

<https://github.com/evans-rono/assignment-1-java--car-rental-system/tree/main>

The Car Rental System application is designed to enable customers to rent and return cars through a rental agency, comprising classes for cars, customers, and the rental agency itself. The **Car** class represents a car with attributes such as `licensePlate`, `model`, and `isRented`, providing methods to retrieve car details, check rental status, rent the car, and return it. The **Customer** class encapsulates customer information, including their `name` and `id`, with methods to access these attributes. The **RentalAgency** class manages the operations of the car rental system, maintaining an `ArrayList` of cars and a `HashMap` of registered customers, allowing for the addition of cars, registration of customers, and facilitating the rental and return processes. The main functionality is demonstrated in the **CarRentalSystem** class, which contains the `main` method as the entry point of the application. This class showcases the system's operations by registering a customer, adding a car, and performing rental and return actions, with output statements that indicate the results of these operations. Overall, the design and implementation of the Car Rental System provide a clear and efficient way to manage car rentals and customer interactions.