National University of Modern Languages

Department of Software Engineering

Software Construction & Development

Project Report

Submitted to

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1. Introduction

The Car Rental System project is a C++ based software application that provides functionalities for both administrators and users. The system allows administrators to add cars to the rental inventory and set the daily rental prices. Users can access the system after authentication to choose a car for rent and view the billing details. This project report provides an overview of the system, its purpose, and the UML diagrams created for its design.

2. Project Description

The Car Rental System aims to streamline the process of renting cars by providing a user-friendly interface for administrators and users. Administrators have the ability to add new cars to the system by providing details such as the car's make, model, and daily rental price. Users can then browse the available cars, select their desired car for rent, and view the total bill.

The system incorporates user authentication to ensure secure access. Both administrators and users are required to log in to access the system. Administrators have additional privileges such as adding and managing cars, while users can only view and rent cars.

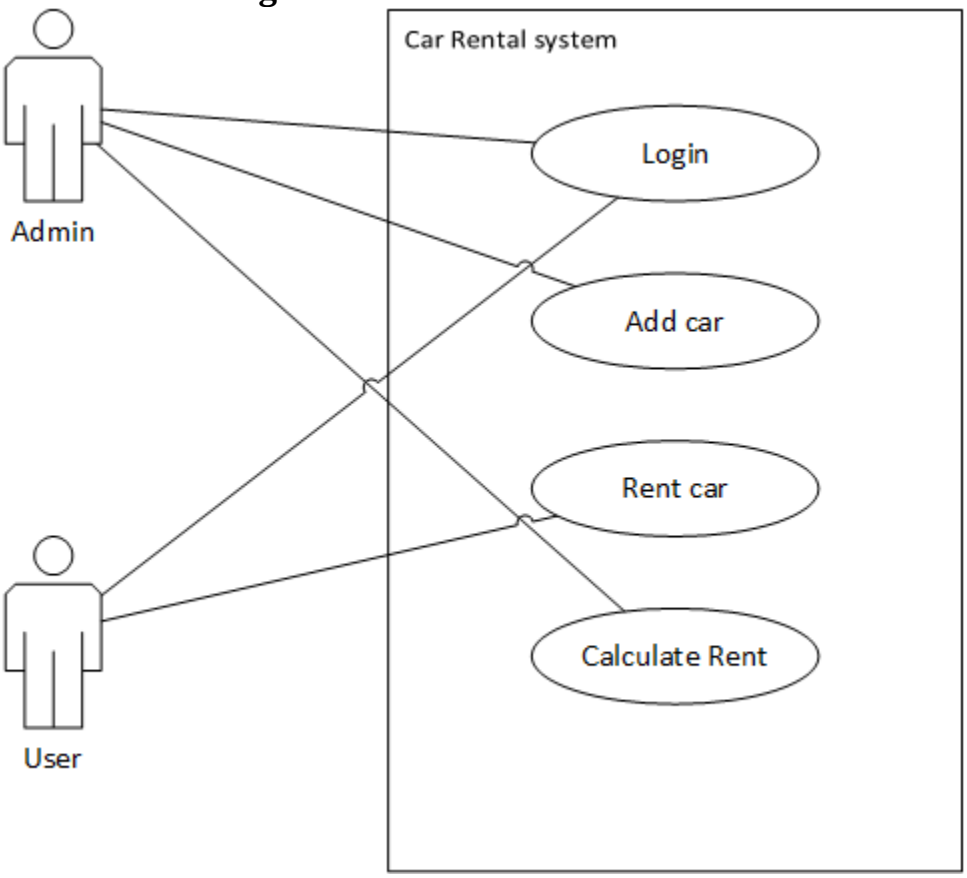
3. Purpose of the Project

The purpose of this project is to develop a simple yet functional car rental system that facilitates the rental process for both administrators and users. The system aims to provide a convenient way for users to browse and rent cars while allowing administrators to manage the car inventory effectively. By automating the rental process, the system saves time and effort for both parties involved.

