SOURCE CODE – FlyAway (An Airline Booking Portal)

FOR ADMIN

```
ChangePassword.java:
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
* Servlet implementation class ChangePassword
@WebServlet("/change-password")
public class ChangePassword extends HttpServlet {
       private static final long serialVersionUID = 1L;
  /**
  * @see HttpServlet#HttpServlet()
  public ChangePassword() {
    super();
    // TODO Auto-generated constructor stub
  }
       /**
        * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
       protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
               // TODO Auto-generated method stub
               response.getWriter().append("Served at: ").append(request.getContextPath());
       }
        * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
       protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws
ServletException, IOException {
               // TODO Auto-generated method stub
               PrintWriter out = resp.getWriter();
    String pass = req.getParameter("password");
    if (!Login.isLoggedIn){
      out.println("You must login first");
    }
    else if (pass.equals("")){
```

```
out.println("Password can't be empty");
    }
    else if (Login.isLoggedIn && !pass.equals("")){
      Login.password = pass;
      out.println("Password changed. New Password is "+Login.password);
      try {
                               Thread.sleep(1000);
                       } catch (InterruptedException e) {
                               // TODO Auto-generated catch block
                               e.printStackTrace();
                       }
    }
    else {
      out.println("something went wrong");
       }
    try {
                        req.getRequestDispatcher("passwordverified.html").forward(req, resp);
               } catch (ServletException e) {
                       // TODO Auto-generated catch block
                        e.printStackTrace();
               } catch (IOException e) {
                       // TODO Auto-generated catch block
                       e.printStackTrace();
               }
    out.close();
       }
}
```

Login.java:

import javax.servlet.ServletException; import javax.servlet.annotation.WebServlet;

```
import javax.servlet.http.*;
import java.io.IOException;
import java.io.PrintWriter;
@WebServlet("/login")
public class Login extends HttpServlet {
  /**
        */
        private static final long serialVersionUID = 1L;
        public static boolean isLoggedIn = false;
  public static String password = "Airline";
  public static String email = "airline@flyaway.com";
  @Override
  public void doPost (HttpServletRequest req, HttpServletResponse resp) throws IOException {
    PrintWriter out = resp.getWriter();
    String email = req.getParameter("username");
    String pass = req.getParameter("password");
    if (email.equals(Login.email) && pass.equals(Login.password)){
      isLoggedIn = true;
      out.println("You have LoggedIn");
//
        resp.sendRedirect("/dashboard.html");
//
        out.print("<a href=\"dashboard.html\">Home</a>");
      try {
                                req.getRequestDispatcher("dashboard.html").forward(req, resp);
                        } catch (ServletException e) {
                                // TODO Auto-generated catch block
                                e.printStackTrace();
                        } catch (IOException e) {
                                // TODO Auto-generated catch block
                                e.printStackTrace();
                        }
    }
    else {
      isLoggedIn = false;
      out.println("Login Failed: Incorrect email or Password");
    }
    out.close();
}
```

FOR USER:

Confirmation.java:

```
import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import com.simplilearn.tables.Flight;
import com.simplilearn.util.HibernateUtil;
/**
 * Servlet implementation class ConfirmationPage
@WebServlet("/confirmation-page")
public class ConfirmationPage extends HttpServlet {
                   private static final long serialVersionUID = 1L;
     /**
       * @see HttpServlet#HttpServlet()
     public ConfirmationPage() {
                   /**
                     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
                   protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
                                      // print writer
                                      PrintWriter out = response.getWriter();
                                      response.setContentType("text/html");
                                      HttpSession httpsession = request.getSession();
                                      String flightid = (String) https://example.com/stringflightid = (Str
                                      String firstName = (String) https://orangetAttribute("firstname");
                                      int flightIdConverted = Integer.parseInt(flightid);
                                      //open a connection
                                      try {
                                                         SessionFactory sFactory = HibernateUtil.buildSessionFactory();
                                                         Session session = sFactory.openSession();
                                                         session.beginTransaction();
```

```
String query = "select f from Flight f" +
                                      " inner join Airline a" +
                                      " on f.airline=a.id" +
                                      " and f.numberOfSeats > 0" +
                                      " and f.id = " + flightIdConverted;
                       @SuppressWarnings("unchecked")
                       List<Flight> flights = session.createQuery(query).list();
                       if (flights.size() > 0) {
                       out.print("<a href=\"index.html\">Home</a><br/>);
                       out.println("<h1>Congratulations! You're all set, " + firstName +
"!</h1><br/><br/>");
                       out.println("<h1>List of Confirmed Flights for " + firstName + "</h1><hr>");
                       out.println("<style> table,th,td { border : 1px solid black ; padding :15px;}
</style>");
                       out.println("");
                       out.println("");
                              out.println(""); out.println("Flight ID"); out.println("");
                              out.println(""); out.println("Airline"); out.println("");
                              out.println(""); out.println("Number Of Seats");
out.println("");
                              out.println(""); out.println("Source"); out.println("");
                              out.println(""); out.println("Desintation"); out.println("");
                              out.println(""); out.println("Departure Date");
out.println("");
                              out.println(""); out.println("Arrival Date"); out.println("");
                              out.println(""); out.println("Price"); out.println("");
                       out.println("");
                       for(Flight i:flights) {
                              if (i.getNumberOfSeats() > 0) {
                                      out.println("");
                                              out.println(">"); out.println(i.getId());
out.println("");
                                              out.println("");
out.println(i.getAirline().getAirline().toString()); out.println("");
                                              out.println("");
out.println(i.getNumberOfSeats()); out.println("");
                                              out.println(""); out.println(i.getSource());
out.println("");
                                              out.println(""); out.println(i.getDestination());
out.println("");
                                              out.println("");
out.println(i.getDateOfDeparture()); out.println("");
                                              out.println(""); out.println(i.getDateOfArrival());
out.println("");
                                              out.println(""); out.println(i.getPrice());
out.println("");
                                      out.println("");
```

```
}
                       out.println("");
                       } else {
                               out.print("<a href=\"index.html\">Home</a>");
                               out.print("<h1>Sorry You don't have any are no flights
currently!<h1>");
                       }
                       session.close();
               } catch (Exception e) {
                       e.printStackTrace();
               } finally {
                       out.close();
               }
       }
        * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
       protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
       }
}
```

PayOnline.java:

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Date;
import java.util.HashSet;
import java.util.List;
import java.util.Set;
import java.util.regex.Pattern;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.query.Query;
import com.simplilearn.tables.Flight;
import com.simplilearn.tables.Payment;
import com.simplilearn.tables.Person;
import com.simplilearn.util.HibernateUtil;
/**
* Servlet implementation class PayOnline
@WebServlet("/pay-online")
public class PayOnline extends HttpServlet {
       private static final long serialVersionUID = 1L;
  /**
  * @see HttpServlet#HttpServlet()
  public PayOnline() {
       /**
        * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
       protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
               response.sendRedirect("payment.html");
       }
       /**
```

```
* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
                 */
                @SuppressWarnings({ "unchecked", "rawtypes" })
                protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
                                 PrintWriter out = response.getWriter();
                                 response.setContentType("text/html");
                                 HttpSession httpsession = request.getSession(false);
                                String personflightid = (String) https://doi.org/10.1016/j.j.
                                 String personfirstname = (String) https://example.com/string.getAttribute("firstname");
                                String personlastname = (String) https://orangetAttribute("lastname");
                                String personemail = (String) https://example.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/string.com/
                                String personbirthday = (String) https://example.com/string.getAttribute("birthday");
                                long millis = System.currentTimeMillis();
                                 Date timeBooked = new Date(millis);
                                 Date dateSqlPerson = null;
                                try {
                                                 if ((dateSqlPerson=Date.valueOf(personbirthday)) == null) {
                                                                  out.println("<h1>You must enter the date correctly into yyyy-MM-
dd format<h1>");
                                                                  out.print("<a href = \"payment.html\"> Re-enter Information
</a><br/>);
                                                 };
                                } catch (Exception e1) {
                                                 out.println("<h1>You must enter the date correctly into yyyy-MM-dd
format<h1>");
                                                 out.print("<a href = \"payment.html\"> Re-enter Information </a><br/>>");
                                }
                                String fName = request.getParameter("firstname");
                                 String IName = request.getParameter("lastname");
                                String cardNumber = request.getParameter("cardnumber").replaceAll("\\s", "");
                                System.out.println(cardNumber);
                                String expiration = request.getParameter("expiration");
                                int securitycode = Integer.parseInt(request.getParameter("securitycode"));
                                 Date dateSqlPayment = null;
                                try {
                                                 dateSqlPayment=Date.valueOf(expiration);
                                } catch (Exception e1) {
                                                 out.println("<h1>You must enter the date correctly into yyyy-MM-dd
format<h1>");
                                                 out.print("<a href = \"payment.html\"> Re-enter Information </a><br/>>");
                                }
```

