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The system is programmed from the start of action scene of the car image frame to menu frame : -

```
public static void main(String[] args) {  
    Runner runner = new Runner();  
    Runner.FRAME.setVisible(true);  
  
    try {  
        Thread.sleep(1000);  
        Login LoginObject = new Login();  
        Runner.FRAME.getContentPane().removeAll();  
        Runner.FRAME.add(LoginObject.getMainPanel());  
        Runner.FRAME.getContentPane().revalidate();  
  
    } catch (InterruptedException e) {  
        System.out.println(e);  
    }  
}
```

The above source code is the first program that starts a scene and shifts to the manpanel class.

The menu page contains the construction of JLabels and JButtons with action listener for every clicks;

```
public void actionPerformed(ActionEvent e) {  
  
    switch (e.getActionCommand()) {  
        case "Cars": {  
            Parent_JFrame.getMainFrame().getContentPane().removeAll();  
            Car_Details cd = new Car_Details();  
            Parent_JFrame.getMainFrame().add(cd.getMainPanel());  
            Parent_JFrame.getMainFrame().getContentPane().revalidate();  
        }  
        break;  
        case "Customer": {  
            Parent_JFrame.getMainFrame().getContentPane().removeAll();  
            Customer_Details cd = new Customer_Details();  
            Parent_JFrame.getMainFrame().add(cd.getMainPanel());  
        }  
    }  
}
```

```

        Parent_JFrame.getMainFrame().getContentPane().revalidate();
    }
    break;
    case "Owner": {
        Parent_JFrame.getMainFrame().getContentPane().removeAll();
        CarOwner_Details cd = new CarOwner_Details();
        Parent_JFrame.getMainFrame().add(cd.getMainPanel());
        Parent_JFrame.getMainFrame().getContentPane().revalidate();
    }
    break;
    case "Logout": {
        Parent_JFrame.getMainFrame().dispose();
        Runner r = new Runner();
        JFrame frame = r.getFrame();
        Login login = new Login();
        JPanel panel = login.getMainPanel();
        frame.add(panel);
        frame.setVisible(true);
    }
    break;
    case "Booking Details": {
        Parent_JFrame.getMainFrame().getContentPane().removeAll();
        Booking_Details cd = new Booking_Details();
        Parent_JFrame.getMainFrame().add(cd.getMainPanel());
        Parent_JFrame.getMainFrame().getContentPane().revalidate();
    }
    break;
}
}
}

```

There is also JFrame panel that exists at the top border of the program that has action listener to every clicks:

```

public void actionPerformed(ActionEvent e) {
    switch (e.getActionCommand()) {
        case "Exit": {
            int showConfirmDialog = JOptionPane.showConfirmDialog(null, "You are
about to terminate the program.\n"
+ " Are you sure you want to continue ?", "Close Confirmation",
JOptionPane.OK_CANCEL_OPTION, JOptionPane.WARNING_MESSAGE, null);
            if (showConfirmDialog == 0) {
                System.exit(0);
            }
        }
        break;
        case "Add Car": {
            Parent_JFrame.getMainFrame().setEnabled(false);
            Car_Add ac = new Car_Add();

```

```

ac.setVisible(true);
}
break;
case "Update Car": {
Parent_JFrame.getMainFrame().setEnabled(false);
Car_Update ac = new Car_Update();
ac.setVisible(true);
}
break;
case "Remove Car": {
Parent_JFrame.getMainFrame().setEnabled(false);
Car_Remove ac = new Car_Remove();
ac.setVisible(true);
}
break;
case "View booked Cars": {
ArrayList<Car> SearchBookedCars_Array = Booking.getBookedCars();
String result = "";
if (!SearchBookedCars_Array.isEmpty()) {
for (int i = 0; i < SearchBookedCars_Array.size(); i++) {
result += (i + 1) + " : " + SearchBookedCars_Array.get(i) + "\n";
}
} else {
result = "No Cars are Booked !";
}
JOptionPane.showMessageDialog(null, result);
}
break;
case "View Unbooked Cars": {
ArrayList<Car> SearchUnBookedCars_Array = Booking.getUnbookedCars();
String result = "";
if (!SearchUnBookedCars_Array.isEmpty()) {
for (int i = 0; i < SearchUnBookedCars_Array.size(); i++) {
result += (i + 1) + " : " + SearchUnBookedCars_Array.get(i) + "\n";
}
} else {
result = "No UnBooked Cars are available !";
}
JOptionPane.showMessageDialog(null, result);
}
break;
case "Add Customer": {
Parent_JFrame.getMainFrame().setEnabled(false);
Customer_Add aco = new Customer_Add();
aco.frame.setVisible(true);
}
break;
case "Update Customer": {

```

```

Parent_JFrame.getMainFrame().setEnabled(false);
new Customer_Update().frame.setVisible(true);
}
break;
case "Remove Customer": {
Parent_JFrame.getMainFrame().setEnabled(false);
new Customer_Remove().frame.setVisible(true);
}
break;
case "Add Car Owner": {
Parent_JFrame.getMainFrame().setEnabled(false);
CarOwner_Add aco = new CarOwner_Add();
aco.frame.setVisible(true);
}
break;
case "Update Car Owner": {
Parent_JFrame.getMainFrame().setEnabled(false);
new CarOwner_Update().frame.setVisible(true);
}
break;
case "Remove Car Owner": {
Parent_JFrame.getMainFrame().setEnabled(false);
new CarOwner_Remove().frame.setVisible(true);
}
break;
case "View JavaDoc": {
if (Desktop.isDesktopSupported()) {
try {
File myFile = new File("JavaDoc_Documentation_About.pdf");
if (myFile.exists()) {
Desktop.getDesktop().open(myFile);
} else {
JOptionPane.showMessageDialog(null, "JavaDoc not found !");
}
} catch (IOException ex) {

}
}
}
break;
case "View Documentation": {
if (Desktop.isDesktopSupported()) {
try {
File myFile = new File("JavaDoc_Documentation_About.pdf");
if (myFile.exists()) {
Desktop.getDesktop().open(myFile);
} else {
JOptionPane.showMessageDialog(null, "JavaDoc not found !");
}
}
}
}
}

```

```
        }  
    } catch (IOException ex) {  
  
    }  
    }  
    }  
    break;  
    case "About": {  
        JOptionPane.showMessageDialog(null, "OOP Java Project Dedicated to  
Haramaya Univerisity");  
    }  
    break;  
  
    }
```

The source code is easily readable so if the software is published it can keep up refining itself with easier maintaining techniques.