



VIT[®]

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

Vehicle Selling System

SCHOOL OF INFORMATION

TECHNOLOGY AND ENGINEERING

ITE1007-Object Oriented Analysis and Design

Review -3

by

Divyaveer Singh Samyal (19BIT0250)
Manav Deep Singh Lamba (19BIT0217)
Rohan Pal (19BIT0211)

Under the guidance of

Prof. Prabhu J

School of Information technology, VIT, Vellore.

DECLARATION

I hereby declare that the thesis entitled “Vehicle Selling System” submitted by us, for the award of the degree of *Bachelor of Technology in Information Technology* to VIT is a record of bonafide work carried out by me under the supervision of Prof. Prabhu J.

I further declare that the work reported in this thesis has not been submitted and will not be submitted, either in part or in full, for the award of any other degree or diploma in this institute or any other institute or university.

Place: Vellore

Date: 7th June 2021

Rohan Pal

Signature of the Candidate

Divyaveer Singh Samyal (19BIT0250)
Manav Deep Singh Lamba (19BIT0217)
Rohan Pal (19BIT0211)

ACKNOWLEDGEMENTS:

It is my pleasure to express with deep sense of gratitude to Prof. Prabhu J, Designation, School of Information Technology and Engineering, Vellore Institute of Technology, for his constant guidance, continual encouragement, understanding; more than all, he taught me patience in my endeavor. My association with him is not confined to academics only, but it is a great opportunity on my part of work with an intellectual and expert in the field of Computer Science.

I would like to express my gratitude to Dr. G.Viswanathan, Dr. Sankar Viswanathan, Dr. Sekar Viswanathan, Dr. Anand A. Samuel, Dr. S.Narayanan, and Dr.Balakrushna Tripathy, School of Information Technology and Engineering, for providing with an environment to work in and for his inspiration during the tenure of the course.

In jubilant mood I express ingeniously my whole-hearted thanks to Dr. Usha Devi, Head of the Department, SITE, all teaching staff and members working as limbs of our university for their not-self-centered enthusiasm coupled with timely encouragements showered on me with zeal, which prompted the acquirement of the requisite knowledge to finalize my course study successfully. I would like to thank my parents for their support.

It is indeed a pleasure to thank my friends who persuaded and encouraged me to take up and complete this task. At last but not least, I express my gratitude and appreciation to all those who have helped me directly or indirectly toward the successful completion of this project.

