

Lesson 01 Demo 05

Exception Handling in JSP

Objective: To explore exception handling in JSP

Tools required: Eclipse IDE

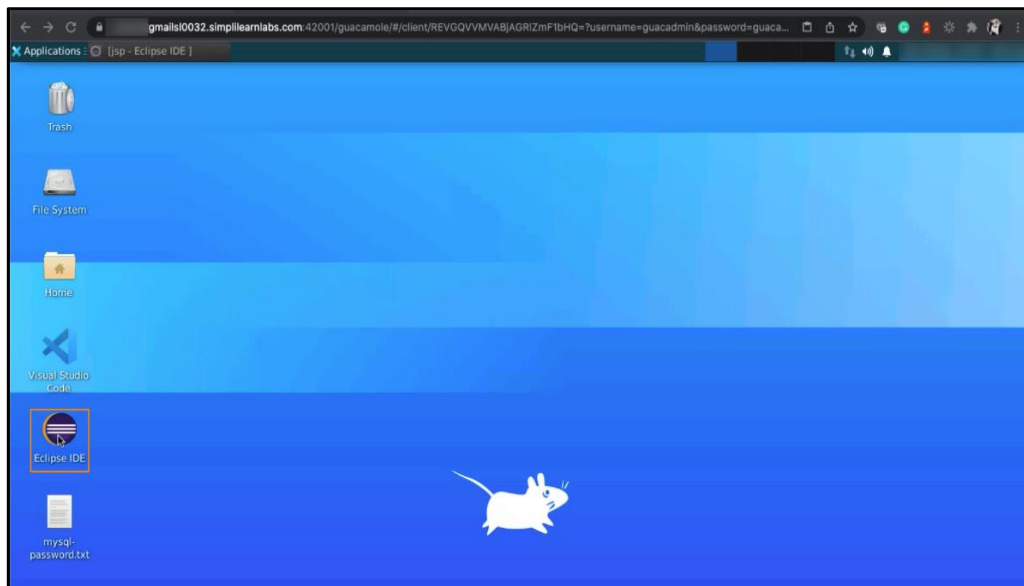
Prerequisites: None

Steps to be followed:

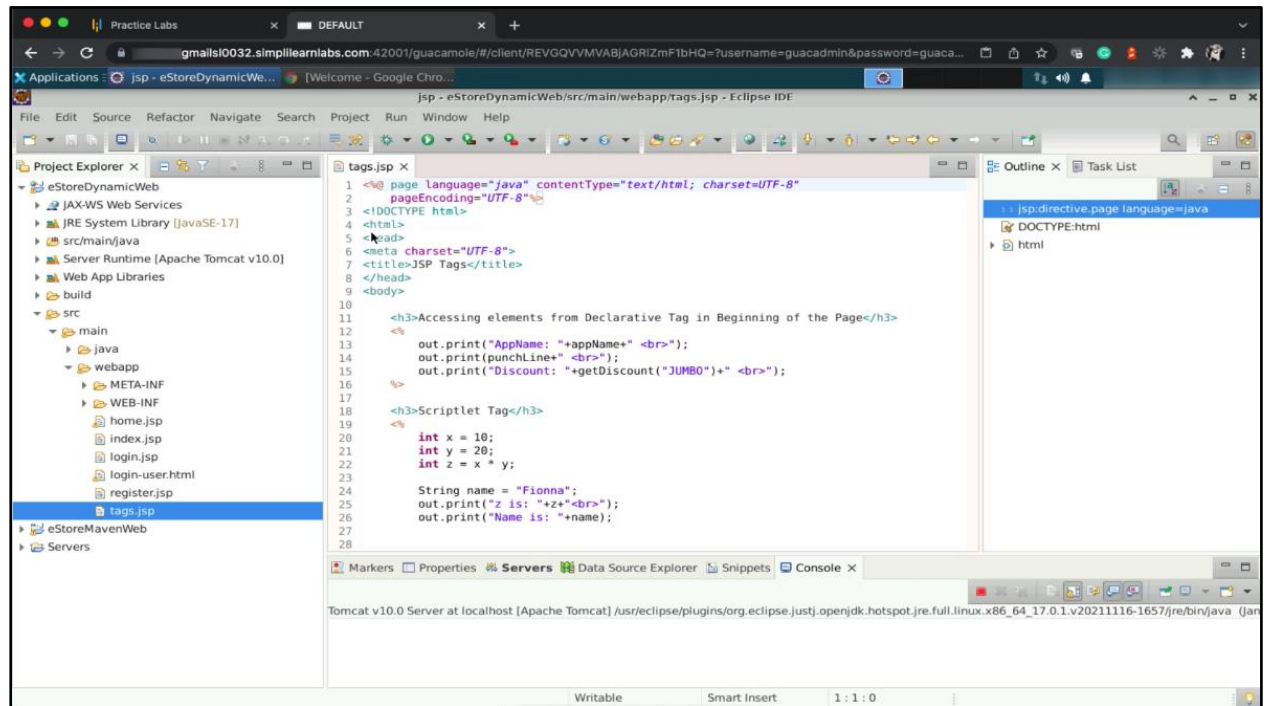
1. Open the tags.jsp file
2. Create a new JSP File
3. Create another JSP file

