Date : 05-03-2024

Experiment - 5.1

Aim:

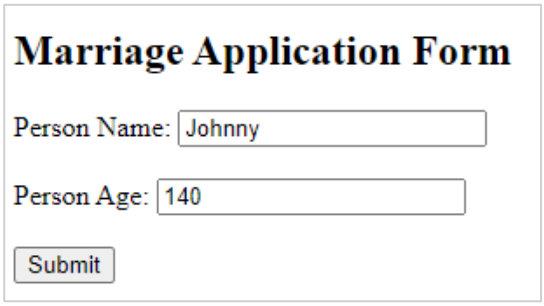
Implement form validation in marriage application input.html form page using JavaScript:
1. Person name is required.
2. Person’s name must have a minimum of 5 characters.
3. Personage is required.
4. Person age must be a numeric value. 5. Personage must be there between 1 to 125

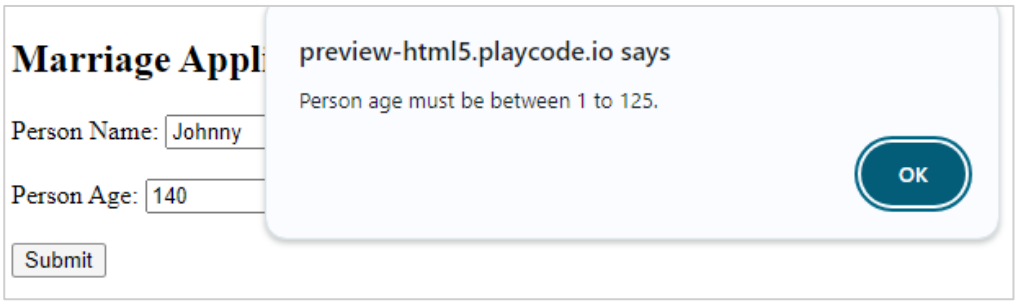
Code:

```
<!DOCTYPE html>
<html>
<head>
   <title>Marriage Application Form</title>
   <script>
      function validateForm() {
         var name = document.forms["marriageForm"]["personName"].value;
         var age = document.forms["marriageForm"]["personAge"].value;
         if (name == "") {
            alert("Person name is required.");
            return false;
         }
         if (name.length < 5) {
            alert("Person’s name must have a minimum of 5 characters.");
            return false;
         }
         if (age == "") {
            alert("Person age is required.");
            return false;
         }
         if (isNaN(age)) {
            alert("Person age must be a numeric value.");
            return false;
         }
         if (age < 1 || age > 125) {
            alert("Person age must be between 1 to 125.");
            return false;
         }
         return true;
      }
   </script>
</head>
<body>
   <h2>Marriage Application Form</h2>
   <form name="marriageForm" onsubmit="return validateForm()">
```

```
        <label for="personName">Person Name:</label>
        <input type="text" id="personName" name="personName"><br><br>
        <label for="personAge">Person Age:</label>
        <input type="text" id="personAge" name="personAge"><br><br>
        <input type="submit" value="Submit">
    </form>
</body>
</html>
```

Output:





Date : 05-03-2024

Experiment - 5.2

Aim:

Design Servlet Login and Logout using Cookies.

Code:

File: index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Servlet Login Example</title>
</head>
<body>
<h1>Welcome to Login App by Cookie</h1>
<a href="login.html">Login</a>|
<a href="LogoutServlet">Logout</a>|
<a href="ProfileServlet">Profile</a>
</body>
</html>
```

File: link.html

```
<a href="login.html">Login</a> |
<a href="LogoutServlet">Logout</a> |
<a href="ProfileServlet">Profile</a>
<hr>
```

File: login.html

```
<form action="LoginServlet" method="post">
Name:<input type="text" name="name"><br>
Password:<input type="password" name="password"><br>
<input type="submit" value="login">
</form>
```

File: LoginServlet.java

```
package com.javatpoint;
import java.io.*;
import javax.servlet.*;
public class LoginServlet extends HttpServlet {
   protected void doPost(HttpServletRequest request, HttpServletResponse response)
                    throws ServletException, IOException {
      response.setContentType("text/html");
      PrintWriter out=response.getWriter();
      request.getRequestDispatcher("link.html").include(request, response);
      String name=request.getParameter("name");
      String password=request.getParameter("password");
      if(password.equals("admin123")){
         out.print("You are successfully logged in!");
         out.print("<br>Welcome, "+name);
         Cookie ck=new Cookie("name",name);
```

```
        response.addCookie(ck);
      }else{
        out.print("sorry, username or password error!");
        request.getRequestDispatcher("login.html").include(request, response);
      }
      out.close();
   }
}
```

File: LogoutServlet.java