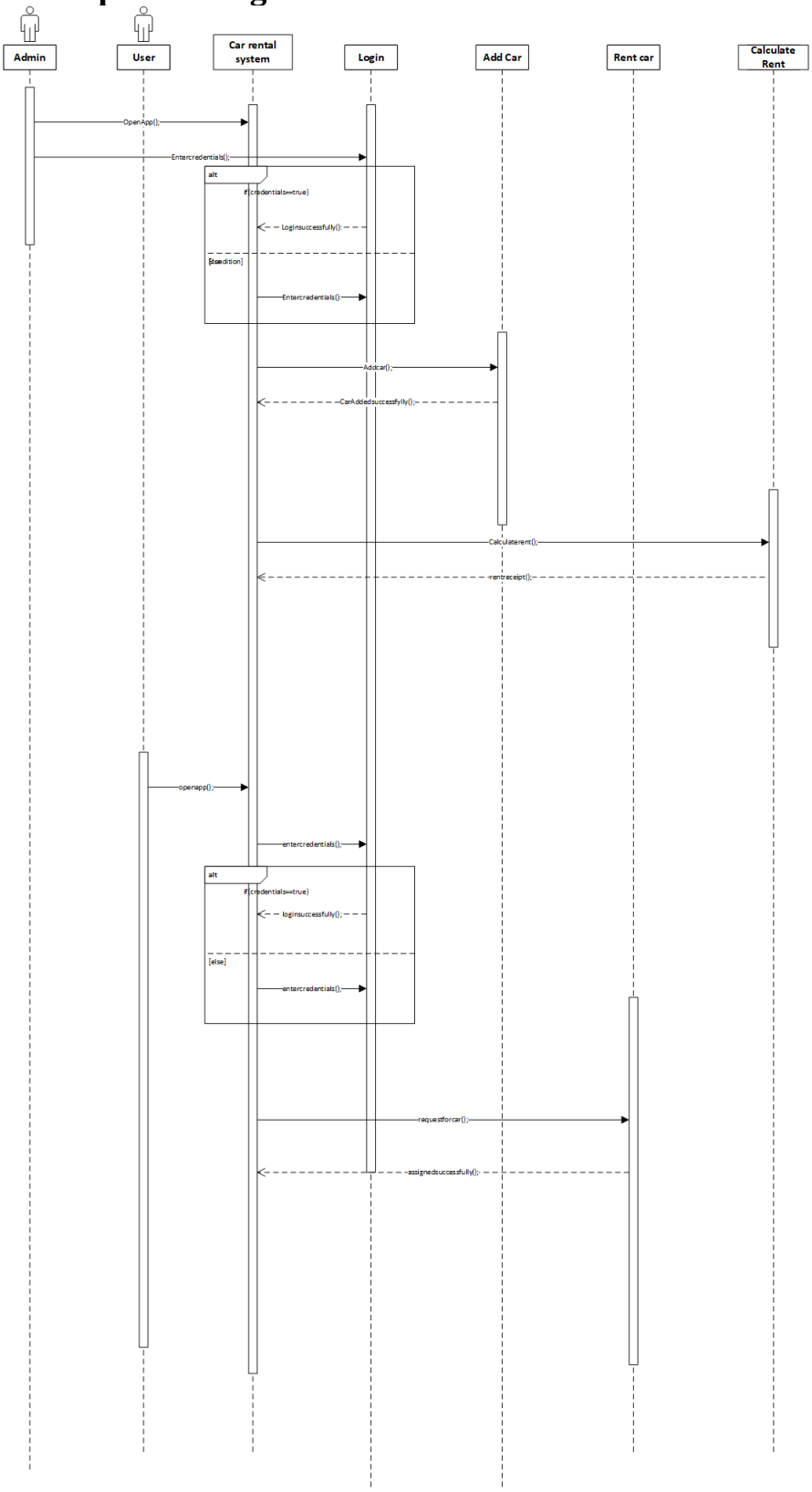
4. UML Diagrams

This section presents the UML diagrams created during the design phase of the Car Rental System.