```
out.print("<a href = \"payment.html\"> Re-enter Information </a><br/>>");
        out.print("Make sure you are entering your card number in correctly");
} else if (!Pattern.matches("\\d{3,4}", Integer.toString(securitycode))) {
        out.print("<a href = \"payment.html\"> Re-enter Information </a><br/>>");
        out.print("Make sure you are entering your security code in correctly");
} else if (dateSqlPayment.before(timeBooked)) {
        out.println("<h1>You must ensure your card is not expired<h1>");
        out.print("<a href = \"payment.html\"> Re-enter Information </a><br/>>");
}
else {
//step 1. Confirm Fields Match Criteria
       //Else redirect to payment
//step 2. insert into person table
//open a connection
try {
        SessionFactory sFactory = HibernateUtil.buildSessionFactory();
        Session session = sFactory.openSession();
        session.beginTransaction();
        int personflightidConverted = Integer.parseInt(personflightid);
        String query1 = " from Flight where id = " + personflightidConverted;
        List<Flight> list = (List<Flight>) session.createQuery(query1).list();
        Set<Flight> flights = new HashSet<Flight>(list);
        Person person = new Person();
        person.setFirstName(personfirstname);
        person.setLastName(personlastname);
        person.setEmail(personemail);
        person.setBirthday(dateSqlPerson);
        person.setTimeBooked(timeBooked);
        person.setFlights(flights);
        Payment payment = new Payment();
        payment.setFirstNameOnCard(fName);
        payment.setLastNameOnCard(IName);
        payment.setCardNumber(cardNumber);
        payment.setExpiration(dateSqlPayment);
        payment.setSecurityCode(securitycode);
        payment.setPerson(person);
```

if (!Pattern.matches("\\d{15,16}", cardNumber)) {

```
session.save(person);
                       session.save(payment);
                       String query = "select numberOfSeats from Flight f" +
                                       " where id = " + personflightidConverted;
                        int resultFromQ1 = (int) session.createQuery(query).getSingleResult();
                        Query q3=session.createQuery("update Flight set numberOfSeats=:n where
id=:i");
                        q3.setParameter("n",(resultFromQ1 - 1));
                       q3.setParameter("i",personflightidConverted);
                        int status=q3.executeUpdate();
                       System.out.println(status);
                       session.getTransaction().commit();
                       session.close();
                       response.sendRedirect("confirmation-page");
                       out.close();
               } catch (Exception e) {
                       e.printStackTrace();
               }
               }
               //step 3. insert into payment table
               //step 4. reduce person count
               //step 5. Redirect to confirmation page
       }
```

}

Registeration.java:

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Date;
import java.util.List;
import java.util.regex.Pattern;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import com.simplilearn.tables.Flight;
import com.simplilearn.util.HibernateUtil;
* Servlet implementation class Registration
*/
@WebServlet("/registeration")
public class Registeration extends HttpServlet {
       private static final long serialVersionUID = 1L;
  /**
  * @see HttpServlet#HttpServlet()
  public Registeration() {
       /**
        * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
       protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
       }
       /**
        * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
        @SuppressWarnings("unchecked")
```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
               // print writer
                PrintWriter out = response.getWriter();
                response.setContentType("text/html");
               HttpSession httpsession = request.getSession();
               String flightid = request.getParameter("flightid");
               String firstname = request.getParameter("firstname");
               String lastname = request.getParameter("lastname");
               String email = request.getParameter("email");
                String birthday = request.getParameter("birthday");
                request.setAttribute("firstname", firstname);
                Date dateSqlBirthday = null;
               try {
                        dateSqlBirthday = Date.valueOf(birthday);
                } catch (Exception e1) {
                        out.print("<a href = \"registeration.html\"> Re-Enter Information
</a><br/>);
                        out.print("Make sure you are entering your date code in correctly (yyyy-
MM-dd)");
               }
               //email
               if (!(Pattern.matches("[A-Za-z0-9]+(.+)@(.+)", email))) {
                        out.print("<a href = \"registeration.html\"> Re-enter Information
</a><br/>);
                        out.print("Make sure you are entering in a valid email address");
               } else if (dateSqlBirthday==null){
                        out.print("<a href = \"registeration.html\"> Re-enter Information
</a><br/>);
                        out.print("Make sure you are entering in a valid date format (yyyy-MM-
dd)");
               } else {
               httpsession.setAttribute("flightid", flightid);
               httpsession.setAttribute("firstname", firstname);
               httpsession.setAttribute("lastname", lastname);
               httpsession.setAttribute("email", email);
                httpsession.setAttribute("birthday", birthday);
               //open a connection
               try {
                        SessionFactory sFactory = HibernateUtil.buildSessionFactory();
                        Session session = sFactory.openSession();
                        session.beginTransaction();
                        String query = "select f from Flight f" +
```