Step 1: Open the tags.jsp file

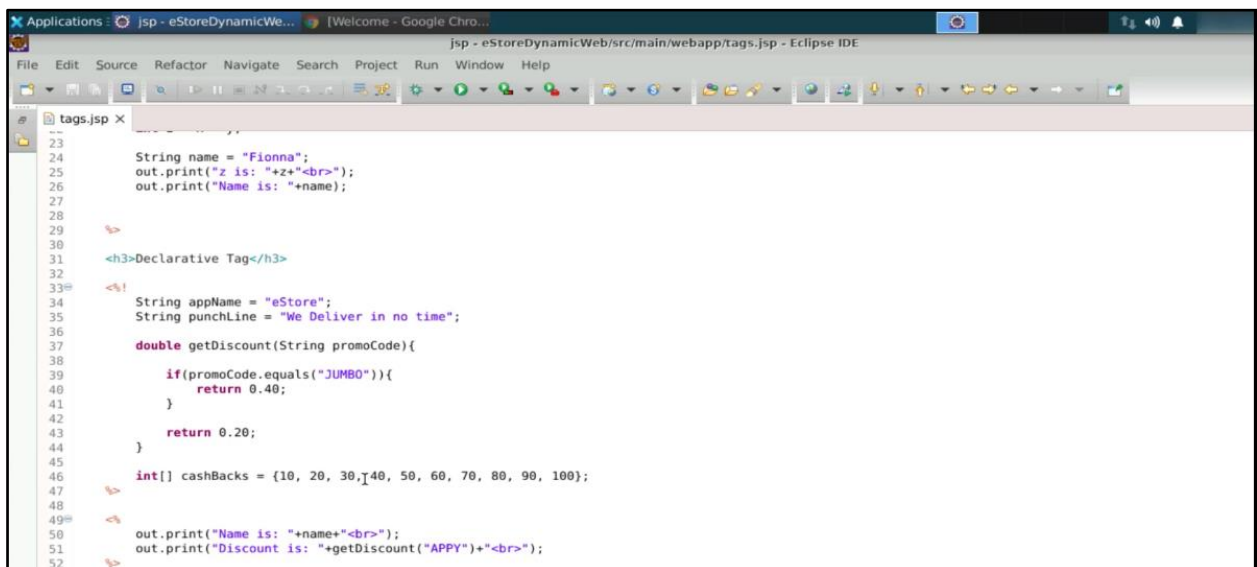
1.1 Open Eclipse IDE in your lab



1.2 Next, open the **eStoreDynamicWeb** project, navigate to the **webapp** folder, and open **tags.jsp**

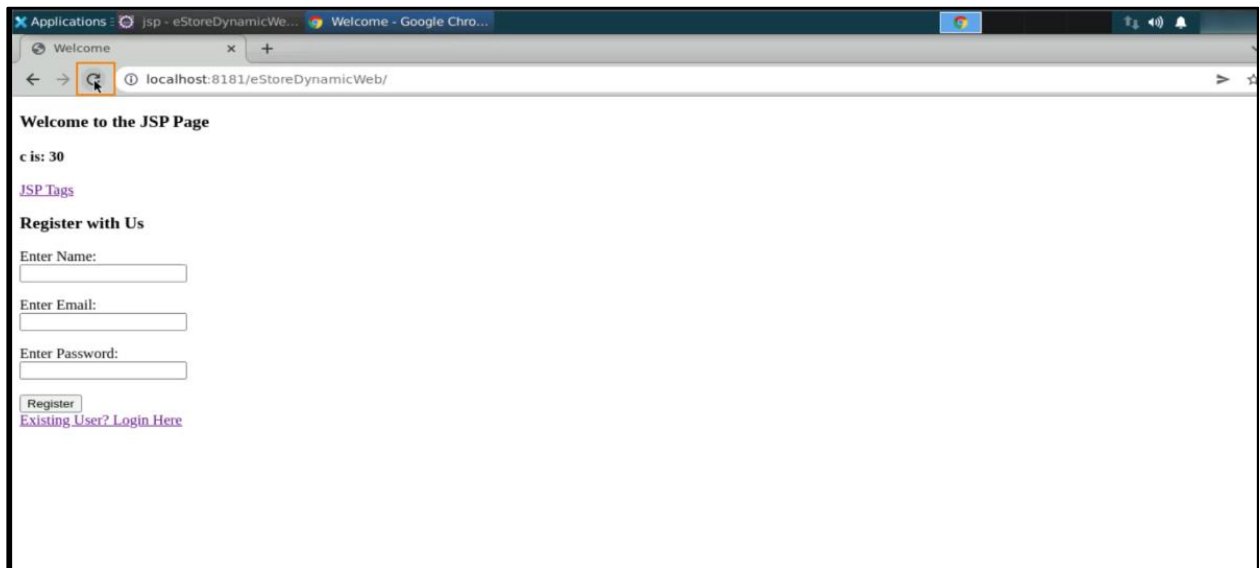


1.3 Now, create an array **cashBacks** with the following set of elements:
int[] cashBacks = {10, 20, 30, 40, 50, 60, 70, 80, 100}

