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| **AirplaneFlyAway.**  **(An Air Booking Portal)**  *(Sprint Work and Project Specification)* |

* **Version History:**

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| --- | --- | --- |
| 1. | **Author Name** | Tushar Khillare. |
| 2. | **Purpose** | Specification of Project and Sprint Work. |
| 3. | **Date** | 29 September 2021 |
| 4. | **Version** | 1.0 |

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# **Modules in the Project.**

1. User Registration Page.
2. Login Page.
3. Admin Login Page.
4. User Login.
5. Change Password.
6. Dashboard.
7. Search Flights.
8. Payment Confirmation/PIN Page.
9. Booking List/(Add/Delete/Edit).

# **JAVA (Core)Technology Used:**

1. Java Server pages and Servlet.
2. Server request response Object.
3. HTTP Session, Cookies URL Redirect Hidden field.
4. Hibernate JPA, Different types of mapping (one to one, one to many etc).
5. MVC Framework where View (jsp/Html pages) Controller (Servlet pages), Data Model (Classes and interfaces which interact to backend database using hibernate framework), Naming Standards.
6. Modularity, HTML/CSS to design view.
7. Web container such as Tomcat server usage deployment of web application and running/configuration.
8. Collections Framework.
9. MySQL Database and SQL Query Language.

# **3.Sprint Wise Work.**

* FlyAway was divided into 3 Sprints of 1 Week each.

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| --- | --- | --- |
| Sr no | Sprint Number | Sprint Module |
| 1. | 1 | 1. Initialized the project, made it Hibernate project and added dependencies: MySQL Connector, Hibernate libraries. 2. Setting MySQL database and entities relationship. 3. Configured hibernate and mapped classes as entities. |
| 2. | 2 | 1. Planned the structure of the website and navigation across it. 2. Made a Hibernate util. class to use it across the servlet. 3. Made a Header and footer jsp pages to include it across every page. |
| 3. | 3 | 1. Made the master list JSP for master list of places for source and destination, master list of airlines. 2. Also made a list of files where each flight has a source, destination. 3. Modified the navigation with the help of buttons and added the navigation to the home page in the Header Tag/Testing of Code. |

# **4.Project GitHub Link.**

|  |  |
| --- | --- |
| Repository Name. | FlyAway (1.0). |
| GitHub Link. | <https://github.com/tuskhillare/FlyAway-1.0-> |

