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Mini project (Online cab booking)

/----------Entity_Class----------/

/----------Booking_Class---------/

```
package com.espire.cabbooking1;

import java.sql.Timestamp;

public class Booking {
	private int bookingId;
	private Timestamp bookingDateTime ;
	private String bookingStatus ;
	private boolean check;

	public Booking() {}
	public Booking(int bookingId, Timestamp bookingDateTime,
String bookingStatus, boolean check) {
		this.bookingId = bookingId;
		this.bookingDateTime = bookingDateTime;
		this.bookingStatus = bookingStatus;
		this.check = check;
	}

	public int getBookingId() {
		return bookingId;
	}
	public void setBookingId(int bookingId) {
		this.bookingId = bookingId;
	}
	public Timestamp getBookingDateTime() {
		return bookingDateTime;
	}
	public void setBookingDateTime(Timestamp bookingDateTime)
{
		this.bookingDateTime = bookingDateTime;
	}
	public String getBookingStatus() {
		return bookingStatus;
	}
	public void setBookingStatus(String bookingStatus) {
		this.bookingStatus = bookingStatus;
	}
	public boolean isCheck() {
```

```
		return check;
	}
	public void setCheck(boolean check) {
		this.check = check;
	}
	@Override
	public String toString() {
		return "Booking [bookingId=" + bookingId + ",
bookingDateTime=" + bookingDateTime + ", bookingStatus="
				+ bookingStatus + ", check=" + check +
"]";
	}

}


/---------cab_classs--------/

package com.espire.cabbooking1;

public class Cab {
	private int cabNo;
	private int driverId;
	private String cabModel;
	private String cabColor;
	private String availibility;
	private boolean check;

	public Cab(){}

	public Cab(int cabNo, int driverId, String cabModel,
String cabColor, String availibility, boolean check) {
		this.cabNo = cabNo;
		this.driverId = driverId;
		this.cabModel = cabModel;
		this.cabColor = cabColor;
		this.availibility = availibility;
		this.check = check;
	}

	public int getCabNo() {
		return cabNo;
	}
	public void setCabNo(int cabNo) {
		this.cabNo = cabNo;
	}
	public int getDriverId() {
		return driverId;
	}
	public void setDriverId(int driverId) {
		this.driverId = driverId;
```

```
	}
	public String getCabModel() {
		return cabModel;
	}
	public void setCabModel(String cabModel) {
		this.cabModel = cabModel;
	}
	public String getCabColor() {
		return cabColor;
	}
	public void setCabColor(String cabColor) {
		this.cabColor = cabColor;
	}
	public String getAvailibility() {
		return availibility;
	}
	public void setAvailibility(String availibility) {
		this.availibility = availibility;
	}
	public boolean isCheck() {
		return check;
	}
	public void setCheck(boolean check) {
		this.check = check;
	}

	@Override
	public String toString() {
		return "Cab [cabNo=" + cabNo + ", driverId=" +
driverId + ", cabModel=" + cabModel + ", cabColor=" + cabColor
				+ ", availibility=" + availibility + ",
check=" + check + "]";
	}

}

// Passenger Class

package com.espire.cabbooking1;

public class Passenger {
	private int passengerId;
	private String passengerName;
	private String passengerPhone;
	private String passengerEmail;


	public Passenger() {}
	public Passenger(int passengerId, String passengerName,
String passengerPhone, String passengerEmail) {
		this.passengerId = passengerId;
```

```
            this.passengerName = passengerName;
            this.passengerPhone = passengerPhone;
            this.passengerEmail = passengerEmail;
      }
      public int getPassengerId() {
            return passengerId;
      }
      public void setPassengerId(int passengerId) {
            this.passengerId = passengerId;
      }
      public String getPassengerName() {
            return passengerName;
      }
      public void setPassengerName(String passengerName) {
            this.passengerName = passengerName;
      }
      public String getPassengerPhone() {
            return passengerPhone;
      }
      public void setPassengerPhone(String passengerPhone) {
            this.passengerPhone = passengerPhone;
      }
      public String getPassengerEmail() {
            return passengerEmail;
      }
      public void setPassengerEmail(String passengerEmail) {
            this.passengerEmail = passengerEmail;
      }
      @Override
      public String toString() {
            return "Passenger [passengerId=" + passengerId + ",
passengerName=" + passengerName + ", passengerPhone="
                        + passengerPhone + ", passengerEmail=" +
passengerEmail + "]";
      }

}

//User class
package com.espire.cabbooking1;

public class User {
      private String username;
      private String password;
      private String role;
      private boolean checked;


      public User() {}
      public User(String username, String password, String
role, boolean checked) {
```

```
            this.username = username;
            this.password = password;
            this.role = role;
            this.checked = checked;
      }
      public String getUsername() {
            return username;
      }
      public void setUsername(String username) {
            this.username = username;
      }
      public String getPassword() {
            return password;
      }
      public void setPassword(String password) {
            this.password = password;
      }
      public String getRole() {
            return role;
      }
      public void setRole(String role) {
            this.role = role;
      }
      public boolean isChecked() {
            return checked;
      }
      public void setChecked(boolean checked) {
            this.checked = checked;
      }
      @Override
      public String toString() {
            return "User [username=" + username + ", password="
+ password + ", role=" + role + ", checked=" + checked
                        + "]";
      }

}

//Dao Interfaces

//Creating AdminDao Interface

package com.espire.cabbooking1.dao;

import java.sql.SQLException;

public interface AdminDao {
      public void viewAllCabs() throws SQLException;
      public void viewAllPassengers() throws SQLException;
      public void viewAllBookings() throws SQLException;
}
```

```
//PassengerDao Interface

package com.espire.cabbooking1.dao;

import java.sql.SQLException;

public interface PassengerDAO {
     void bookTheRide() throws SQLException;
     void cancelTheBooking() throws SQLException;
}


//Implementing of dao interfaces

//Creating AdminDaoImpl

package com.espire.cabbooking1.daoimpl;

import java.sql.SQLException;

import com.espire.cabbooking1.dao.AdminDao;
import com.espire.cabbooking1.serviceimpl.AdminServiceImpl;

public class AdminDaoImpl implements AdminDao{
     AdminServiceImpl adminSerImpl=new AdminServiceImpl();
     @Override
     public void viewAllCabs() throws SQLException{
          adminSerImpl.getAllCabs();
          return;
     }

     @Override
     public void viewAllPassengers() throws SQLException{
          adminSerImpl.getAllPassengers();
          return;
     }

     @Override
     public void viewAllBookings() throws SQLException{
          adminSerImpl.getAllBookings();
          return;
     }

}

//creating PassengerDaoImpl

package com.espire.cabbooking1.daoimpl;

import java.sql.SQLException;
import java.sql.Timestamp;
```

```
import java.util.Scanner;
import com.espire.cabbooking1.dao.PassengerDAO;
import
com.espire.cabbooking1.serviceimpl.PassengerServiceImpl;

public class PassengerDaoImpl implements PassengerDAO{
     PassengerServiceImpl serImpl=new PassengerServiceImpl();
     Scanner scan=new Scanner(System.in);
     public void bookTheRide() throws SQLException {
          System.out.println("Enter booking id");
        int bId=scan.nextInt();
        scan.nextLine();
//      System.out.println("Enter booking Date and time");
        Timestamp ts=new
Timestamp(System.currentTimeMillis());
//        SimpleDateFormat sdf = new SimpleDateFormat("dd-mm-
yyyy");
//        String bDate=scan.nextLine();
        System.out.println("Enter booking Status");
        String bStatus=scan.nextLine();
//        boolean bn = "true" != null;
        serImpl.add(bId,ts,bStatus);
        return;
     }

     public void cancelTheBooking() throws SQLException {
          System.out.println("Enter booking id");
        int bId=scan.nextInt();
          serImpl.delete(bId);
          return;
     }

}

//Creating Service Interface

//Creating AdminService Interface

package com.espire.cabbooking1.service;

import java.sql.SQLException;

import com.espire.cabbooking1.Booking;
import com.espire.cabbooking1.Cab;
import com.espire.cabbooking1.Passenger;

public interface AdminService {
     public Cab getAllCabs()throws SQLException;
     public Passenger getAllPassengers()throws SQLException;
     public Booking getAllBookings()throws SQLException;
}
```

```
//Creating Passenger service Interface

package com.espire.cabbooking1.service;

import java.sql.SQLException;
import java.sql.Timestamp;

public interface PassengerService {
     void add(int bId, Timestamp bDate, String bStatus)throws
SQLException;
    void delete(int bId)throws SQLException;
}

//AdminServiceImpl

package com.espire.cabbooking1.serviceimpl;

import java.sql.Connection;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import com.espire.cabbooking1.Booking;
import com.espire.cabbooking1.Cab;
import com.espire.cabbooking1.Passenger;
import com.espire.cabbooking1.connection.DBConnection;
import com.espire.cabbooking1.service.AdminService;

public class AdminServiceImpl implements AdminService{
     DBConnection connection = new DBConnection();

     @Override
     public Cab getAllCabs() throws SQLException{
          String sql="select*from Cab";
          Connection con = connection.getCon();
          Statement st = con.createStatement();
          ResultSet rs=st.executeQuery(sql);
          while(rs.next()) {
               System.out.println(rs.getInt(1)+"
"+rs.getInt(2)+" "+rs.getString(3)+" "+rs.getString(4)+"
"+rs.getString(5));
          }
          return null;
     }

     @Override
     public Passenger getAllPassengers() throws SQLException {
          String sql="select*from Passenger";
          Connection con = connection.getCon();
          Statement st = con.createStatement();
          ResultSet rs=st.executeQuery(sql);
          while(rs.next()) {
```

```
                System.out.println(rs.getInt(1)+"
"+rs.getString(2)+" "+rs.getString(3)+" "+rs.getString(4));
           }
           return null;
     }

     @Override
     public Booking getAllBookings() throws SQLException {