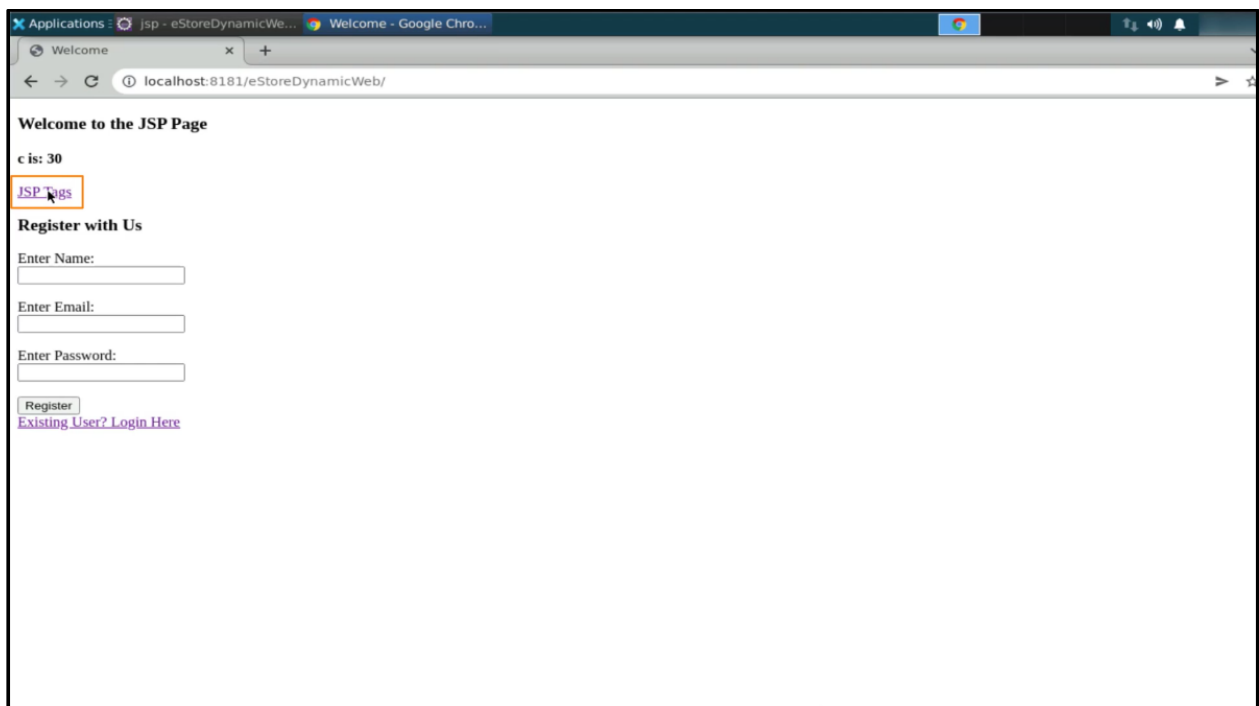


Print the third index value of the array using **<h3>**

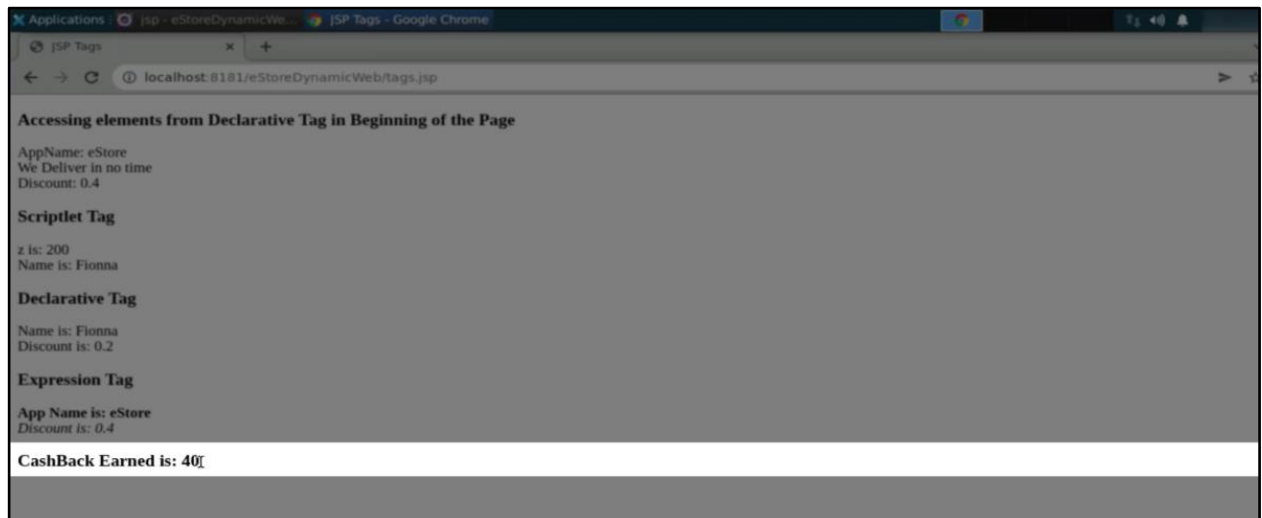