# **5.Project Code.**

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| --- |
| 1. Folder Structure. |
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|  |
| 1. Com.Controller   *1.ChangePassword.java*  package com.controller;  import org.hibernate.query.Query;  import org.hibernate.Session;  import org.hibernate.SessionFactory;  import javax.servlet.http.HttpSession;  import java.io.PrintWriter;  import com.util.HibernateUtil;  import java.io.IOException;  import javax.servlet.ServletException;  import javax.servlet.http.HttpServletResponse;  import javax.servlet.http.HttpServletRequest;  import javax.servlet.annotation.WebServlet;  import javax.servlet.http.HttpServlet;  public class ChangePassword extends HttpServlet  {  private static final long serialVersionUID = 1L;    protected void doGet(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {  }    protected void doPost(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {  final PrintWriter out = response.getWriter();  response.setContentType("text/html");  final String password = request.getParameter("password");  final String confirmPassword = request.getParameter("confirmpassword");  if (password.equals(confirmPassword)) {  try {  final HttpSession httpsession = request.getSession();  final SessionFactory sFactory = HibernateUtil.buildSessionFactory();  final Session session = sFactory.openSession();  session.beginTransaction();  final String email = (String)httpsession.getAttribute("username");  final String query = "select id from Admin a where a.email = '" + email + "'";  final int resultFromQ1 = (Integer)session.createQuery(query).getSingleResult();  final Query q3 = session.createQuery("update Admin set password=:n where id=:i");  q3.setParameter("n", (Object)confirmPassword);  q3.setParameter("i", (Object)resultFromQ1);  final int status = q3.executeUpdate();  System.out.println(status);  session.getTransaction().commit();  session.close();  out.write("Password Changed Succesfully");  out.close();  }  catch (Exception e) {  e.printStackTrace();  }  }else {  out.print("Sorry, your passwords do not match");  }  }  }  *2.ConfirmationPage.java*  package com.controller;  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.table.Flight;  import com.util.HibernateUtil;  /\*\*  \* Servlet implementation class ConfirmationPage  \*/  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) httpsession.getAttribute("flightid");  String firstName = (String) httpsession.getAttribute("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.jsp\">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("<table>");  out.println("<tr>");  out.println("<th>"); out.println("Flight ID"); out.println("</th>");  out.println("<th>"); out.println("Airline"); out.println("</th>");  out.println("<th>"); out.println("Number Of Seats"); out.println("</th>");  out.println("<th>"); out.println("Source"); out.println("</th>");  out.println("<th>"); out.println("Desintation"); out.println("</th>");  out.println("<th>"); out.println("Departure Date"); out.println("</th>");  out.println("<th>"); out.println("Arrival Date"); out.println("</th>");  out.println("<th>"); out.println("Price"); out.println("</th>");  out.println("</tr>");  for(Flight i:flights) {  if (i.getNumberOfSeats() > 0) {  out.println("<tr>");  out.println("<td>"); out.println(i.getId()); out.println("</td>");  out.println("<td>"); out.println(i.getAirline().getAirline().toString()); out.println("</td>");  out.println("<td>"); out.println(i.getNumberOfSeats()); out.println("</td>");  out.println("<td>"); out.println(i.getSource()); out.println("</td>");  out.println("<td>"); out.println(i.getDestination()); out.println("</td>");  out.println("<td>"); out.println(i.getDateOfDeparture()); out.println("</td>");  out.println("<td>"); out.println(i.getDateOfArrival()); out.println("</td>");  out.println("<td>"); out.println(i.getPrice()); out.println("</td>");  out.println("</tr>");  }  }  out.println("</table>");  } else {  out.print("<a href=\"index.jsp\">Home</a>");  out.print("<h1>Oop's You don't have any flights available 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 {    }  }  *3.ListAirline.java*  package com.controller;  import java.io.IOException;  import javax.servlet.ServletException;  import java.util.List;  import org.hibernate.Session;  import org.hibernate.SessionFactory;  import java.io.PrintWriter;  import com.table.Airline;  import com.util.HibernateUtil;  import javax.servlet.http.HttpServletResponse;  import javax.servlet.http.HttpServletRequest;  import javax.servlet.http.HttpServlet;  public class ListAirlines extends HttpServlet  {  private static final long *serialVersionUID* = 1L;    protected void doGet(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {  final PrintWriter out = response.getWriter();  response.setContentType("text/html");  out.print("<a href=\"Dashboard.jsp\">Dashboard</a><br/><hr>");  out.print("<h1>Master View</h1>");  try {  final SessionFactory sFactory = HibernateUtil.*buildSessionFactory*();  final Session session = sFactory.openSession();  session.beginTransaction();  final String query = "from Airline";  final List<Airline> airlines = (List<Airline>)session.createQuery(query).list();  if (airlines.size() > 0) {  out.println("<h1>List of all Airlines: </h1>");  out.println("<style> table,th,td { border : 1px solid black ; padding :15px;} </style>");  out.println("<table>");  out.println("<tr>");  out.println("<th>");  out.println("Airline ID");  out.println("</th>");  out.println("<th>");  out.println("Airline Name");  out.println("</th>");  out.println("</tr>");  for (final Airline i : airlines) {  out.println("<tr>");  out.println("<td>");  out.println(i.getId());  out.println("</td>");  out.println("<td>");  out.println(i.getAirline());  out.println("</td>");  out.println("</tr>");  }  out.println("</table>");  }  else {  out.print("<a href=\"index.jsp\">Home</a>");  out.print("<h1>Sorry there are no airlines available!<h1>");  }  out.close();  session.close();  }  catch (Exception e) {  e.printStackTrace();  }  }    protected void doPost(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {  }  }  *4.ListFilghts.java*  package com.controller;  import java.io.IOException;  import javax.servlet.ServletException;  import java.util.List;  import org.hibernate.Session;  import org.hibernate.SessionFactory;  import java.io.PrintWriter;  import com.table.Flight;  import com.util.HibernateUtil;  import javax.servlet.http.HttpServletResponse;  import javax.servlet.http.HttpServletRequest;  import javax.servlet.http.HttpServlet;  public class ListFlights extends HttpServlet  {  private static final long *serialVersionUID* = 1L;    protected void doGet(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {  final PrintWriter out = response.getWriter();  response.setContentType("text/html");  out.print("<a href=\"Dashboard.jsp\">Dashboard</a><br/><hr>");  out.print("<h1>Master View</h1>");  try {  final SessionFactory sFactory = HibernateUtil.*buildSessionFactory*();  final Session session = sFactory.openSession();  session.beginTransaction();  final String query = "select f from Flight f inner join Airline a on f.airline=a.id";  final List<Flight> flights = (List<Flight>)session.createQuery(query).list();  if (flights.size() > 0) {  out.println("<h1>List of all Flights: </h1>");  out.println("<style> table,th,td { border : 1px solid black ; padding :15px;} </style>");  out.println("<table>");  out.println("<tr>");  out.println("<th>");  out.println("Flight ID");  out.println("</th>");  out.println("<th>");  out.println("Airline");  out.println("</th>");  out.println("<th>");  out.println("Number Of Seats");  out.println("</th>");  out.println("<th>");  out.println("Source");  out.println("</th>");  out.println("<th>");  out.println("Desintation");  out.println("</th>");  out.println("<th>");  out.println("Departure Date");  out.println("</th>");  out.println("<th>");  out.println("Arrival Date");  out.println("</th>");  out.println("<th>");  out.println("Price");  out.println("</th>");  out.println("</tr>");  for (final Flight i : flights) {  if (i.getNumberOfSeats() > 0) {  out.println("<tr>");  out.println("<td>");  out.println(i.getId());  out.println("</td>");  out.println("<td>");  out.println(i.getAirline().getAirline().toString());  out.println("</td>");  out.println("<td>");  out.println(i.getNumberOfSeats());  out.println("</td>");  out.println("<td>");  out.println(i.getSource());  out.println("</td>");  out.println("<td>");  out.println(i.getDestination());  out.println("</td>");  out.println("<td>");  out.println(i.getDateOfDeparture());  out.println("</td>");  out.println("<td>");  out.println(i.getDateOfArrival());  out.println("</td>");  out.println("<td>");  out.println(i.getPrice());  out.println("</td>");  out.println("</tr>");  }  }  out.println("</table>");  }  else {  out.print("<a href=\"Dashboard.jsp\">Home</a>");  out.print("<h1>Sorry there are no flights currently!