```
" inner join Airline a" +
                                          " on f.airline=a.id" +
                                          " and f.numberOfSeats > 0";
                                          if (flightid !=null && flightid.trim().length() > 0) {
                                                  try {
                                                          int flightIdParsed =
Integer.parseInt(flightid);
                                                          String flightIdQuery = " and f.id =" +
flightIdParsed;
                                                          query = query.concat(flightIdQuery);
                                                  } catch (Exception e){
                                                          out.println("<h1>You must enter a valid
flight id<h1>");
                                                  }
                                          }
                         List<Flight> flights = session.createQuery(query).list();
                         if (flights.size() > 0) {
                         out.print("<a href=\"index.html\">Home</a>");
                         out.println("<h1>Confirm Flight Details: </h1>");
                         for(Flight i:flights) {
                                 if (i.getNumberOfSeats() > 0) {
                                 out.println("Flight ID: " + i.getId() + "<br/>");
                                 out.println("Airline: " + i.getAirline().getAirline().toString() +
"<br/>");
                                 out.println("Number Of Seats: " + i.getNumberOfSeats() + "<br/>");
                                 out.println("Source " + i.getSource() + "<br/>");
                                 out.println("Desintation:" + i.getDestination() + "<br/>");
                                 out.println("Departure Date: "+i.getDateOfDeparture() + "<br/>");
                                 out.println("Arrival Date: " + i.getDateOfArrival() + "<br/>");
                                 out.println("<h1>Your Total is: Rs. " + i.getPrice() + "<h1><br/>");
                                 out.println("<hr>");
                                 }
                         }
                         request.getRequestDispatcher("payment.html").include(request, response);
                         } else {
                                 out.print("<a href=\"index.html\">Home</a>");
                                 out.print("<h1>You must enter a valid flight id!<h1>");
                         session.close();
                         out.close();
                } catch (Exception e) {
                         e.printStackTrace();
                }
                }
                }
```

}

SearchAllFlights.java:

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Date;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import com.simplilearn.tables.Flight;
import com.simplilearn.util.HibernateUtil;
/**
* Servlet implementation class SearchFlights
@WebServlet("/search-flights")
public class SearchFlights extends HttpServlet {
       private static final long serialVersionUID = 1L;
  /**
  * @see HttpServlet#HttpServlet()
  public SearchFlights() {
       /**
        * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
        */
        @SuppressWarnings({ "null", "unchecked" })
       protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
               // print writer
               PrintWriter out = response.getWriter();
               response.setContentType("text/html");
               String source = request.getParameter("source");
               String destination = request.getParameter("destination");
               String price = request.getParameter("price");
               String date = request.getParameter("date");
               //open a connection
               try {
```

```
SessionFactory sFactory = HibernateUtil.buildSessionFactory();
                        Session session = sFactory.openSession();
                        session.beginTransaction();
                        String query = "select f from Flight f" +
                                         "inner join Airline a" +
                                         " on f.airline=a.id" +
                                         " and f.numberOfSeats > 0";
                                         if (source !=null && source.trim().length() > 0) {
                                                 String sourceQuery = " and f.source = "" + source +
                                                 query = query.concat(sourceQuery);
                                         if (destination != null && destination.trim().length() > 0) {
                                                 String destinationQuery = " and f.destination = "" +
destination + "'";
                                                 query = query.concat(destinationQuery);
                                         }
                                         if (price !=null && price.trim().length() > 0) {
                                                 try {
                                                         Double priceParsed =
Double.parseDouble(price);
                                                         String priceQuery = " and f.price <= " +
priceParsed;
                                                         query = query.concat(priceQuery);
                                                 } catch (Exception e){