1.4 Go to the browser and refresh the page



1.5 Click on the JSP Tags link to view the output

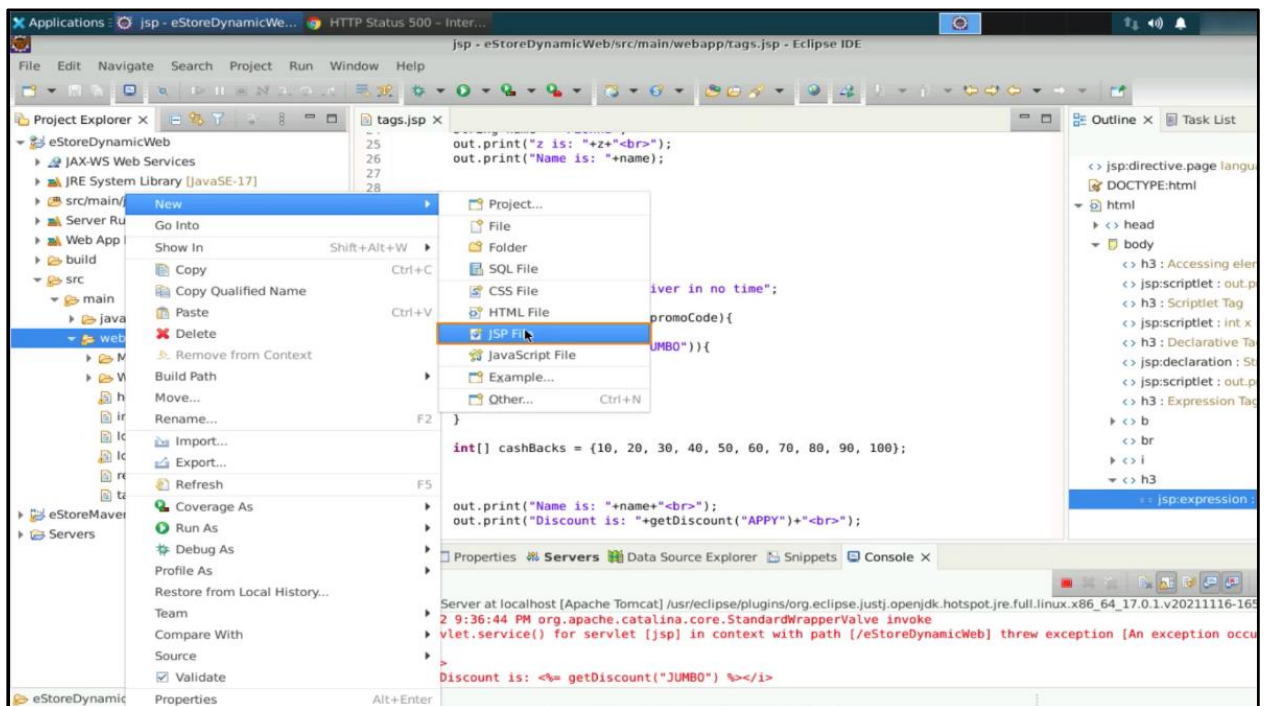


The following output can be seen:

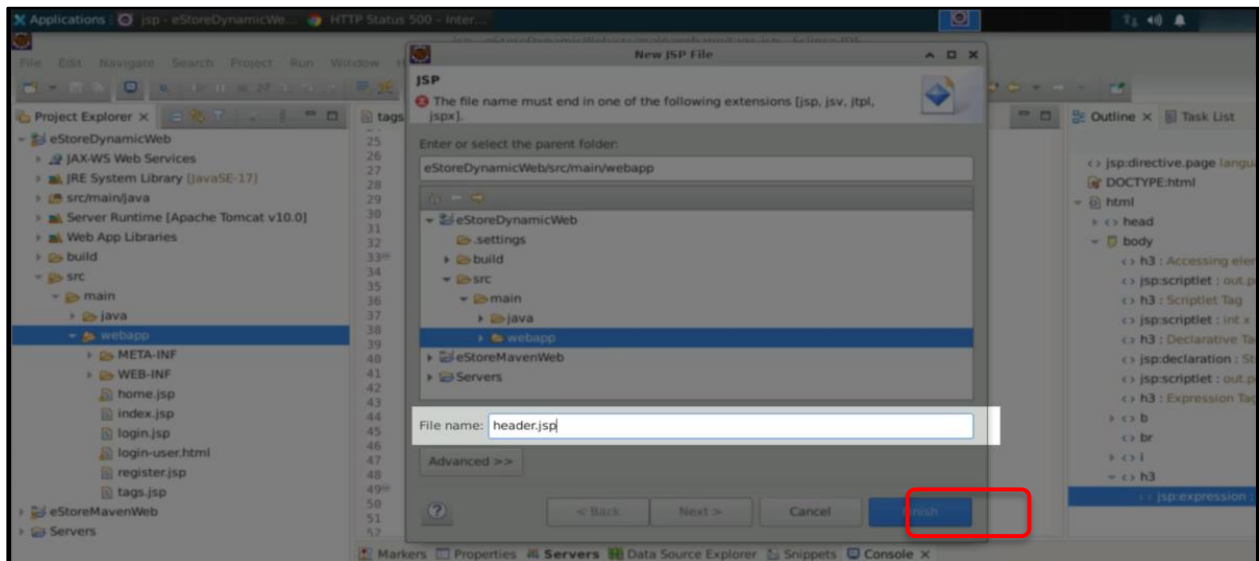


Step 2: Create a new JSP file

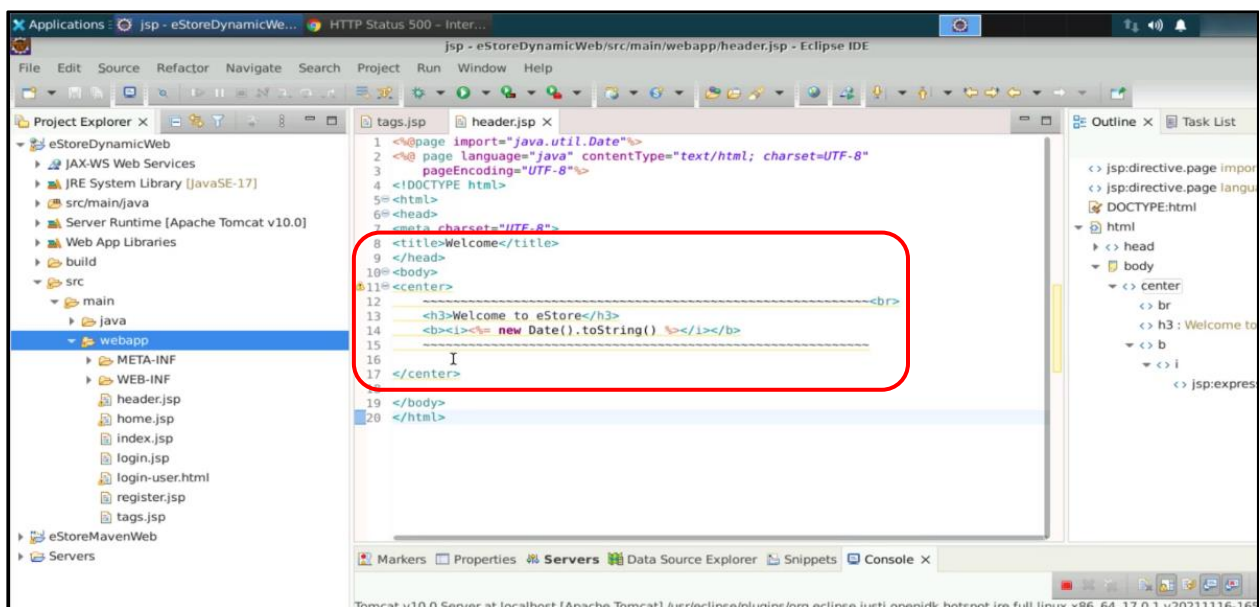
2.1 Right-click on the **webapp** folder, click **New** and select **JSP File**



