Fresh Grads – Group Project Online Vehicle Rental Management



Problem Statement

To Create an application which provides provision for customers to book vehicle and get it delivered or collect the vehicle from the company.

Administrator can add/modify the vehicle details, approve / reject the vehicles to the customers, view vehicles, view customers, view booking requests, view details of vehicles rented and payment details.

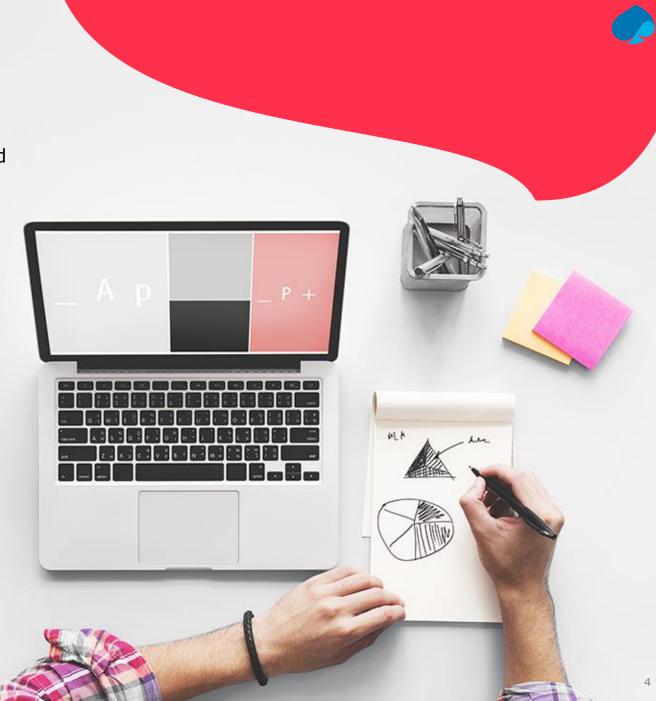
It also keeps track of number of vehicles rented and the payment details. This application also provides status booking where the customer can see the whether their booking is accepted or rejected





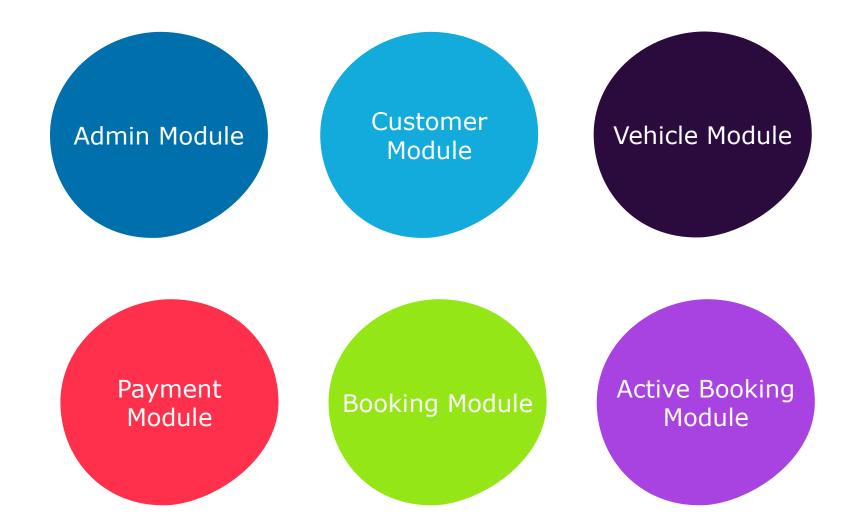
Plan

- 1. Design
 - 1. Generate the skeleton as per class design provided
- 2. TDD approach
 - 1. Identify test cases for each module
 - 2. Write Failing Test cases
 - 3. Convert the Test Cases in GREEN
- 3. Implement the case study in incremental manner



Modules

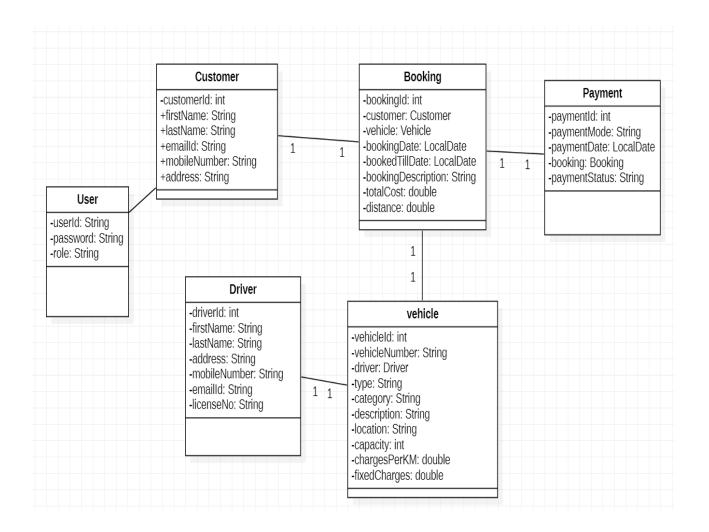






Class Design

POJO Classes:





Class Design

Service Interface:

IBookingService

- +addBooking(Booking b): Booking
- +updateBooking(Booking b): Booking
- +cancelBooking(Booking b): Booking
- +viewBooking(Booking b): Booking
- +viewAllBookings(Vehicle v): List<Booking>
- +viewAllBooking(Customer customer): List<Booking>
- +viewAllBookingByDate(LocalDate bdate): List

ICustomerService

- +addCustomer(Customer customer): Customer
- +removeCustomer(Customer customer): Customer
- +updateCustomer(Customer customer): Customer
- +viewCustomer(Customer customer): customer
- +viewAllCustomers(String vtype): List<Customer>
- +viewAllCustomersByLocation(String location): List<Customer>

IUserService

- +validateUser(User): User
- +addUser(User user): User
- +removeUser(User user): User
- +signOut(User user): User

IPaymentService

- +addPayment(Payment payment): Payment
- +cancelPayment(Payment payment): Payment
- +viewPayment(Booking booking): Payment
- +viewAllPayment(Vehicle vehicle): List<Payment>
- +calculateMonthlyRevenue(LocalDate d1, LocalDate d2): double
- +calculateTotalPayment(Vehicle vehicle): double



Class Design

Repository:

IBookingRepository

- +addBooking(Booking b): Booking
- +updateBooking(Booking b): Booking
- +cancelBooking(Booking b): Booking
- +viewBooking(Booking b): Booking
- +viewAllBookings(Vehicle v): List<Booking>
- +viewAllBooking(Customer customer): List<Booking>
- +viewAllBookingByDate(LocalDate bdate): List

ICustomerRepository

- +addCustomer(Customer customer): Customer
- +removeCustomer(Customer customer): Customer
- +updateCustomer(Customer customer): Customer
- +viewCustomer(Customer customer): customer
- +viewAllCustomers(String vtype): List<Customer>
- +viewAllCustomersByLocation(String location): List<Customer>

IUserRepository

- +validateUser(User): User
- +addUser(User user): User
- +removeUser(User user): User
- +signOut(User user): User

IPaymentRepository |

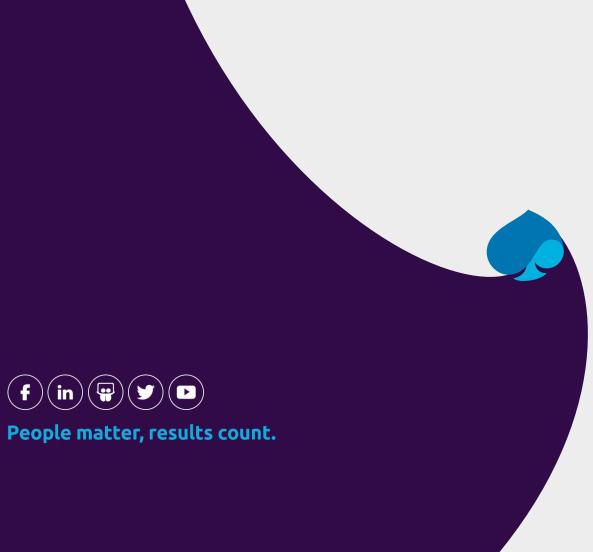
- +addPayment(Payment payment): Payment
- +cancelPayment(Payment payment): Payment
- +viewPayment(Booking booking): Payment
- +viewAllPayment(Vehicle vehicle): List<Payment>
- +calculateMonthlyRevenue(LocalDate d1, LocalDate d2): double
- +calculateTotalPayment(Vehicle vehicle): double

Questions









This message contains information that may be privileged or confidential and is the property of the Capgemini Group. Copyright © 2017 Capgemini. All rights reserved.

Rightshore® is a trademark belonging to Capgemini.

About Capgemini

With more than 190,000 people, Capgemini is present in over 40 countries and celebrates its 50th Anniversary year in 2017. A global leader in consulting, technology and outsourcing services, the Group reported 2016 global revenues of EUR 12.5 billion. Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

Learn more about us at

www.capgemini.com

This message is intended only for the person to whom it is addressed. If you are not the intended recipient, you are not authorized to read, print, retain, copy, disseminate, distribute, or use this message or any part thereof. If you receive this message in error, please notify the sender immediately and delete all copies of this message.