                                                         out.println("<h1>You must enter a valid
number for price<h1>");
                                                 }
                                         if (date !=null && date.trim().length()> 0) {
                                                 try {
                                                         Date dateSql=Date.valueOf(date);
                                                         String dateQuery = " and f.dateOfDeparture
>= "" + dateSql + """;
                                                         query = query.concat(dateQuery);
                                                 } catch (Exception e1) {
                                                         out.println("<h1>You must enter the date
correctly into yyyy-MM-dd format<h1>");
                                                 }
                                         System.out.println(query);
                        List<Flight> flights = session.createQuery(query).list();
                        if (flights.size() > 0) {
                        out.print("<a href=\"index.html\">Home</a>");
                        out.println("<h1>List of all Flights: </h1>");
                        out.println("<style> table,th,td { border : 1px solid black ; padding :15px;}
</style>");
```

```
out.println("");
                                                     out.println("");
                                                                       out.println(""); out.println("Flight ID"); out.println("");
                                                                       out.println(""); out.println("Airline"); out.println("");
                                                                       out.println(""); out.println("Number Of Seats");
out.println("");
                                                                       out.println(""); out.println("Source"); out.println("");
                                                                       out.println(""); out.println("Desintation"); out.println("");
                                                                       out.println(""); out.println("Departure Date");
out.println("");
                                                                       out.println(""); out.println("Arrival Date"); out.println("");
                                                                       out.println(""); out.println("Price"); out.println("");
                                                     out.println("");
                                                     for(Flight i:flights) {
                                                                      if (i.getNumberOfSeats() > 0) {
                                                                                        out.println("");
                                                                                                          out.println(""); out.println(i.getId());
out.println("");
                                                                                                          out.println("");
out.println(i.getAirline().getAirline().toString()); out.println("");
                                                                                                          out.println("");
out.println(i.getNumberOfSeats()); out.println("");
                                                                                                          out.println(">"); out.println(i.getSource());
out.println("");
                                                                                                          out.println(""); out.println(i.getDestination());
out.println("");
                                                                                                          out.println("");
out.println(i.getDateOfDeparture()); out.println("");
                                                                                                          out.println(""); out.println(i.getDateOfArrival());
out.println("");
                                                                                                          out.println(">"); out.println(i.getPrice());
out.println("");
                                                                                        out.println("");
                                                                      }
                                                    }
                                                     out.println("");
                                                     request.get Request Dispatcher ("registeration.html"). include (request, properties of the context of the con
response);
                                                    } else {
                                                                      out.print("<a href=\"index.html\">Home</a>");
                                                                       out.print("<h1>Sorry there are no flights currently!<h1>");
                                                    }
                                                     session.close();
                                                     out.close();
                                  } catch (Exception e) {
                                                     e.printStackTrace();
                                  }
```

```
/**
    * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
    */
    protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
```

SeeAllFlights.java:

```
package com.simplilearn.servlets.users;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import com.simplilearn.tables.Flight;
import com.simplilearn.util.HibernateUtil;
/**
* Servlet implementation class SeeAllFlights
@WebServlet("/see-all-flights")
public class SeeAllFlights extends HttpServlet {
        private static final long serialVersionUID = 1L;
  /**
   * @see HttpServlet#HttpServlet()
  public SeeAllFlights() {
        * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
        */
```

```
@SuppressWarnings({ "unused", "unchecked" })
       protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
               // print writer
                               PrintWriter out = response.getWriter();
                               response.setContentType("text/html");
                               String source = request.getParameter("source");
                               String destination = request.getParameter("destination");
                               String price = request.getParameter("price");
                               String date = request.getParameter("date");
                               //open a connection
                               try {
                                       SessionFactory sFactory =
HibernateUtil.buildSessionFactory();
                                       Session session = sFactory.openSession();
                                       session.beginTransaction();
                                       String query = "select f from Flight f" +
                                                      " inner join Airline a" +
                                                      " on f.airline=a.id" +
                                                      " and f.numberOfSeats > 0";
                                       List<Flight> flights = session.createQuery(query).list();
                                       if (flights.size() > 0) {
                                       out.print("<a href=\"index.html\">Home</a>");
                                       out.println("<h1>List of all Flights: </h1>");
                                       out.println("<style> table,th,td { border : 1px solid black ;
padding :15px;} </style>");
                                       out.println("");
                                       out.println("");
                                               out.println(""); out.println("Flight ID");
out.println("");
                                               out.println(""); out.println("Airline");
out.println("");
                                               out.println(""); out.println("Number Of Seats");
out.println("");
                                               out.println(""); out.println("Source");
out.println("");
                                               out.println(""); out.println("Desintation");
out.println("");
                                               out.println(""); out.println("Departure Date");
out.println("");
                                               out.println(""); out.println("Arrival Date");
out.println("");
                                               out.println(""); out.println("Price");
out.println("");
```

```
out.println("");
                                      for(Flight i:flights) {
                                              if (i.getNumberOfSeats() > 0) {
                                                     out.println("");
                                                             out.println("");
out.println(i.getId()); out.println("");
                                                             out.println("");
out.println(i.getAirline().getAirline().toString()); out.println("");
                                                             out.println("");
out.println(i.getNumberOfSeats()); out.println("");
                                                             out.println("");
out.println(i.getSource()); out.println("");
                                                             out.println("");
out.println(i.getDestination()); out.println("");
                                                             out.println("");
out.println(i.getDateOfDeparture()); out.println("");
                                                             out.println("");
out.println(i.getDateOfArrival()); out.println("");
                                                             out.println("");
out.println(i.getPrice()); out.println("");
                                                     out.println("");
                                              }
                                      }
                                      out.println("");
       request.getRequestDispatcher("registeration.html").include(request, response);
                                      } else {
                                              out.print("<a href=\"index.html\">Home</a>");
                                              out.print("<h1>Sorry there are no flights
currently!<h1>");
                                      }
                                      session.close();
                                      out.close();
                              } catch (Exception e) {
                                      e.printStackTrace();
                              }
       }
        * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
       protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
       }
}
```

```
setupDB.sql:
use flyawaydb;
create table airline(
       a_id int NOT NULL AUTO_INCREMENT,
       airline varchar(255) NOT NULL,
       PRIMARY KEY (a_id)
);
create table flight(
       f_id int(11) NOT NULL AUTO_INCREMENT,
       number of seats int(11) NOT NULL,
       price decimal(10,2) NOT NULL,
  source varchar(255) NOT NULL,
  destination varchar(255) NOT NULL,
  date of departure date NOT NULL,
  date_of_arrival date NOT NULL,
  a_id int(11) NOT NULL,
       PRIMARY KEY (f id),
       CONSTRAINT airline_fk FOREIGN KEY (a_id) REFERENCES airline (a_id)
);
create table person(
       per_id int(11) NOT NULL AUTO_INCREMENT,
       first_name varchar(255) NOT NULL,
       last_name varchar(255) NOT NULL,
       email varchar(255) NOT NULL,
  birthday date NOT NULL,
  time_booked DATETIME default CURRENT_TIMESTAMP NOT NULL,
       PRIMARY KEY (per_id)
);
create table personflight(
       per_id int(11) NOT NULL,
       f id int(11) NOT NULL,
       PRIMARY KEY (per id, f id),
       CONSTRAINT person_fk FOREIGN Key (per_id) REFERENCES person (per_id),
       CONSTRAINT flights fk FOREIGN Key (f id) REFERENCES flight (f id)
);
create table payment(
       pay id int(11) NOT NULL AUTO INCREMENT,
       card number varchar(255) NOT NULL,
       expiration DATE NOT NULL,
       security code int(11) NOT NULL,
       card_fname varchar(255) NOT NULL,
       card_Iname varchar(255) NOT NULL,
       per id int(11) NOT NULL,
       PRIMARY KEY (pay id),
       CONSTRAINT person_payment_fk FOREIGN KEY (per_id) REFERENCES person (per_id)
);
```

create table admin(

admin_id int (11) NOT NULL AUTO_INCREMENT,

```
first_name varchar(255) NOT NULL,
        last name varchar(255) NOT NULL,
        email varchar(255) NOT NULL,
        password varchar(255) NOT NULL,
        PRIMARY KEY (admin id)
);
INSERT INTO airline (airline)
        values ("AirIndia"), ("SpiceJet"), ("Indigo"), ("Vistara"), ("AirAsia"), ("Emirates"), ("Qatar
Airways");
INSERT INTO flight (number_of_seats, price, source, destination, date_of_departure,
date_of_arrival, a_id)
        values (180, 500, "Hyderabad", "Chennai", "2022-10-20", "2022-10-20",
                (select a_id from airline where airline = "AirIndia" LIMIT 1)),
        (10, 1200, "Hyderabad", "Delhi", "2022-10-23", "2022-10-23",
                (select a_id from airline where airline = "SpiceJet"LIMIT 1)),
        (150, 200, "Hyderabad", "Kolkata", "2022-10-21", "2022-10-21",
                (select a_id from airline where airline = "Indigo"LIMIT 1)),
        (20, 150, "Tirupathi", "Hyderabad", "2022-10-20", "2022-10-20",
                (select a_id from airline where airline = "Indigo"LIMIT 1)),
        (120, 700, "India", "Dubai", "2022-10-24", "2022-10-25",
                (select a id from airline where airline = "Emirates"LIMIT 1)),
        (123, 250, "India", "Qatar", "2022-10-22", "2022-10-23",
                (select a_id from airline where airline = "Qatar Airways"LIMIT 1));
INSERT INTO person (first_name, last_name, email, birthday)
        values ("P", "Suresh", "pablo@gmail.com", "1990-02-01");
SET FOREIGN_KEY_CHECKS=0;
INSERT INTO personflight (per id, f id)
        values (1, 3),
               (2, 2),
               (3, 1),
               (4, 5),
               (5, 2),
               (6, 3),
               (7, 6),
                (8, 7);
INSERT INTO payment (card_number, expiration, security_code, card_fname, card_lname, per_id)
        values ("1234 5678 1021 9182", "2022-10-31", 123, "Steve", "Smith", 1);
INSERT INTO admin (first name, last name, email, password)
        values ("Tarun", "P", "tarun@gmail.com", "Msd@7781");
```

```
HibernateUtil.java:
```

```
package com.simplilearn.util;
import org.hibernate.SessionFactory;
import org.hibernate.boot.Metadata;
import org.hibernate.boot.MetadataSources;
import org.hibernate.boot.registry.StandardServiceRegistry;
import org.hibernate.boot.registry.StandardServiceRegistryBuilder;
public class HibernateUtil {
       private static SessionFactory factory;
       public static SessionFactory buildSessionFactory() {
              // 1. Load Configuration
       StandardServiceRegistry sService = new StandardServiceRegistryBuilder()
                      .configure("hibernate.annotation.cfg.xml").build();
       Metadata meta = new MetadataSources(sService).getMetadataBuilder().build();
       // 2. Create Session factory
       factory = meta.getSessionFactoryBuilder().build();
       return factory;
       }
}
Hibernate.annotation.cfg.xml:
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE hibernate-configuration PUBLIC</p>
    "-//Hibernate/Hibernate Configuration DTD 3.0//EN"
    "http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
 <session-factory>
    <property name="hibernate.connection.driver_class">com.mysql.jdbc.Driver/property>
    property
name="hibernate.connection.url">jdbc:mysql://localhost:3306/flyawaydb</property>
    cproperty name="hibernate.connection.username">root/property>
    cproperty name="hibernate.connection.pool_size">1/property>
    <property name="hibernate.current_session_context_class">thread</property>
    cproperty name="hibernate.show sql">true/property>
    <property name="hibernate.dialect">org.hibernate.dialect.MySQLDialect/property>
    cproperty name="hibernate.id.new_generator_mappings">false/property>
    <mapping class="com.simplilearn.tables.Admin" />
    <mapping class="com.simplilearn.tables.Airline" />
    <mapping class="com.simplilearn.tables.Flight" />
```

```
<mapping class="com.simplilearn.tables.Payment" />
    <mapping class="com.simplilearn.tables.Person" />
    </session-factory>
</hibernate-configuration>
```