2.2 Name the file as **header.jsp** and click on **Finish**

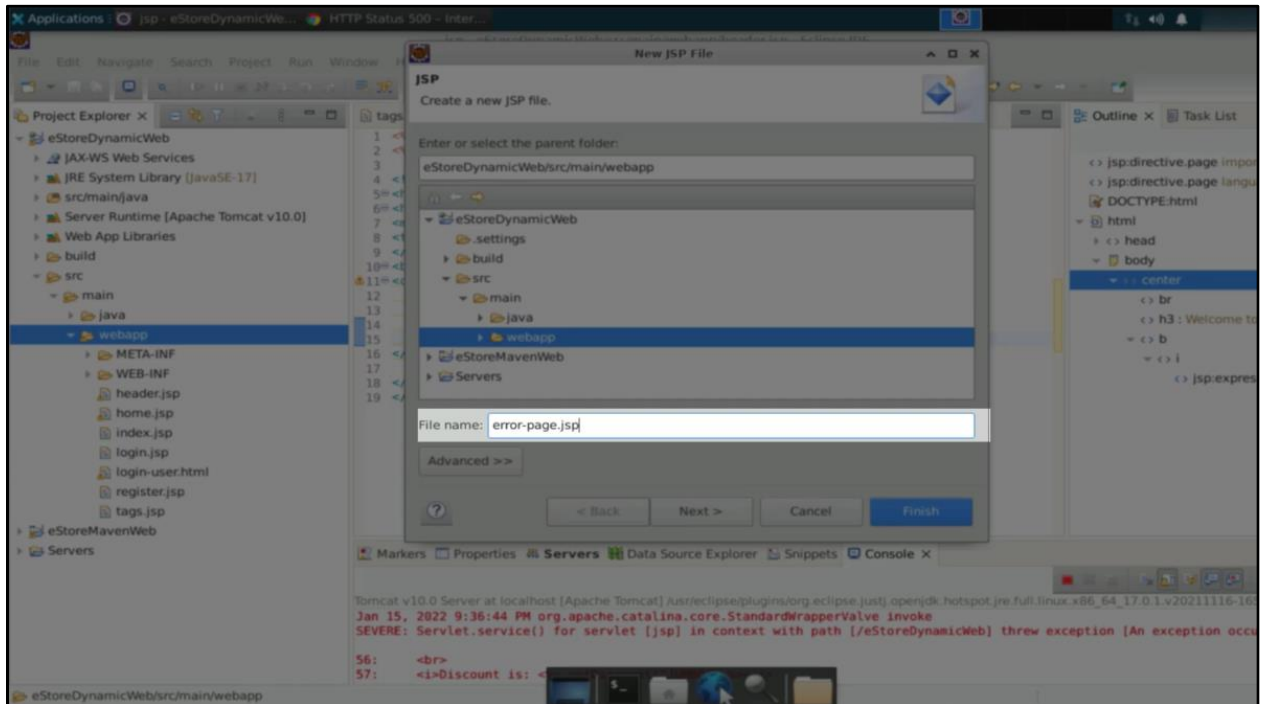


2.3 This file will be a page. Now to view the page, write the following code from lines 8-17:

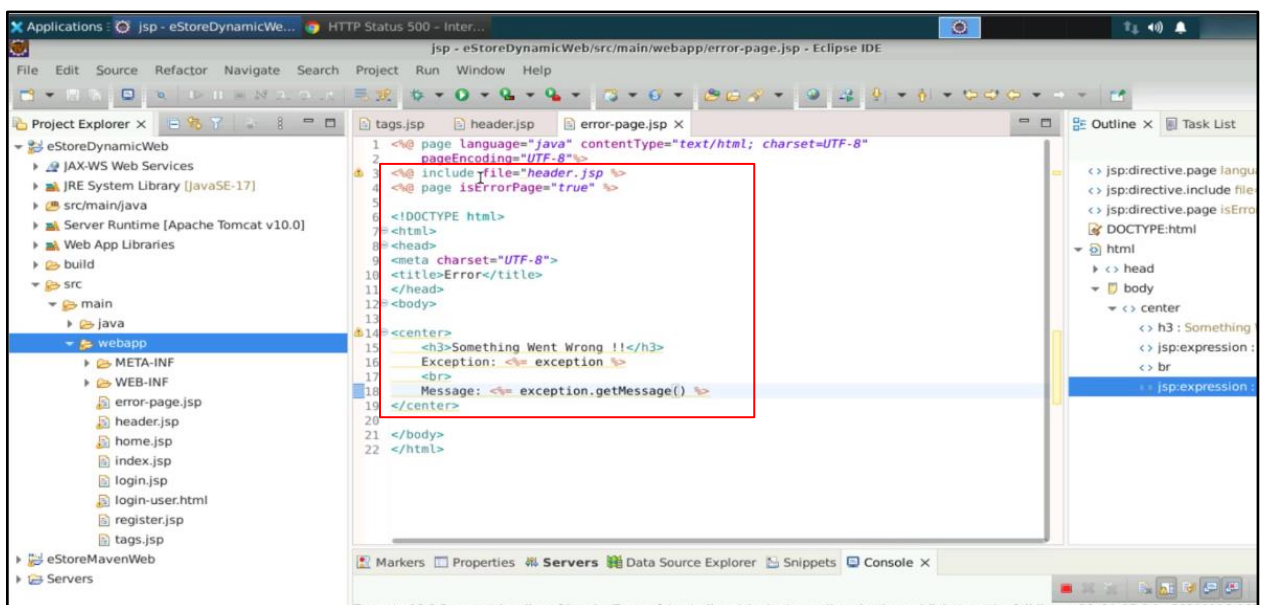


Step 3: Create another JSP file

3.1 Now, create another JSP file and name it **error-page.jsp**



3.2 Now, the error-page.jsp shows the error by adding a **header.jsp**. Write the following lines of code (from lines 3 to 18):



3.3 Go to the **tags.jsp** file and write the following code (line 3):

```

1 <%@ page language="java" contentType="text/html; charset=UTF-8"
2   pageEncoding="UTF-8"%>
3 <%@ include file="header.jsp"%>
4 <!DOCTYPE html>
5 <html>
6 <head>
7   <meta charset="UTF-8">
8   <title>JSP Tags</title>
9 </head>
10 <body>
11
12   <h3>Accessing elements from Declarative Tag in Beginning of the Page</h3>
13
14   out.print("AppName: "+appName+" <br>");
15   out.print("punchLine: "+punchLine+" <br>");
16   out.print("Discount: "+getDiscount("JUMBO")+" <br>");
17
18   <h3>Scriptlet Tag</h3>
19
20   <%
21     int x = 10;
22     int y = 20;
23     int z = x * y;
24
25     String name = "Fionna";