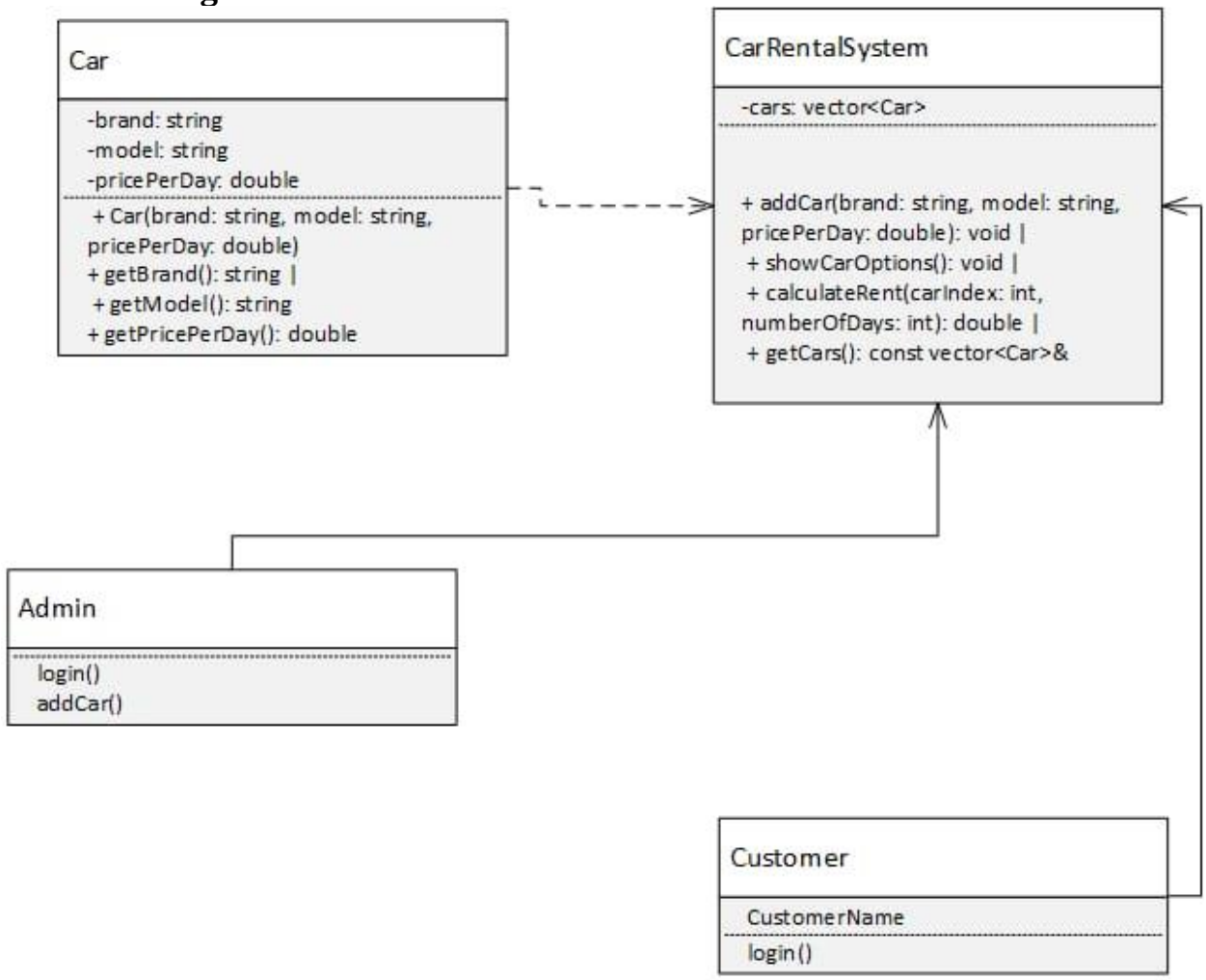
4.1 Use Case Diagram:



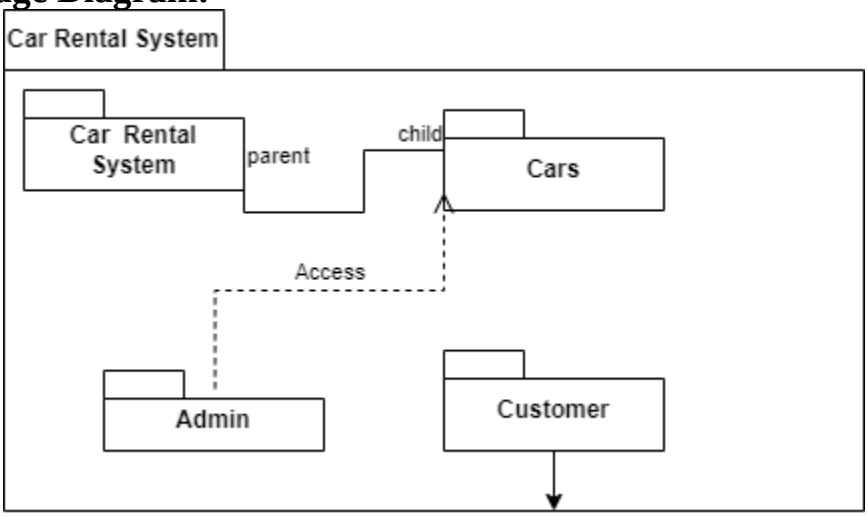
4.2 Sequence Diagram:



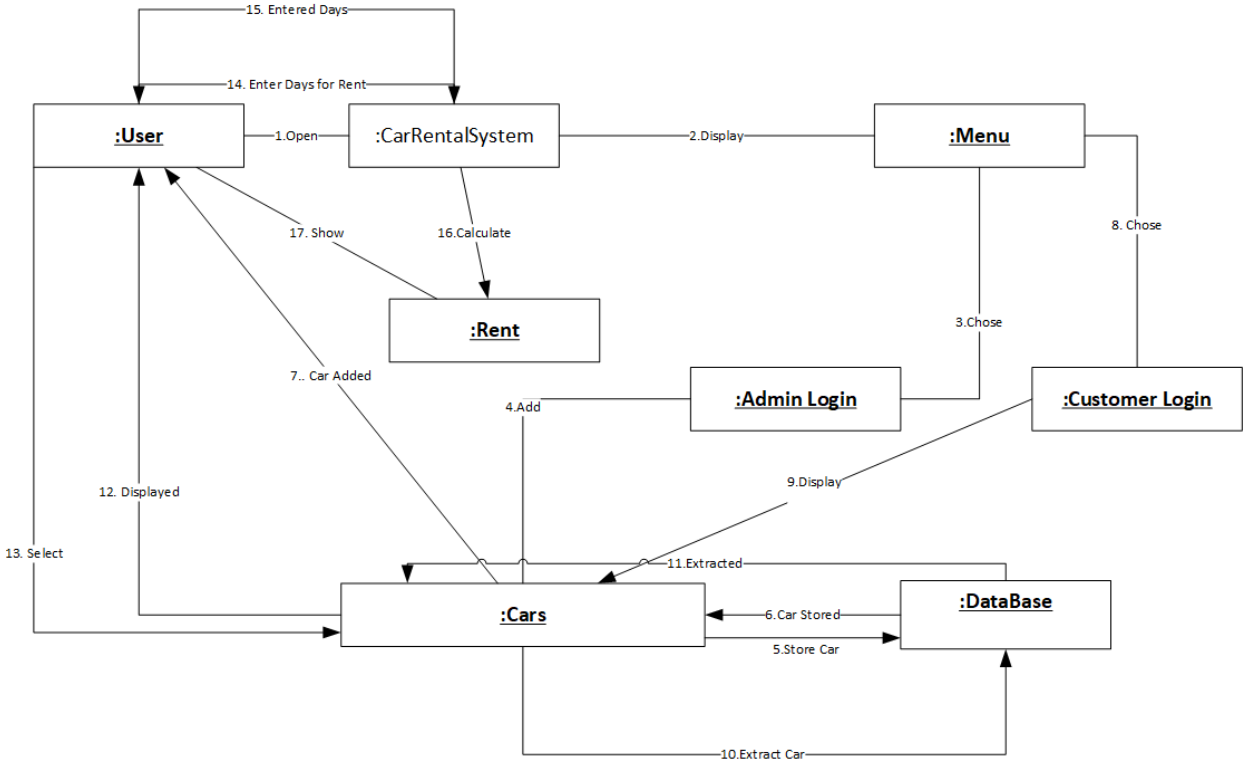
4.3 Class Diagram:



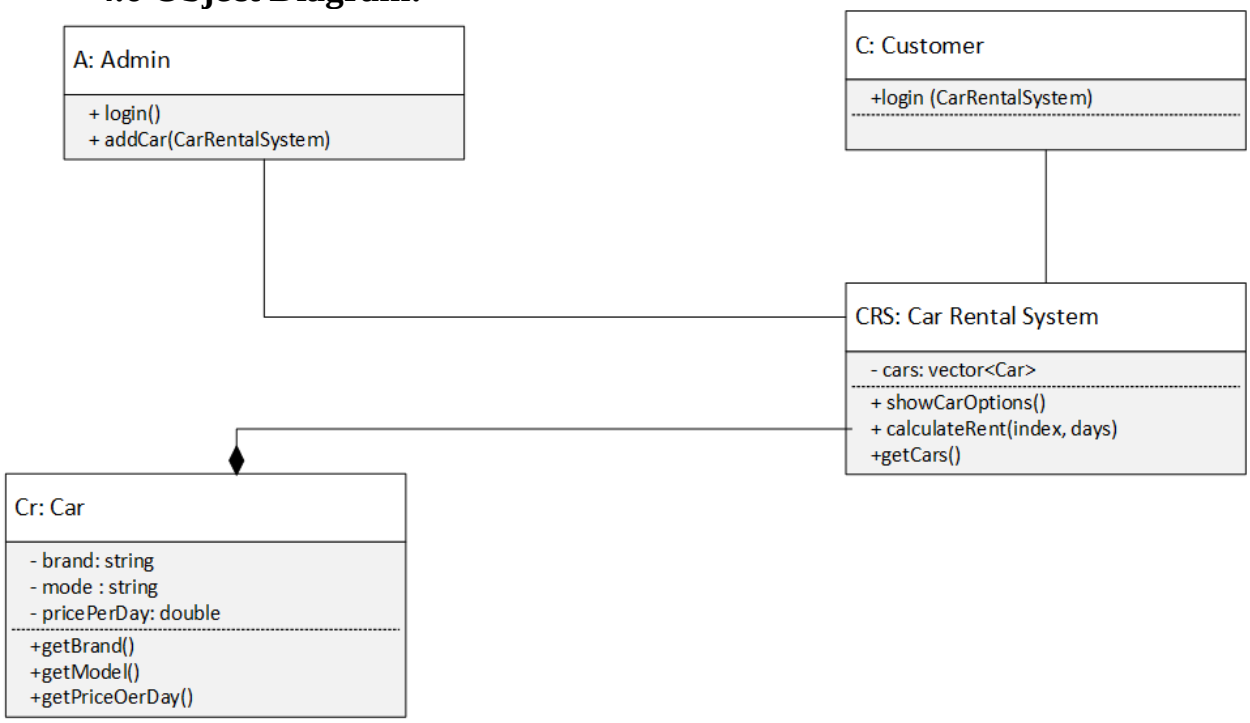
4.4 Package Diagram:



4.5 Communication Diagram:

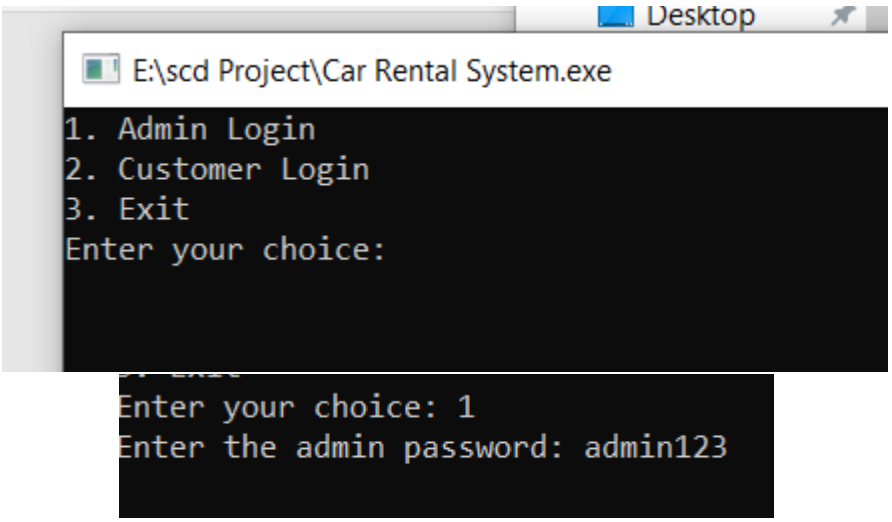


4.6 Object Diagram:

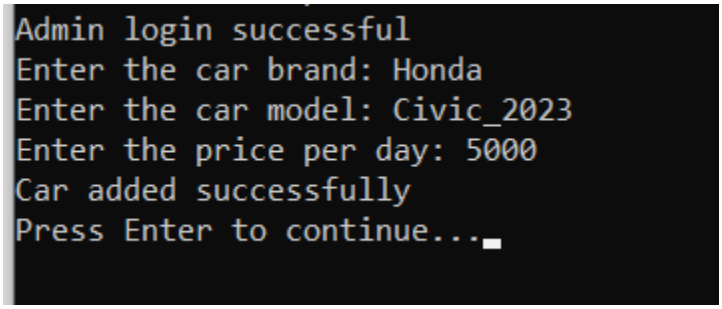


5. Program Output

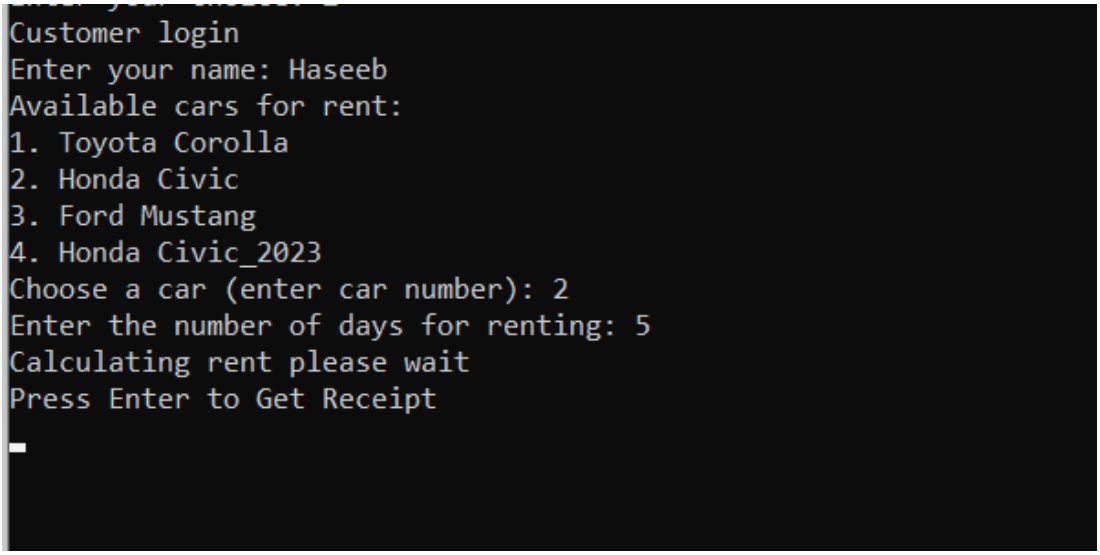
5.1 Main Screen



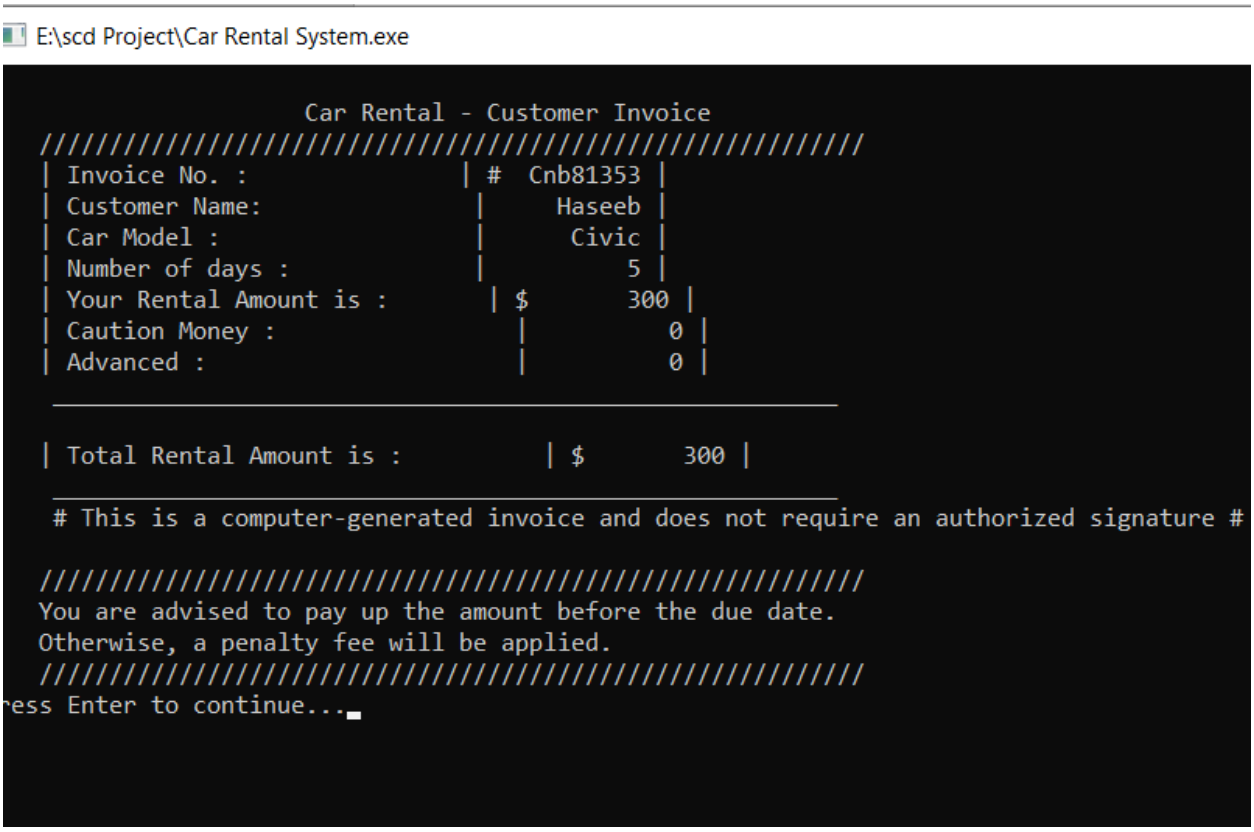
5.2 Admin Panel



5.3 User Interface



5.4 Receipt



6. Conclusion

The Car Rental System project provides a comprehensive solution for car rental management. The system enables administrators to add and manage cars, while users can easily browse and rent cars according to their preferences. The project successfully demonstrates the use of C++ programming concepts and UML diagrams for designing a functional software application.