<h1>");  }  session.close();  out.close();  }  catch (Exception e) {  e.printStackTrace();  }  }    protected void doPost(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {  }  }  *5.Login.java*  *package com.controller;*  *import java.util.List;*  *import javax.servlet.http.HttpSession;*  *import org.hibernate.Session;*  *import org.hibernate.SessionFactory;*  *import java.io.PrintWriter;*  *import com.table.Admin;*  *import com.util.HibernateUtil;*  *import java.io.IOException;*  *import javax.servlet.ServletException;*  *import javax.servlet.http.HttpServletResponse;*  *import javax.servlet.http.HttpServletRequest;*  *import javax.servlet.annotation.WebServlet;*  *import javax.servlet.http.HttpServlet;*  *public class Login extends HttpServlet*  *{*  *private static final long serialVersionUID = 1L;*    *protected void doGet(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {*  *}*    *protected void doPost(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {*  *final PrintWriter out = response.getWriter();*  *response.setContentType("text/jsp");*  *final String user = request.getParameter("username");*  *final String password = request.getParameter("password");*  *try {*  *final SessionFactory sFactory = HibernateUtil.buildSessionFactory();*  *final Session session = sFactory.openSession();*  *session.beginTransaction();*  *final String query = "from Admin a where email = '" + user + "'" + " and password = '" + password + "'";*  *String usernamedb = "";*  *String namedb = "";*  *final HttpSession httpsession = request.getSession();*  *final List<Admin> admin = (List<Admin>)session.createQuery(query).list();*  *if (admin.size() > 0) {*  *for (final Admin i : admin) {*  *usernamedb = i.getEmail();*  *namedb = i.getFirstName();*  *}*  *httpsession.setAttribute("name", (Object)namedb);*  *httpsession.setAttribute("username", (Object)usernamedb);*  *response.sendRedirect("Dashboard.jsp");*  *}*  *else {*  *out.print("<a href=\"index.jsp\">Home</a>");*  *out.print("<h1>Sorry that username and password does not exist.<h1>");*  *}*  *session.close();*  *out.close();*  *}*  *catch (Exception e) {*  *e.printStackTrace();*  *}*  *}*  *}*  *6.PayOnline.java*  *package com.controller;*  *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.table.Flight;*  *import com.table.Payment;*  *import com.table.Person;*  *import com.util.HibernateUtil;*  */\*\**  *\* Servlet implementation class PayOnline*  *\*/*  *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.jsp");*  *}*  */\*\**  *\* @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) httpsession.getAttribute("flightid");*  *String personfirstname = (String) httpsession.getAttribute("firstname");*  *String personlastname = (String) httpsession.getAttribute("lastname");*  *String personemail = (String) httpsession.getAttribute("email");*  *String personbirthday = (String) httpsession.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.jsp\"> 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.jsp\"> Re-enter Information </a><br/>");*  *}*      *String fName = request.getParameter("firstname");*  *String lName = request.getParameter("lastname");*  *String cardNumber = request.getParameter("cardnumber").replaceAll("\\s", "");*  *System.out.println(cardNumber);*  *String expiration = request.getParameter("expiration");*  *Integer 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.jsp\"> Re-enter Information </a><br/>");*  *}*      *if (!Pattern.matches("\\d{15,16}", cardNumber)) {*  *out.print("<a href = \"Payment.jsp\"> 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.jsp\"> 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.jsp\"> 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();*    *Integer 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(lName);*  *payment.setCardNumber(cardNumber);*  *payment.setExpiration(dateSqlPayment);*  *payment.setSecurityCode(securitycode);*  *payment.setPerson(person);*    *session.save(person);*  *session.save(payment);*    *String query = "select numberOfSeats from Flight f" +*  *" where id = " + personflightidConverted;*  *Integer resultFromQ1 = (Integer) 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("ConfirmationPage");*  *out.close();*  *} catch (Exception e) {*  *e.printStackTrace();*  *}*  *}*  *//step 3. insert into payment table*  *//step 4. reduce person count*  *//step 5. Redirect to confirmation page*    *}*  *}*  *7.Registeration.java*  *package com.controller;*  *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.table.Flight;*  *import com.util.HibernateUtil;*  */\*\**  *\* Servlet implementation class Registration*  *\*/*  *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.jsp\"> 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.jsp\"> 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.jsp\"> 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.jsp\">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: $" + i.getPrice() + "<h1><br/>");*  *out.println("<hr>");*  *}*  *}*  *request.getRequestDispatcher("Payment.jsp").include(request, response);*  *} else {*  *out.print("<a href=\"index.jsp\">Home</a>");*  *out.print("<h1>You must enter a valid flight id!<h1>");*  *}*  *session.close();*  *out.close();*  *} catch (Exception e) {*  *e.printStackTrace();*  *}*  *}*  *}*  *}*  *8.SearchFlights.java*  *package com.controller;*  *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.table.Flight;*  *import com.util.HibernateUtil;*  */\*\**  *\* Servlet implementation class Registration*  *\*/*  *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.jsp\"> 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.jsp\"> 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.jsp\"> 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.jsp\">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: $" + i.getPrice() + "<h1><br/>");*  *out.println("<hr>");*  *}*  *}*  *request.getRequestDispatcher("Payment.jsp").include(request, response);*  *} else {*  *out.print("<a href=\"index.jsp\">Home</a>");*  *out.print("<h1>You must enter a valid flight id!<h1>");*  *}*  *session.close();*  *out.close();*  *} catch (Exception e) {*  *e.printStackTrace();*  *}*  *}*  *}*  *}*  *9.SeAllFlights.java*  *package com.controller;*  *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.table.Flight;*  *import com.util.HibernateUtil;*  */\*\**  *\* Servlet implementation class SeeAllFlights*  *\*/*  *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.jsp\">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("<table>");*  *out.println("<tr>");*  *out.println("<th>"); out.println("Flight ID"); out.println("</th>");*  *out.println("<th>"); out.println("Airline"); out.println("</th>");*  *out.println("<th>"); out.println("Number Of Seats"); out.println("</th>");*  *out.println("<th>"); out.println("Source"); out.println("</th>");*  *out.println("<th>"); out.println("Desintation"); out.println("</th>");*  *out.println("<th>"); out.println("Departure Date"); out.println("</th>");*  *out.println("<th>"); out.println("Arrival Date"); out.println("</th>");*  *out.println("<th>"); out.println("Price"); out.println("</th>");*  *out.println("</tr>");*  *for(Flight i:flights) {*  *if (i.getNumberOfSeats() > 0) {*  *out.println("<tr>");*  *out.println("<td>"); out.println(i.getId()); out.println("</td>");*  *out.println("<td>"); out.println(i.getAirline().getAirline().toString()); out.println("</td>");*  *out.println("<td>"); out.println(i.getNumberOfSeats()); out.println("</td>");*  *out.println("<td>"); out.println(i.getSource()); out.println("</td>");*  *out.println("<td>"); out.println(i.getDestination()); out.println("</td>");*  *out.println("<td>"); out.println(i.getDateOfDeparture()); out.println("</td>");*  *out.println("<td>"); out.println(i.getDateOfArrival()); out.println("</td>");*  *out.println("<td>"); out.println(i.getPrice()); out.println("</td>");*  *out.println("</tr>");*  *}*  *}*  *out.println("</table>");*  *request.getRequestDispatcher("Registeration.jsp").include(request, response);*  *} else {*  *out.print("<a href=\"index.jsp\">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 {*  *}*  *}*  *10.SourceDestination.java*  *package com.controller;*  *import java.io.IOException;*  *import javax.servlet.ServletException;*  *import java.util.List;*  *import org.hibernate.Session;*  *import org.hibernate.SessionFactory;*  *import java.io.PrintWriter;*  *import com.util.HibernateUtil;*  *import javax.servlet.http.HttpServletResponse;*  *import javax.servlet.http.HttpServletRequest;*  *import javax.servlet.annotation.WebServlet;*  *import javax.servlet.http.HttpServlet;*  *public class SourceDestination extends HttpServlet*  *{*  *private static final long serialVersionUID = 1L;*    *protected void doGet(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {*  *final PrintWriter out = response.getWriter();*  *response.setContentType("text/html");*  *out.print("<a href=\"Dashboard.jsp\">Dashboard</a><br/><hr>");*  *out.print("<h1>Master View</h1>");*  *try {*  *final SessionFactory sFactory = HibernateUtil.buildSessionFactory();*  *final Session session = sFactory.openSession();*  *session.beginTransaction();*  *final String query = "select source, destination from Flight";*  *final List<Object[]> flights = (List<Object[]>)session.createQuery(query).list();*  *if (flights.size() > 0) {*  *out.println("<h1>List of all Source/Destinations: </h1>");*  *out.println("<style> table,th,td { border : 1px solid black ; padding :15px;} </style>");*  *out.println("<table>");*  *out.println("<tr>");*  *out.println("<th>");*  *out.println("Source");*  *out.println("</th>");*  *out.println("<th>");*  *out.println("Destination");*  *out.println("</th>");*  *out.println("</tr>");*  *for (final Object[] i : flights) {*  *out.println("<tr>");*  *out.println("<td>");*  *out.println((String)i[0]);*  *out.println("</td>");*  *out.println("<td>");*  *out.println((String)i[1]);*  *out.println("</td>");*  *out.println("</tr>");*  *}*  *out.println("</table>");*  *}*  *else {*  *out.print("<a href=\"Dashboard.jsp\">Home</a>");*  *out.print("<h1>Sorry there are no flights currently!<h1>");*  *}*  *session.close();*  *out.close();*  *}*  *catch (Exception e) {*  *e.printStackTrace();*  *}*  *}*    *protected void doPost(final HttpServletRequest request, final HttpServletResponse response) throws ServletException, IOException {*  *}*  *}* |