```
2.Registration
Register.jsp
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<%@ page import="java.util.List" %>
<%@ page import="java.util.ArrayList" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<html>
<head>
  <title>User Registration</title>
</head>
<body bgcolor='pink'>
<h2>Register</h2>
<form action="register.jsp" method="post">
  Username: <input type="text" name="username" required/><br/>
  Email: <input type="email" name="email" required/><br/>
  Password: <input type="password" name="password" required/><br/><br/>
  Confirm Password: <input type="password" name="confirmPassword" required/><br/>>
  <input type="submit" value="Register"/>
</form>
<c:if test="${not empty param.error}">
  ${param.error}
</c:if>
<%
  List<String> users = (List<String>) application.getAttribute("users");
  if (users == null) {
    users = new ArrayList<>();
    application.setAttribute("users", users);
  }
```

```
String username = request.getParameter("username");
  String email = request.getParameter("email");
  String password = request.getParameter("password");
  String confirmPassword = request.getParameter("confirmPassword");
  if (username != null && email != null && password != null && confirmPassword != null) {
    if (users.contains(username)) {
      response.sendRedirect("register.jsp?error=Username already exists!");
    } else if (!password.equals(confirmPassword)) {
      response.sendRedirect("register.jsp?error=Passwords do not match!");
    } else {
      users.add(username);
      application.setAttribute("users", users);
      response.sendRedirect("login.jsp");
    }
  }
%>
</body>
</html>
2.login.jsp
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<%@ page import="java.util.List" %>
<%@ page import="java.util.ArrayList" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<html>
<head>
  <title>User Login</title>
</head>
<body bgcolor='pink'>
<h2>Login</h2>
```

```
<form action="login.jsp" method="post">
  Username: <input type="text" name="username" required/><br/><br/>
  Password: <input type="password" name="password" required/><br/><br/>
  <input type="submit" value="Login"/>
</form>
<c:if test="${not empty param.error}">
  ${param.error}
</c:if>
<%
  List<String> users = (List<String>) application.getAttribute("users");
  if (users == null) {
    users = new ArrayList<>();
    users.add("testUser");
    users.add("admin");
    application.setAttribute("users", users);
  }
  String username = request.getParameter("username");
  String password = request.getParameter("password");
  if (username != null && password != null) {
    if (!users.contains(username)) {
      response.sendRedirect("login.jsp?error=Username does not exist!");
    } else {
      session.setAttribute("username", username);
```

```
response.sendRedirect("welcome.jsp");
    }
  }
%>
</body>
</html>
3.logout.jsp
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<%
  session.invalidate();
  response.sendRedirect("login.jsp");
%>
4.signup.jsp
<!DOCTYPE html>
<html lang="en">
 <head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Signup Page</title>
 </head>
 <body>
  <div class="container">
   <div class="left-section">
    <button class="sign-in-btn" onclick="location.href='/login.html"">
     Sign In
    </button>
   </div>
   <div class="right-section">
```

```
<h2>Sign Up</h2>
    <form action="validation.jsp" method="post">
     <div class="form-group">
      <label for="username">Username</label>
      <input type="text" id="username" name="username" required />
     </div>
     <div class="form-group">
      <label for="email">Email</label>
      <input type="email" id="email" name="email" required />
     </div>
     <div class="form-group">
      <label for="password">Password</label>
      <input type="password" id="password" name="password" required />
     </div>
     <button type="submit" class="signup-btn">Sign Up</button>
    </form>
   </div>
  </div>
 </body>
</html>
5.welcom.jsp
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<html>
<head>
  <title>Welcome</title>
</head>
<body bgcolor='pink'>
<%
  String username = (String) session.getAttribute("username");
  if (username == null) {
```

```
response.sendRedirect("login.jsp");
  } else {
  <h2>Welcome, <%= username %> :)</h2>
  <a href="logout.jsp">Logout</a>
  }
%>
</body>
</html>
****BOOKS****
1.admin.jsp