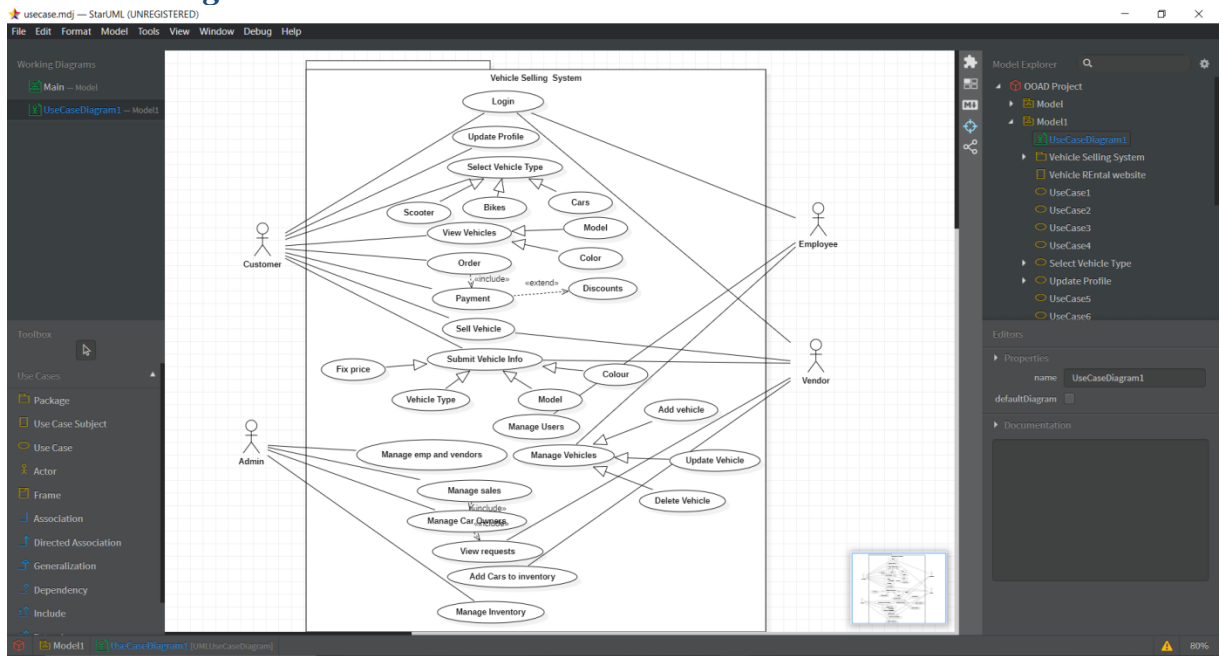
Rohan Pal

Abstract:

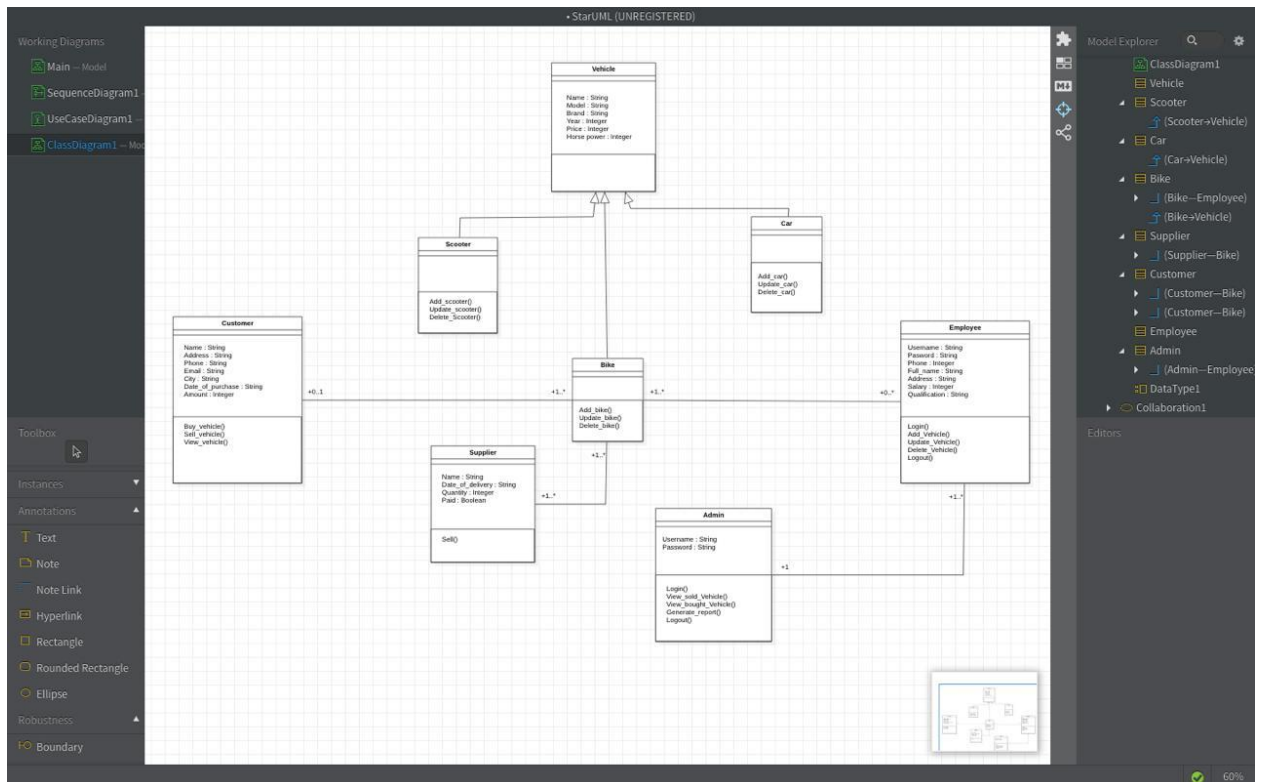
The goal of UML can be defined as a simple modelling mechanism to model all possible practical systems in today's complex environment. As UML describes the real-time systems, it is very important to make a conceptual model and then proceed gradually. In this project, different types of UML diagram have been given for the given Vehicle Selling System. Making a system for vehicle selling company that has some venders, every vender has its own model and every model has different colors, by this customer will select the cars according to his choice and employee will make the selections accordingly. By doing User Registration by proper authentication. Vehicles can be rented and therefore it has to be returned. This system is window based and designed in object-oriented programming language i.e java. This particular system will be provided with different UML diagrams i.e. Class Diagram, Use-Case Diagram, Activity Diagram, Sequence Diagram, State chart Diagram, Deployment Diagram, Component Diagram, Object Diagram and Collaboration Diagram.