26     out.print("z is: "+z+"<br>");
27     out.print("Name is: "+name);
28   %>

```

Tomcat v10.0 Server at localhost [Apache Tomcat] /usr/eclipse/plugins/org.eclipse.justopenjdk.hotspot.jre.full.linux.x86_64.17.0.1.v20211116-165
Jan 15, 2022 9:36:44 PM org.apache.catalina.core.StandardWrapperValve invoke
SEVERE: Servlet.service() for servlet [jsp] in context with path [/eStoreDynamicWeb] threw exception [An exception occurred while processing the request]

3.4 Go to the **index.jsp** file and write the following code (line 3):

```

1 <%@ page language="java" contentType="text/html; charset=UTF-8"
2   pageEncoding="UTF-8"%>
3 <%@ include file="header.jsp"%>
4 <!DOCTYPE html>
5 <html>
6 <head>
7   <meta charset="UTF-8">
8   <title>Welcome</title>
9 </head>
10 <body>
11   <h3>Welcome to the JSP Page</h3>
12
13   <%
14     int a = 10;
15     int b = 20;
16     int c = a + b;
17     out.print("<h4>c is: "+c+"</h4>");
18   %>
19
20   <a href="tags.jsp">JSP Tags</a>
21
22   <h3>Register with Us</h3>
23
24   <div style="align-items: center;">
25     <form action="register.jsp" method="post">
26       Enter Name: <br>
27     </form>
28   </div>

```

Tomcat v10.0 Server at localhost [Apache Tomcat] /usr/eclipse/plugins/org.eclipse.justopenjdk.hotspot.jre.full.linux.x86_64.17.0.1.v20211116-165
Jan 15, 2022 9:36:44 PM org.apache.catalina.core.StandardWrapperValve invoke

3.5 Go to the **tags.jsp** file and write the following code (line 4):

```

1 <%@ page language="java" contentType="text/html; charset=UTF-8"
2   pageEncoding="UTF-8"%>
3 <%@ include file="header.jsp" %>
4 <%@ page errorPage="error-page.jsp" %>
5 <!DOCTYPE html>
6 <html>
7 <head>
8   <meta charset="UTF-8">
9   <title>JSP Tags</title>
10 </head>
11 <body>
12
13   <h3>Accessing elements from Declarative Tag in Beginning of the Page</h3>
14   <%
15     out.print("AppName: "+appName+" <br>");
16     out.print(punchLine+" <br>");
17     out.print("Discount: "+getDiscount("JUMBO")+ " <br>");
18   %>
19
20   <h3>Scriptlet Tag</h3>
21   <%
22     int x = 10;
23     int y = 20;
24     int z = x * y;
25
26     String name = "Fionna";
27     out.print("z is: "+z+"<br>");
28     out.print("Name is: "+name);
29   %>
30
31
32   <h3>Declarative Tag</h3>
33
34
35 </body>
36 </html>

```

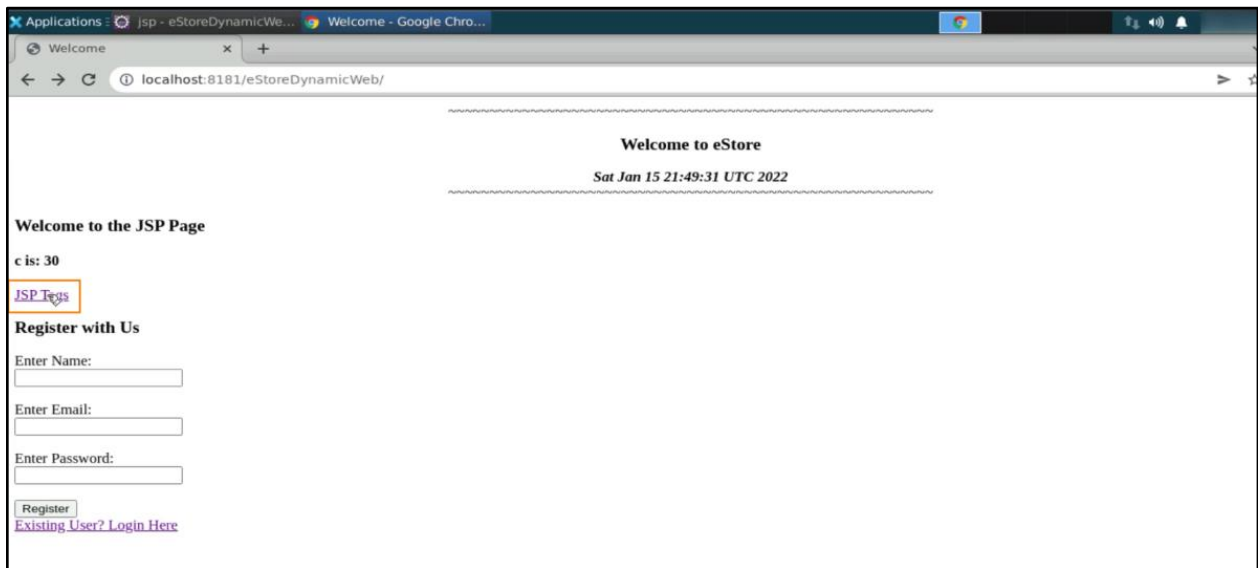
3.6 Delete **<include.....>** from the error page

```

1 <%@ page language="java" contentType="text/html; charset=UTF-8"
2   pageEncoding="UTF-8"%>
3 <%@ page isErrorPage="true" %>
4
5 <!DOCTYPE html>
6 <html>
7 <head>
8   <meta charset="UTF-8">
9   <title>Error</title>
10 </head>
11 <body>
12
13 <center>
14   <h3>Something Went Wrong !!</h3>
15   Exception: <% exception %>
16   <br>
17   Message: <% exception.getMessage() %>
18 </center>
19
20 </body>
21 </html>

```


3.7 Click on the **JSP Tags** link



The following output can be seen:



By following these steps, you have successfully explored exception handling in JSP.