           String sql="select*from Booking";
           Connection con = connection.getCon();
           Statement st = con.createStatement();
           ResultSet rs=st.executeQuery(sql);
           while(rs.next()) {
                System.out.println(rs.getInt(1)+"
"+rs.getString(2)+" "+rs.getString(5));
           }
           return null;
     }

}

//PassengerServiceImpl

package com.espire.cabbooking1.serviceimpl;
import java.sql.Connection;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.sql.Timestamp;
import java.util.Date;
import java.util.Scanner;
import com.espire.cabbooking1.connection.DBConnection;
import com.espire.cabbooking1.service.PassengerService;


public class PassengerServiceImpl implements PassengerService{
     DBConnection connection = new DBConnection();
    Scanner scan=new Scanner(System.in);
     public void add(int bId, Timestamp date, String bStatus)
throws SQLException {
           String sql = "insert into
booking(bookingId,bookingDateTime,bookingStatus) values(" +
bId + ",'"
                      + date + "','" + bStatus + "')";
           Connection con = connection.getCon();
           Statement st = con.createStatement();
           int n = st.executeUpdate(sql);
           if (n >= 0)
                System.out.println(" Cab Booked");
           return;
     }
```

```
     public void delete(int bId) throws SQLException {
          String sql = "delete from booking where
bookingId="+bId;
          Connection con = connection.getCon();
          Statement st = con.createStatement();
          int n = st.executeUpdate(sql);
          if (n >= 0)
               System.out.println("Ride Canclled");
          return;
     }

}

//Creating UserInterface
//Including Main class
package com.espire.cabbooking1.ui;
import java.sql.SQLException;
import java.util.Scanner;

import com.espire.cabbooking1.connection.DBConnection;
import com.espire.cabbooking1.daoimpl.AdminDaoImpl;
import com.espire.cabbooking1.daoimpl.PassengerDaoImpl;

public class LoginUI {
     public static void main(String[]args) throws SQLException
{
          DBConnection connection = new DBConnection();
          PassengerDaoImpl impl=new PassengerDaoImpl();
          AdminDaoImpl adminImpl=new AdminDaoImpl();
          Scanner scan=new Scanner(System.in);
          int n;
          do {
        System.out.println("Select the Number\n"
               + "1. Admin\n"
               + "2. User\n");
        n=scan.nextInt();
          switch(n) {
        case 1:
          System.out.println("Enter id:");
          int id=scan.nextInt();
          System.out.println("Enter password");
          int pass=scan.nextInt();
          if(id==1 && pass== 1)
          {
          char ch;
          System.out.println("Select the Chararacter\n"
                    + "A. View all cabs\n"
                    + "B. View all passengers\n"
                    + "C. View all bookings\n");
          ch=scan.next().charAt(0);
```

```
            switch(ch) {
            case 'A':
                 adminImpl.viewAllCabs();
                 break;
            case 'B':
                 adminImpl.viewAllPassengers();
                 break;
            case 'C':
                 adminImpl.viewAllBookings();
                 break;
            }
            }
            else {
                 System.out.println("Wrong credentials");
            }
               break;
          case 2:
            char ch;
            System.out.println("Select the Character\n"
                      + "A. Book The Ride\n"
                      + "B. Cancel The Ride\n");
            ch=scan.next().charAt(0);
            switch(ch) {
            case 'A':
                 impl.bookTheRide();
                 break;
            case 'B':
                 impl.cancelTheBooking();
                 break;
            }
              break;
          default:
              System.out.println("Not a valid choice");
              break;
            }
            }while(true);
      }
}
```

//creating DBConnection to connect with the database

```
package com.espire.cabbooking1.connection;


import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.SQLException;
```

```
public class DBConnection {
        String driver="com.mysql.cj.jdbc.Driver";
   String dburl="jdbc:mysql://localhost:3306/cabbooking";
   String user="root";
   String password="root";
   Connection con;

   public void createConnection() {
      try {
         Class.forName(driver);
         con=DriverManager.getConnection(dburl,user,password);
         //Statement st=con.createStatement();
         if(con!=null) {
            System.out.println("Connection successfull");
            //Statement st=con.createStatement();
         //    return con;
            }
            else {
               System.out.println("Connection failed");
      }}
      catch(ClassNotFoundException | SQLException e) {
         System.out.println(e.getMessage());
      }
   }
   public Connection getCon() {
      try {
         Class.forName(driver);
         con=DriverManager.getConnection(dburl,user,password);
      }
      catch(ClassNotFoundException | SQLException e) {
         System.out.println(e.getMessage());
```

```
        }
        return con;
    }
}
```