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<html>
<head>
  <title>Admin Panel</title>
</head>
<body>
  <h1>Admin Panel</h1>
  <form action="addBookSuccess.jsp" method="post">
    <label for="title">Title:</label>
    <input type="text" name="title" id="title" required>
    <label for="author">Author:</label>
    <input type="text" name="author" id="author" required>
    <label for="genre">Genre:</label>
    <input type="text" name="genre" id="genre" required>
    <label for="price">Price:</label>
    <input type="number" step="0.01" name="price" id="price" required>
```

```
<label for="inStock">In Stock:</label>
    <input type="checkbox" name="inStock" id="inStock">
    <button type="submit">Add Book</button>
  </form>
  <a href="index.jsp">Go to User Page</a>
</body>
</html>
2.addBookSucess
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<html>
<head>
  <!-- Ensure proper linking of the CSS file -->
  <title>Book Added</title>
</head>
<body>
<%
  String title = request.getParameter("title");
  String author = request.getParameter("author");
  String genre = request.getParameter("genre");
  double price = Double.parseDouble(request.getParameter("price"));
  boolean inStock = request.getParameter("inStock") != null;
%>
  <h1>Book Added Successfully!</h1>
```

```
Title
    Author
    <\td>
   Genre
    <<d></d>
   Price
    $<%= String.format("%.2f", price) %>
   Availability
    <%= inStock ? "In Stock" : "Out of Stock" %>
   <a href="admin.jsp">Back to Admin Panel</a>
</body>
</html>
3.booklist.jsp
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<%@ page import="java.util.*" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<html>
<head>
 <title>Book List</title>
```

```
</head>
<body>
  <h1>Available Books</h1>
  <%
    List<Map<String, Object>> books = new ArrayList<>();
    Map<String, Object> book1 = new HashMap<>();
    book1.put("title", "Book A");
    book1.put("author", "Author 1");
    book1.put("genre", "Fiction");
    book1.put("price", 10.99);
    book1.put("inStock", true);
    books.add(book1);
    Map<String, Object> book2 = new HashMap<>();
    book2.put("title", "Book B");
    book2.put("author", "Author 2");
    book2.put("genre", "Non-Fiction");
    book2.put("price", 12.99);
    book2.put("inStock", true);
    books.add(book2);
    Map<String, Object> book3 = new HashMap<>();
    book3.put("title", "Book C");
    book3.put("author", "Author 3");
    book3.put("genre", "Science");
    book3.put("price", 15.99);
    book3.put("inStock", false);
    books.add(book3);
    Map<String, Object> book4 = new HashMap<>();
```

```
book4.put("title", "Book D");
    book4.put("author", "Author 4");
    book4.put("genre", "Fiction");
    book4.put("price", 8.99);
    book4.put("inStock", true);
    books.add(book4);
    String[] genres = request.getParameterValues("genre");
    if (genres != null) {
      List<String> genreList = Arrays.asList(genres);
      for (Iterator<Map<String, Object>> iterator = books.iterator(); iterator.hasNext(); ) {
         Map<String, Object> book = iterator.next();
         if (!genreList.contains(book.get("genre"))) {
           iterator.remove();
        }
      }
    }
    int currentPage = request.getParameter("page") != null ?
Integer.parseInt(request.getParameter("page")): 1;
    int pageSize = 10;
    int totalBooks = books.size();
    int totalPages = (int) Math.ceil(totalBooks / (double) pageSize);
    int start = (currentPage - 1) * pageSize;
    int end = Math.min(start + pageSize, totalBooks);
    List<Map<String, Object>> paginatedBooks = books.subList(start, end);
    request.setAttribute("paginatedBooks", paginatedBooks);
    request.setAttribute("totalPages", totalPages);
```

```
%>
  <c:forEach var="book" items="${paginatedBooks}">
    <div class="book">
      Title: <strong>${book.title}</strong>
      Author: ${book.author}
      Genre: ${book.genre}
      Price: $${book.price}
      Availability: <c:choose>
        <c:when test="${book.inStock}">In Stock</c:when>
        <c:otherwise>Out of Stock</c:otherwise>
      </c:choose>
    </div>
  </c:forEach>
  <div class="pagination">
    <c:forEach begin="1" end="${totalPages}" var="i">
      <a href="?page=${i}&genre=${param.genre}">${i}</a>
    </c:forEach>
  </div>
</body>
</html>
4.index.jsp
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<html>
<head>
  <title>Online Bookstore</title>
</head>
```