UML DIAGRAMS:

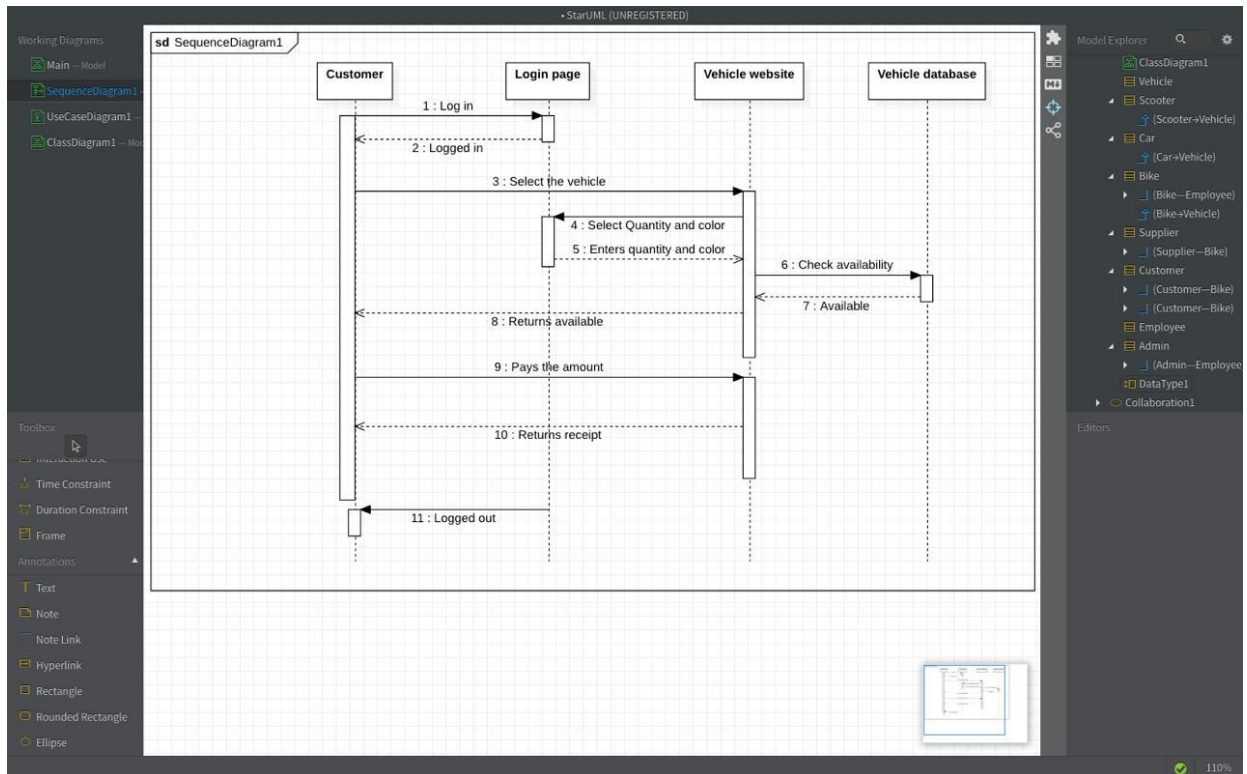
1. Use-case Diagram:



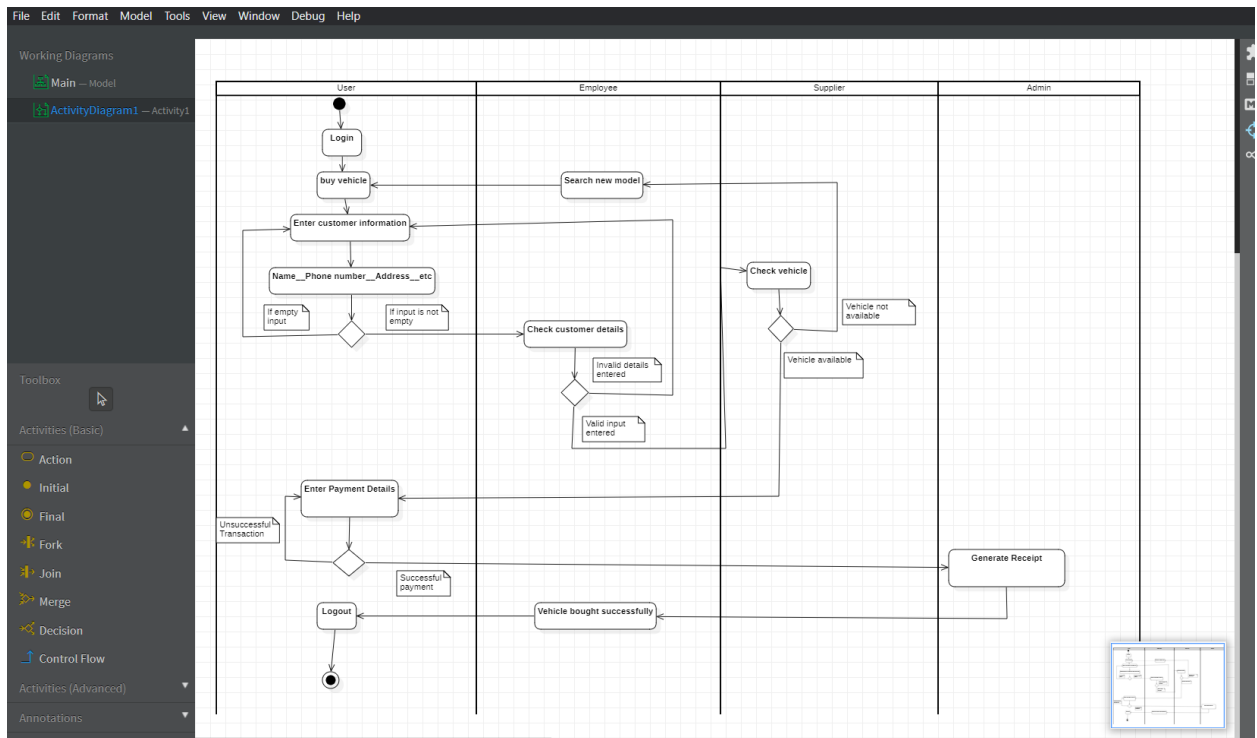
2. Class Diagram:



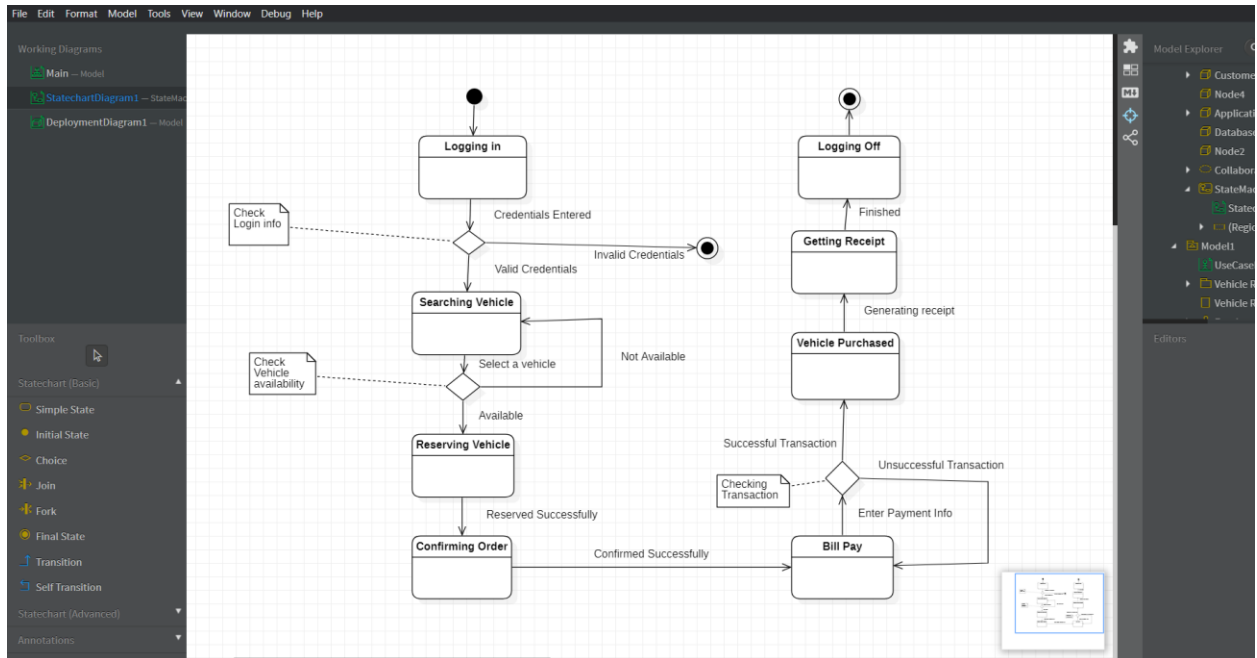
3. Sequence Diagram:



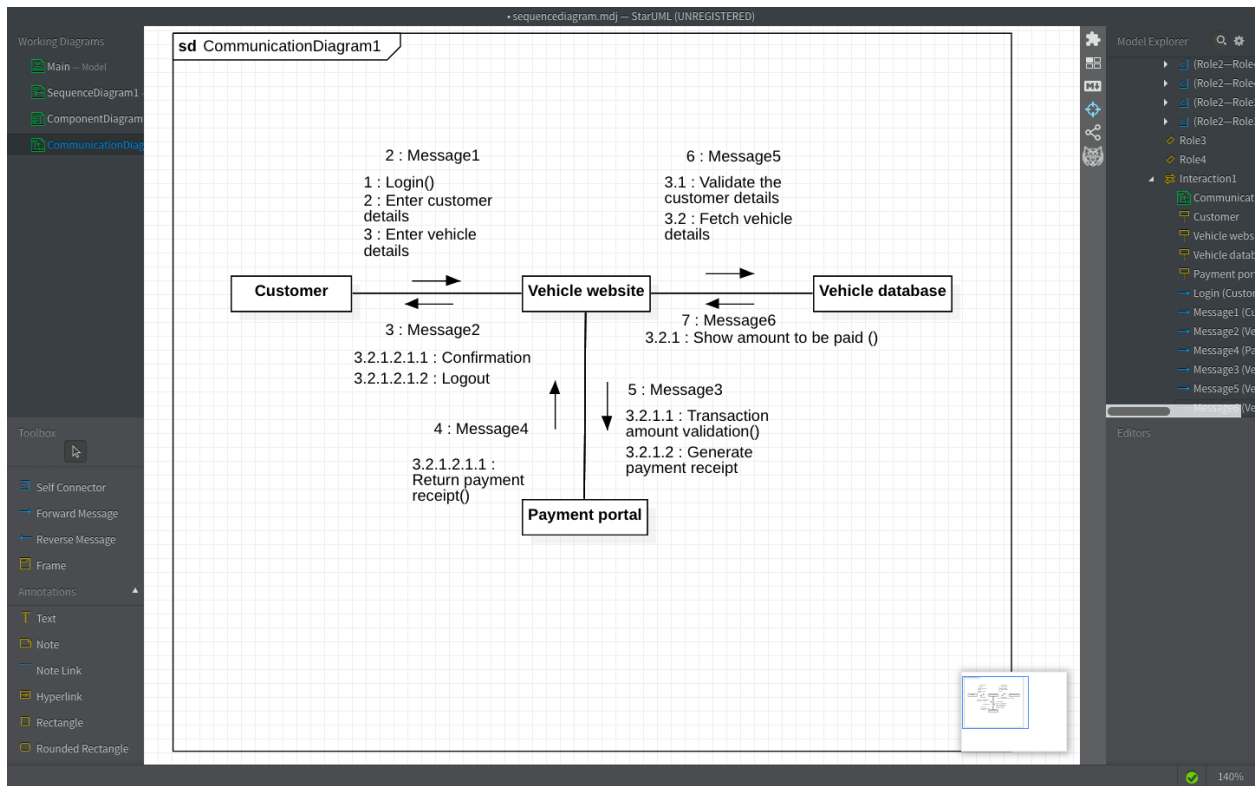
4. Activity Diagram:



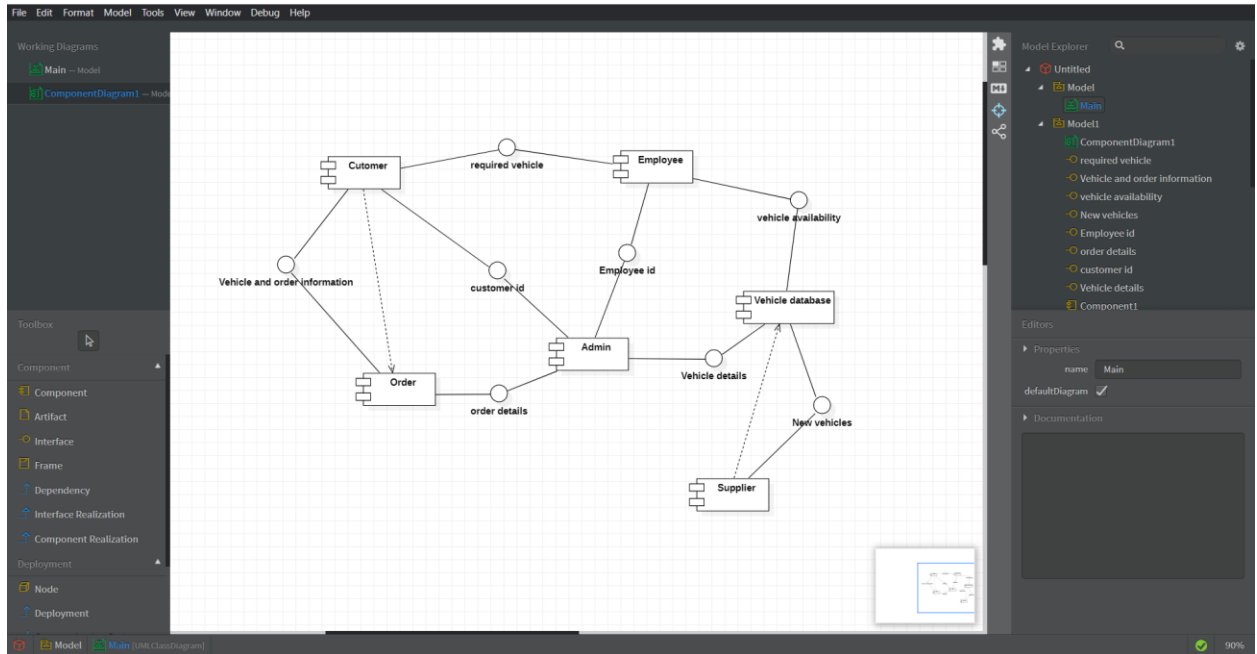
5. State Chart Diagram:



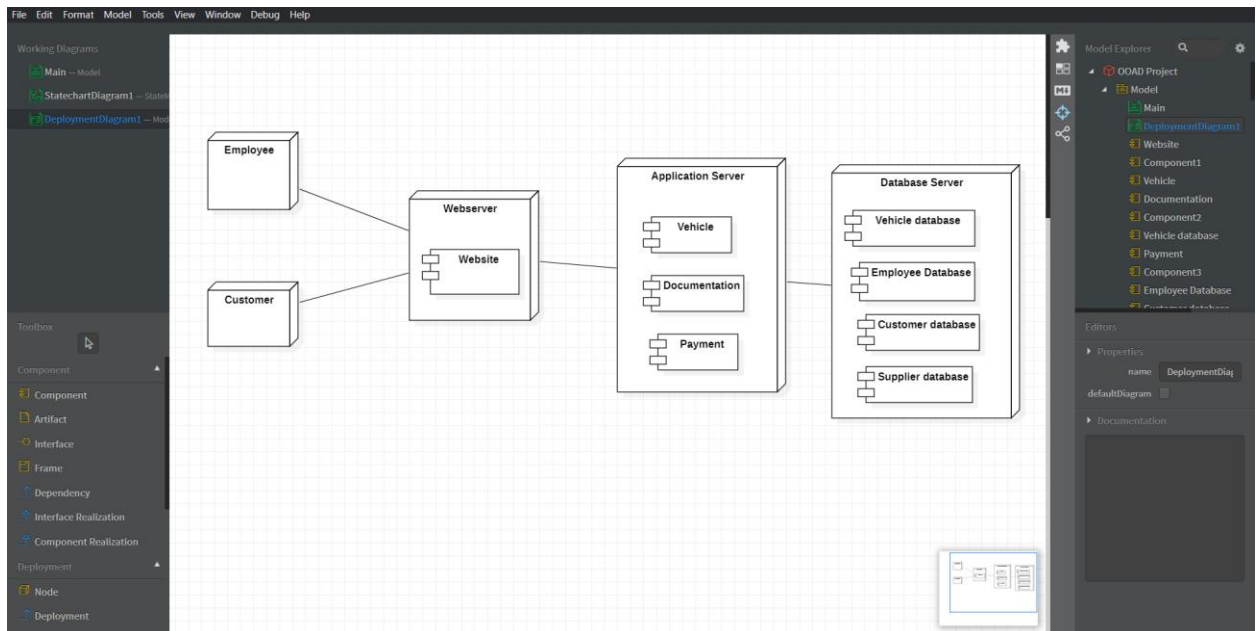
6. Collaboration Diagram:



7. Component Diagram:



8. Deployment Diagram:



Code Generation in Java:

ADMIN.JAVA

```
import java.util.Vector;
public class Admin {
    public String Username;
    public String Password;
    /**
     *
     * @element-type Employee
     */
    public Vector myEmployee;
    public void Login() {
    }
    public void View_Sold_Bike() {
    }
    public void View_Bought_Bike() {
    }
    public void Generate_report() {
    }
    public void Logout() {
    }
}
```

BIKE.JAVA

```
import java.util.Vector;
public class Bike extends Vehicle {
    public Customer myCustomer;
    public Employee myEmployee;
    /**
     *
     * @element-type Supplier
     */
    public Vector mySupplier;
```

```

public void Add_bike() {
}
public void Update_bike() {
}
public void Delete_bike() {
}
}

```

CAR.JAVA

```

import java.util.*;

/**
 * @author 19BIT0211
 */
public class Car extends Vehicle {

    /**
     * Default constructor
     */
    public Car() {
    }

}

```

CUSTOMER.JAVA

```

import java.util.Vector;
public class Customer {
public String name;
public Address : String;
public Phone : Integer;
public email: String;
public City : String;
public Date_of_Purchase : String;
public Amount : Integer;
/**
 *
 * @element-type Bike
 */
public Vector myBike;
public void Buy_bike() {
}
public void Sell_bike() {
}
public void View_bike()

```

```
}  
}
```

EMPLOYEE.JAVA

```
import java.util.Vector;  
public class Employee {  
    public String Username;  
    public String Password;  
    public Integer Phone ;  
    public String Full_Name;  
    public String Address ;  
    public Integer Salary;  
    public String Qualification;  
    /**  
    *  
    * @element-type Bike  
    */  
    public Vector myBike;  
    public Admin myAdmin;  
    public void Login() {  
    }  
    public void Insert_Bike() {  
    }  
    public void Update_Bike() {  
    }  
    public void Delete_Bike() {  
    }  
    public void Logout() {  
    }  
}
```

SCOOTER.JAVA

```
public class Scooter extends Vehicle {  
}
```

SUPPLIER.JAVA

```
import java.util.Vector;  
public class Supplier {  
    public String Name;  
    public String Date_of_Delivery;  
    public Integer Quantity;  
    public Boolean Paid;  
    /**  
    *  
    * @element-type Bike  
    */  
    public Vector myBike;  
    public void Sell_Bike() {
```

```
}  
}
```

VEHICLE.JAVA

```
public class Vehicle {  
    public String Name;  
    public String Model;  
    public String Brand;  
    public Integer Year;  
    public Integer Price;  
    public Integer Horsepower;  
}
```