HTML FILES:

Index.html:

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Welcome To Fly Away Ticket Booking Portal</title>
<body>
      <a href="login.html">Admin Login</a>
      <hr>
      <h1>Search For Flights</h1>
      <form name="searchForFlights" method="GET" action="search-flights">
      Flying From : <input type="text" name="source"> <br/>
            Flying To : <input type="text" name="destination"> <br/>
            Your Max Price : <input type="number" name="price"> <br/>
            Flights On or After Date : <input type="date" name="date">
<br/>
            <br/>
            <input type="submit" value="Search for flights!">
      <form name ="seeAllFlights" method="GET" action="see-all-flights">
            <input type="submit" value="See All Flights">
      </form>
</body>
</html>
```

Login.html:

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Admin Login</title>
</head>
<body>
     <a href="index.html">Home</a>
     <h1>Admin Login Page</h1>
     <form name="loginForm" method="POST" action="login">
            Username: <input type="text" name="username"> <br/> 
           Password : <input type="password" name="password"> <br/>
<br/>
            <input type="submit" value="Login">
     </form>
</body>
</html>
```

Dashboard.html:

ChangePassword.html:

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Admin Login Page</title>
</head>
<body>
      <a href="dashboard.html">Dashboard</a>
      <h1>Change Password</h1>
      <form name="change password" method="POST" action="change-password">
            New Password : <input type="password" name="password"> <br/> <br/>
            Confirm New Password: <input type="password"</pre>
name="confirmpassword"> <br/>
            <br/>
            <input type="submit" value="Change password">
      </form>
</body>
</html>
```

Passwordverified.html:

Payment.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
```

```
<title>Payment</title>
</head>
<body>
      <h1>Enter Payment Details</h1>
      <form name="paymentDetails" method="POST" action="pay-online">
    First Name On Card : <input type="text" name="firstname"</pre>
placeholder="John" required> <br/>
             Last Name On Card : <input type="text" name="lastname"
placeholder="Smith" required> <br/>
             Card Number: <input type="text" name="cardnumber"</pre>
placeholder="1234 1234 4321 9123" required> <br/>
             Expiration (yyyy-MM-dd) : <input type="date" name="expiration"
placeholder="2027-10-31" required> <br/>
             Security Code : <input type="number" name="securitycode"
placeholder="987" required> <br/>
             <br/>
             <input type="submit" value="Pay Ticket">
      </form>
</body>
</html>
```

Registeration.html

```
<!DOCTYPE html>
<html>
<meta charset="UTF-8">
<title>Flight Registration Page</title>
</head>
<body>
      <h1>Flight Registration Page</h1>
      <form name="flightRegistraton" method="POST" action="registeration">
            Flight ID : <input type="number" name="flightid" placeholder="
" required> <br/>
            First Name : <input type="text" name="firstname" placeholder="
" required> <br/>
            Last Name : <input type="text" name="lastname" placeholder="
" required> <br/>
            Email : <input type="email" name="email"</pre>
placeholder="xxxxxxx@gmail.com" required> <br/>
            Birthday (yyyy-MM-dd) : <input type="date" name="birthday"
placeholder="1990-04-02" required> <br/>
            <br/>
            <input type="submit" value="Submit Flight Registration">
      </form>
</body>
</html>
```