SAVEETHA SCHOOL OF ENGINEERING
SIMATS, CHENNAI

Course Code /Title: CSA4399 – Internet Programming
Programme : Computer Science and Engineering

ASSIGNMENT 3 QUESTIONS

SET -5

S.No	Questions	Marks	CO
1	Implementing a feature in a web application that tracks the number of accesses by a client within a single session. You need to use Java Servlets to manage and monitor session data. The application should count how many times the client accesses the application during their session and retrieve information about the session, such as the session ID, creation time, and last accessed time.	20	CO4
2	Write a scenario where you had to use JSTL to solve a complex problem and how you went about it. Also, elaborate the function library in JSTL and how to create custom functions.	20	CO4
3	A page of stock market quotes uses script to refresh the page every five minutes in order to ensure the latest statistics remain available. 20 seconds before the five minute period expires, a confirm dialog appears asking if the user needs more time before the page refreshes. This allows the user to be aware of the impending refresh and to avoid it if desired.	20	CO5
4	You are developing an e-commerce application that needs to integrate with an external payment gateway service. This service is described using a WSDL file. How would you use the WSDL file to integrate the payment gateway service into your e-commerce application? Describe the steps involved in generating the client code, invoking the service, and handling any potential errors	20	CO6

Assignment -3

1) Implementing a feature in a web application that tracks number of accesses by a client within a session using java.

Servlet code:-

```
import java.io.IOException;
import java.io.PrintWriter;
import java.util.Date;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpSession;
@WebServlet("/SessionTracker")
    HttpServlet Response response throws ServletException IOException
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    String sessionId = session.getId();
    long lastAccessTime = session.getLastAccessedTime();
Integer visitCount = (Integer) session.getAttribute("visitCount");
    if (visitCount == null) {
        visitCount = 0;
    }
    visitCount++;
out.println("<html><body>");
out.println("<h1>Session Tracking Example</h1>
```

```
out.println("<p> session ID: " + sessionId + "</p>");
out.println("<p> No. of accesses in this session: "
                    visit count "</p>");
out.println("</body></html>");
}
}
```

Output:-

Session ID: 12345ABCDE

Session Created: Mon Sep 09 12:00:00 IST 2024
Last Accessed: Mon Sep 09 12:01:05 IST 2024

No. of access in this session: 1

2) Write a scenario where you had to use JSTL to solve a complex problem and how you went about it.

JSP code using JSTL

```
<%@ taglib uri = "http://java.sun.com/jsp/jstl/core"
                    prefix = "c" %>
<%@ taglib uri = "http://java.sun.com/jsp/jstl/
                    functions" prefix = "fn" %>
<html>
<head>
    <title> order Managment </title>
</head>
<body>
```

```
<h2> order List</h2>
<form method = "GET" action = "order.jsp">
    <select name = "status" id = "status">
        <option value = "All" > All </option>
        <option value = "Delivered" > Delivered
                                    </option>
    </select>
    <input type = "submit" value = Filter>
</form>
<table border = "1">
    <thead>
        <tr>
            <th> order ID</th>
            <th> Date </th>
            <th> status</th>
            <th> Amount </th>
    </tr>
</thead>
<tbody>
    <c: for each var = order items = ${order}
        <c: choose>
            <tr>
                <td> ${order. id} </td>
                <td> ${order. date} </td>
                <td> ${order. amount} </td>
```

```
        </tr>
        </c:when>
      </c:choose>
    </c:forChoose>
    <c:forEach>
  </tbody>
 </table>
</body>
</html>
```

O/P :-

orderID	Date	Status	Amount
1002	2024-09-08	pending	150.00
1003	2024-09-09	pending	300.00

3) To implement the described functionality for refreshing a stock market quotes page every five minutes.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title> Stock market Quotes </title>
    <script>
        function refresPage() {
            location.reload();
        }
```

```
setTimeout(() => {
    if(!confirmRefresh){
        refreshPage();
    } else{
        alert("Page refresh canceled");
    }
}
280000);
</script>
<body>
    <h1> Stock Market Quotes </h1>
</body>
</html>
```

O/P:-

Stock Market Quotes

- APPLE INC. (AAPL) : $150.00
- Microsoft Corp. (MSFT) : $250.00
- Alphabet Inc (GOOGL) : $2800.00

Confirmation Dialog

The Page will refresh in 20 seconds

OK | cancel

Alert

Page refresh canceled
OK

Page Refresh

Stock market Quotes
- Apple Inc. (APPL) : $152.00
- Microsoft Corp. (MSFT) : $250.00
- Alphabet Inc. (GOOGL) : $2850.00

4) To integrate an external payment gate way service into your e-commerce application using a WSDL file.

i) Generate client code from WSDL

wsimport -keep -s src -d bin -p com.example.payment -verbose http://example.com/paymentgateway

ii) Integrate generated code into Application.

- Include Generated code
- Configure service endpoint

iii) Invoke Payment service

PaymentService service = new PaymentService();

PaymentResponse = Port.ProcessPayment(Payment

4) Handle Response and errors

```
Check Response
if (response.isSuccess()){
    // Handle successful payment
}else{
    // Handle payment failure
}
try{
    PaymentResponse
        (paymentRequest);
}catch (SOAPFaultException e){
}catch (WebService){
}
```

O/P:-

Payment successful Transaction ID: 19875324

Payment fail (eg:- Invalid credit card details.

Payment failed due to a SOAP fault: Invalid Request format