

AIM: Develop Simple Servlet Question Answer Application to demonstrate use of HttpServletRequest and HttpServletResponse interfaces.

Description:

In the below example create a web page to demonstrate online exam. The program in which user select the answer for the question and the result for that test display on the another web page using Servlets

Servlet is a Java class which extends the capabilities of server that provides the application accessed by means of request response model. It uses two interfaces i.e. HttpServletRequest & HttpServletResponse

HTTPRequest: This is an interface which provides methods for extracting HTTP parameters from the query or request body depending on the type of request i.e. get or post

HTTPResponse: This interface provides an OutputStream for retrieving information such as images or PrintWriter for retrieving text output.

Program

Index.jsp(GUI)

```
%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>JSP Page</title>
  </head>
  <body>
    <form action="Question" method="GET">
      <h4><u><center>Check Your Knowledge .....</center></u></h4>
      <h4>What JSP stand for </h4>
      <input type="radio" name="q1" value="Java Server Pages"><b>Java Server
Pages</b><br>
      <input type="radio" name="q1" value="Java Server Programming"><b>Java Server
Programming</b><br>
      <input type="radio" name="q1" value="Java Service Pages"><b>Java Service
Pages</b><br>
      <input type="radio" name="q1" value="Java Service Programming"><b>Java Service
Programming</b><br>
      <h4>Which of the following languages can be used to write server side scripting in
ASP.NET?</h4>
      <input type="radio" name="q2" value="C#"><b>C#</b><br>
      <input type="radio" name="q2" value="VB"><b>VB</b><br>
      <input type="radio" name="q2" value="C++"><b>C++</b><br>
      <input type="radio" name="q2" value="Both a and b"><b>Both a and b</b><br>
```

```

<h4>What command is used to remove files in Linux?</h4>
<input type="radio" name="q3" value="dm"><b>dm</b><br>
<input type="radio" name="q3" value="rm"><b>rm</b><br>
<input type="radio" name="q3" value="delete"><b>delete</b><br>
<input type="radio" name="q3" value="None of the above"><b>None of the
above</b><br>
<input type="Submit" name="btnsubmit">
</form></body></html>

```

Question.java(Servlet File)

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class Question extends HttpServlet
{
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        int correct=0;
        int incorrect=0;
        String a=request.getParameter("q1");
        String b=request.getParameter("q2");
        String c=request.getParameter("q3");
        if(a.equals("Java Server Pages"))
        {
            correct++;
        }
        else
        {
            incorrect++;
        }

        if(b.equals("Both a and b"))
        {
            correct++;
        }
        else
        {
            incorrect++;
        }
    }
}

```

```

if(c.equals("rm"))
{
    correct++;
}
else
{
    incorrect++;
}
PrintWriter out = response.getWriter();
try
{
    /* TODO output your page here. You may use following sample code. */
    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>Servlet Question</title>");
    out.println("</head>");
    out.println("<body>");
    out.println("<h2>Result Of the Test</h1><br>");
    out.println("<h3>Correct Answer :::"+correct+"</h3>");
    out.println("<h3>Incorrect Answer :::"+incorrect+"</h3>");
    out.println("</body>");
    out.println("</html>");
}
catch(NumberFormatException e)
{
    e.printStackTrace();
}
}
}

```

Output:



