

Aim:

To write program to generate dynamic web pages using java servlets.

Program:

1) To display the weather details of a city when entered

```
<!DOCTYPE html>

<!--

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To change this template file, choose Tools | Templates

and open the template in the editor.

-->

<html>

    <head>

        <title>TODO supply a title</title>

        <meta charset="UTF-8">

        <meta name="viewport" content="width=device-width, initial-scale=1.0">

    </head>

    <body>

        <form action="http://localhost:8080/expno7/servletApp">

            <label for="city">city name:</label>

            <input type="text" name="city">

            <input type="submit">

        </form>

    </body>

</html>
```

servletApp.java

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author test01
 */
@WebServlet(urlPatterns = {"/serveletApp"})

public class serveletApp extends HttpServlet {

    /**
     * Processes requests for both HTTP GET and POST
     * methods.
     *
     * @param request servlet request

```

```

    * @param response servlet response

    * @throws ServletException if a servlet-specific error occurs

    * @throws IOException if an I/O error occurs

    */

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

        String a=request.getParameter("city");

        String cname=a.toLowerCase();

        String tempc="",humidity="",forecast="";

        switch(cname)

        {

            case "madurai":

                tempc="32 celsius";

                humidity="78%";

                forecast="sunny";

                break;

            case "trichy":

                tempc="25 celsius";

                humidity="87%";

                forecast="cloudy";

                break;

            case "coimbatore":

                tempc="22 celsius";

                humidity="56%";

                forecast="rainy";

                break;

            default:

                tempc=null;

```

```

        break;
    }

    PrintWriter out = response.getWriter();

    response.setContentType("text/html;charset=UTF-8");

    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 servletApp</title>");

        out.println("</head>");

        out.println("<body>");

        out.println("<h1>you are at " + a+ "</h1>");

        out.println("city name is:"+a);

        if(tempc!=null)
        {
            out.println("<h1>temparature:"+tempc+"</h1>");

            out.println("<h1>humidity:"+humidity+"</h1>");

            out.println("<h1>forecast:"+forecast+"</h1>");

        }

        else

        {

            out.println("<p>the information about the city doesn't exist</p>");

        }

        out.println("</body>");

        out.println("</html>");

    }

```

```

        finally{

            out.println("");

        }

    }

    // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to
    edit the code.">

    /**
     * Handles the HTTP <code>GET</code> method.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

        processRequest(request, response);

    }

    /**
     * Handles the HTTP <code>POST</code> method.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs

```

```

        */

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

    processRequest(request, response);

}

/**

 * Returns a short description of the servlet.

 *

 * @return a String containing servlet description

 */

@Override

public String getServletInfo() {

    return "Short description";

} // </editor-fold>

}

```

2) To display an image and a text when link is clicked

Innerservlet.java

```

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

```

```

/**
 *
 * @author test01
 */

@WebServlet(urlPatterns = {"/NewServlet"})

public class outerServlet extends HttpServlet {

    /**
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

        response.setContentType("text/html;charset=UTF-8");

        try (PrintWriter out = response.getWriter()) {

            /* 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 NewServlet</title>");

            out.println("</head>");

            out.println("<body>");

```

```

        out.println("<h1>Servlet NewServlet at " + request.getContextPath() + "</h1>");

        out.println("<a href=' http://localhost:8080/expno7/innerServlet'>click me</a>");

        out.println("</body>");

        out.println("</html>");

    }

}

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to
edit the code.">

/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)

    throws ServletException, IOException {

    processRequest(request, response);

}

/**
 * Handles the HTTP <code>POST</code> method.
 *
 * @param request servlet request
 * @param response servlet response

```



```

        * @throws ServletException if a servlet-specific error occurs
        * @throws IOException if an I/O error occurs
        */

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

    processRequest(request, response);

}

/**
 * Returns a short description of the servlet.
 *
 * @return a String containing servlet description
 */

@Override

public String getServletInfo() {

    return "Short description";

} // </editor-fold>

}

```

Outerservlet.java

```

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.RequestDispatcher;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

```

```

import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author test01
 */

@WebServlet(urlPatterns = {"/innerServlet"})

public class innerServlet extends HttpServlet {

    /**
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        response.setContentType("text/html;charset=UTF-8");

        try (PrintWriter out = response.getWriter()) {

            /* TODO output your page here. You may use following sample code. */

            RequestDispatcher req=request.getRequestDispatcher("eren.html");

            req.include(request, response);

        }

    }
}

```

```
// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">
```

```
/**
```

```
 * Handles the HTTP <code>GET</code> method.
```

```
 *
```

```
 * @param request servlet request
```

```
 * @param response servlet response
```

```
 * @throws ServletException if a servlet-specific error occurs
```

```
 * @throws IOException if an I/O error occurs
```

```
 */
```

```
@Override
```

```
protected void doGet(HttpServletRequest request, HttpServletResponse response)
```

```
    throws ServletException, IOException {
```

```
        processRequest(request, response);
```

```
}
```

```
/**
```

```
 * Handles the HTTP <code>POST</code> method.
```

```
 *
```

```
 * @param request servlet request
```

```
 * @param response servlet response
```

```
 * @throws ServletException if a servlet-specific error occurs
```

```
 * @throws IOException if an I/O error occurs
```

```
 */
```

```
@Override
```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response)
```

```
    throws ServletException, IOException {
```

```
        processRequest(request, response);
```

```

    }

    /**
     * Returns a short description of the servlet.
     *
     * @return a String containing servlet description
     */
    @Override
    public String getServletInfo() {
        return "Short description";
    } // </editor-fold>

}

```

Vk.html

```

<!DOCTYPE html>

<!--

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and open the template in the editor.

-->

<html>

    <head>

        <title>TODO supply a title</title>

        <meta charset="UTF-8">

        <meta name="viewport" content="width=device-width, initial-scale=1.0">

    </head>

    <body>

```

<h1>the border gavaskar trophy</h1>

<p>The Border–Gavaskar Trophy is a Test cricket series played between India and Australia. It is played via the International Cricket Council's future tours.

As of February 2023, India retained the trophy after defeating Australia in the first two Tests of the 2023 series. If a series is drawn, the country holding the trophy retains it. The series is named after distinguished former captains, Australia's Allan Border and India's Sunil Gavaskar.

In competition for the trophy since 1996, Indian Sachin Tendulkar has been the most successful batsman, scoring 3262 runs from 65 innings.</p>

</body>

</html>

Output:

[Click me to see the image](#)

the border gavaskar trophy



Enter city name:

WEATHER REPORT OF MADURAI

Temperature in celsius:28°C
Temperature in Fahrenheit:83°F
Precipitation: 1%
Humidity: 61%
Wind: 10 mph

Observation(20)	
------------------------	--

Record(5)	
Total(25)	
Initial	

Result:

Thus,the program to implement logic using jquery is written,executed and the output is verified.