum 1GB
- **OS:** Windows 7, 8, 8.1, 10, Linux.
- **Browser**: Chrome Recommended.

Front-End Development

1. HTML
2. CSS
3. Bootstrap 5.0



Back-End Development

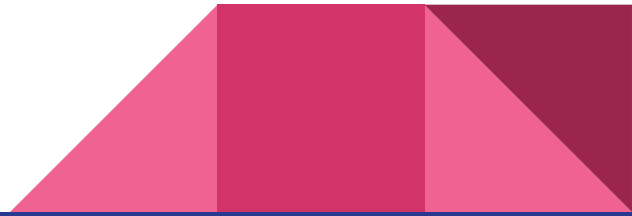
1. Node Js with express
2. EJS
3. MySQL

Functional Requirements

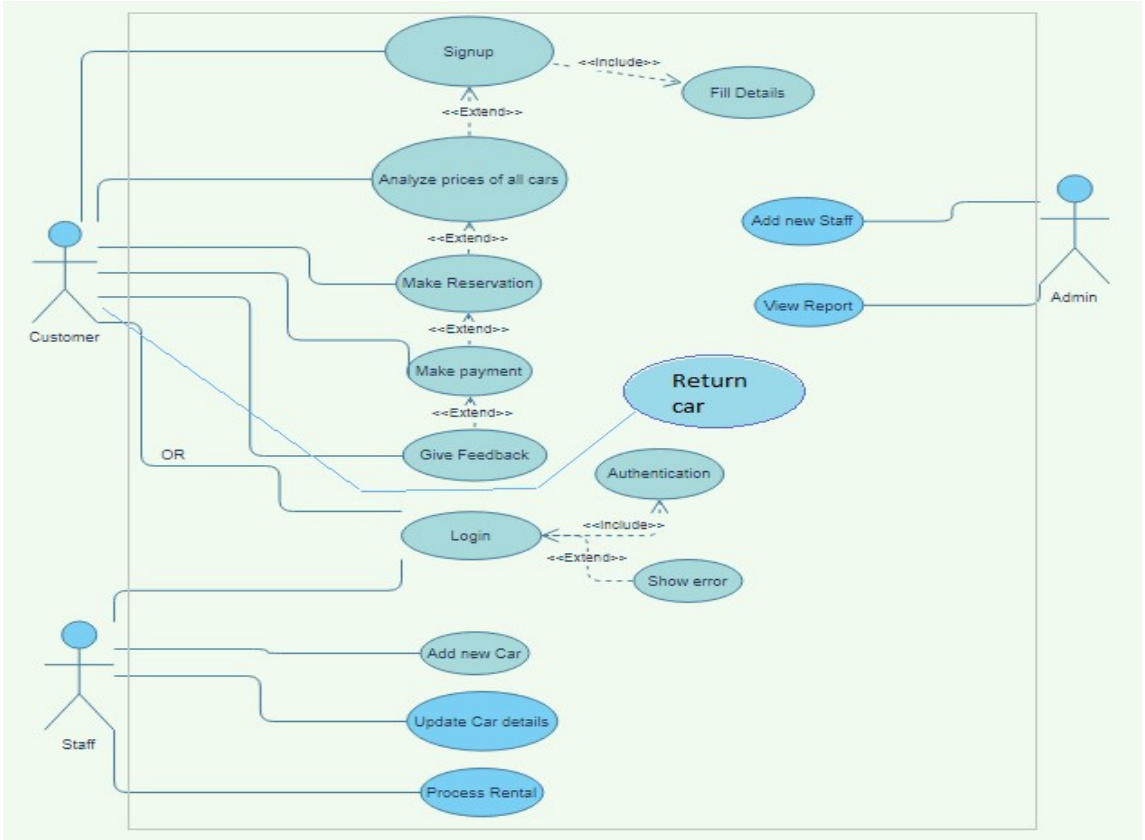
1. Registration
2. Log in
3. Cars
4. Rent

Non Functional Requirements

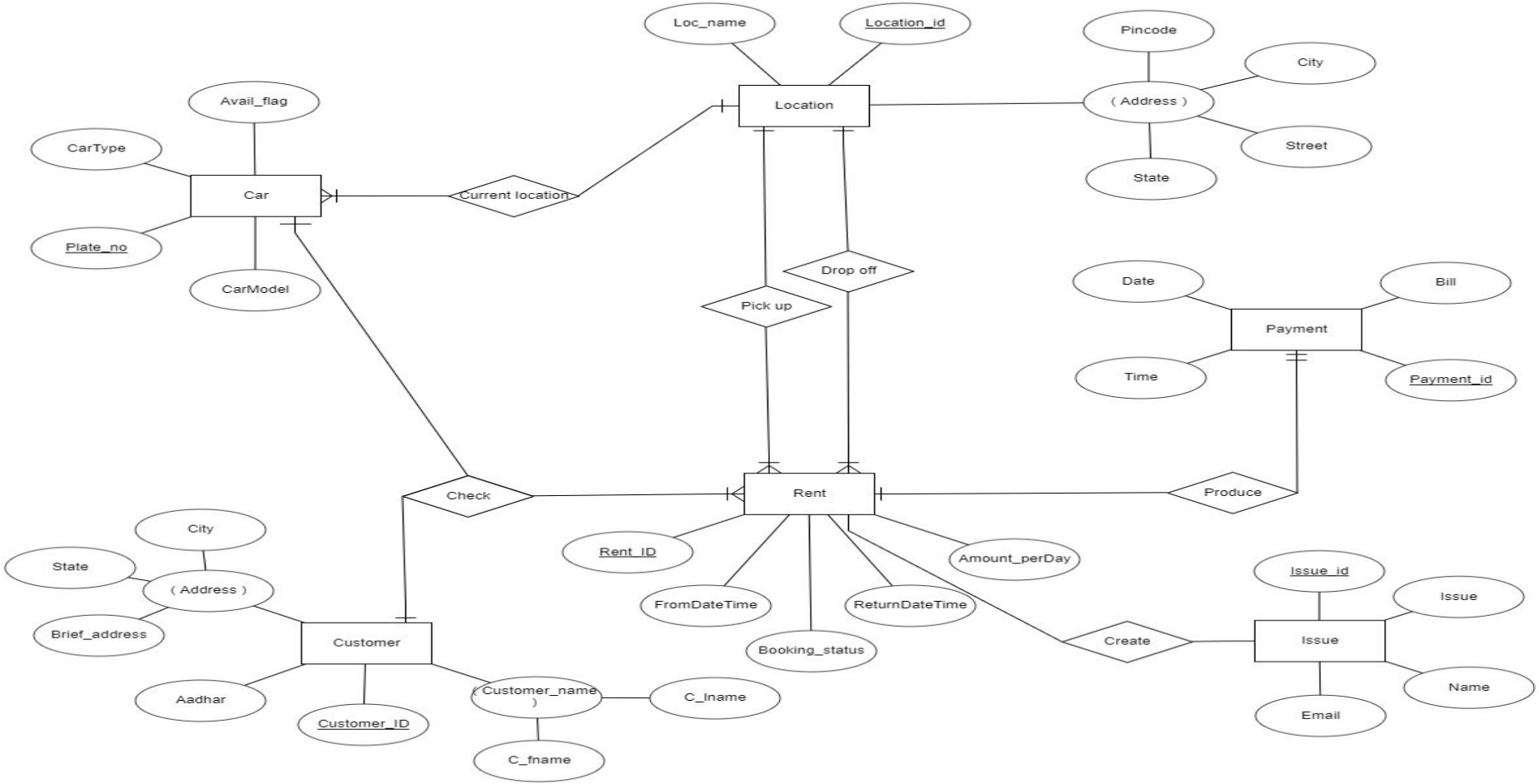
1. Usability
2. Security
3. Performance
4. Availability
5. Error Handling
6. Ease of Use



Use Case Diagram



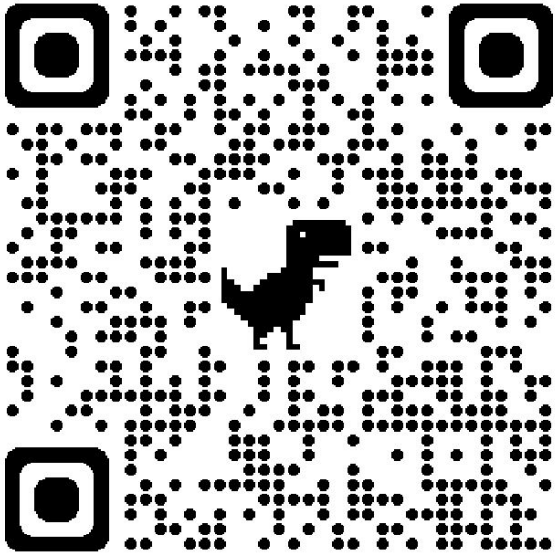
ER Model


Loc_name
Location_id
Location
Pincode
City
(Address)
Street
State
Avail_flag
CarType
Car
Current location
Plate_no
CarModel
Drop off
Pick up
Date
Bill
Payment
Time
Payment_id
Check
Rent
Produce
City
State
(Address)
Brief_address
Customer
Aadhar
Customer_ID
(Customer_name)
C_lname
C_fname
Rent_ID
FromDateTime
ReturnDateTime
Booking_status
Amount_perDay
Create
Issue_id
Issue
Issue
Name
Email

Conclusion

- Car rental business has emerged with a new goody compared to the past experience where every activity concerning car rental business is limited to a physical location only.
- Nowadays, customers can reserve cars online, rent car online, and have the car brought to their doorstep once the customer is a registered member or go to the office to pick the car.
- The web-based car rental system has offered an advantage to both customers as well as Car Rental Company to efficiently and effectively manage the business and satisfies customers' need at the click of a button.

QR Code of Website



Resources Attached

- GitHub Repository: https://github.com/Gaurav31200/Drift_Rental
- Website Link: https://calm-ravine-99748.herokuapp.com/
- Video Tutorial: https://drive.google.com/file/d/1wEETfQ12E1DwXwgddw7vsMcTmcsVrSRg/view?usp=sharing

Thank You!