```
package com.javatpoint;
import java.io.*;
import javax.servlet.*;
public class LogoutServlet extends HttpServlet {
   protected void doGet(HttpServletRequest request, HttpServletResponse response)
                    throws ServletException, IOException {
      response.setContentType("text/html");
      PrintWriter out=response.getWriter();
      request.getRequestDispatcher("link.html").include(request, response);
      Cookie ck=new Cookie("name","");
      ck.setMaxAge(0);
      response.addCookie(ck);
      out.print("you are successfully logged out!");
   }
}
```

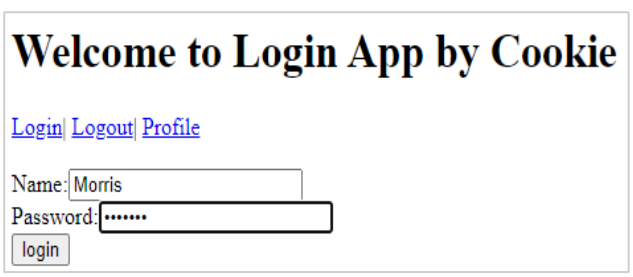
File: ProfileServlet.java

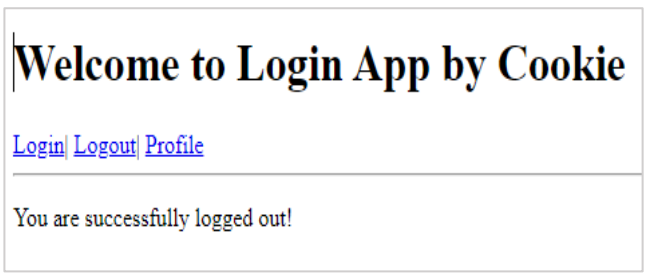
```
package com.javatpoint;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class ProfileServlet extends HttpServlet {
   protected void doGet(HttpServletRequest request, HttpServletResponse response)
                      throws ServletException, IOException {
      response.setContentType("text/html");
      PrintWriter out=response.getWriter();

      request.getRequestDispatcher("link.html").include(request, response);

      Cookie ck[]=request.getCookies();
      if(ck!=null){
       String name=ck[0].getValue();
      if(!name.equals("")||name!=null){
        out.print("<b>Welcome to Profile</b>");
        out.print("<br>Welcome, "+name);
      }
      }else{
```

```
            out.print("Please login first");
            request.getRequestDispatcher("login.html").include(request, response);
        }
        out.close();
    }
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://java.sun.com/xml/ns/javaee" xsi:schemaLocation="http://java.sun.com/xml/ns/javaee

http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd" id="WebApp_ID" version="2.5">
  <servlet>
    <description></description>
    <display-name>LoginServlet</display-name>
    <servlet-name>LoginServlet</servlet-name>
    <servlet-class>com.javatpoint.LoginServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>LoginServlet</servlet-name>
    <url-pattern>/LoginServlet</url-pattern>
  </servlet-mapping>
  <servlet>
    <description></description>
    <display-name>ProfileServlet</display-name>
    <servlet-name>ProfileServlet</servlet-name>
    <servlet-class>com.javatpoint.ProfileServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>ProfileServlet</servlet-name>
    <url-pattern>/ProfileServlet</url-pattern>
  </servlet-mapping>
  <servlet>
    <description></description>
    <display-name>LogoutServlet</display-name>
    <servlet-name>LogoutServlet</servlet-name>
    <servlet-class>com.javatpoint.LogoutServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>LogoutServlet</servlet-name>
    <url-pattern>/LogoutServlet</url-pattern>
  </servlet-mapping>
</web-app>
```

Output:





Date : 05-03-2024

Experiment - 5.3

Aim:

Create a servlet that prints all the request headers it receives, along with their associated values.

Code:

```
import java.io.*;
import java.util.*;
import javax.servlet.*;

@WebServlet("/RequestHeadersServlet")
public class RequestHeadersServlet extends HttpServlet {
   private static final long serialVersionUID = 1L;

   protected void doGet(HttpServletRequest request, HttpServletResponse response)
         throws ServletException, IOException {
      response.setContentType("text/html");
      PrintWriter out = response.getWriter();

      out.println("<html><head><title>Request Headers</title></head><body>");
      out.println("<h2>Request Headers:</h2>");
      out.println("<ul>");

      Enumeration<String> headerNames = request.getHeaderNames();
      while (headerNames.hasMoreElements()) {
         String headerName = headerNames.nextElement();
         out.println("<li><strong>" + headerName + ":</strong> " + request.getHeader(headerName)
+ "</li>");
      }
      out.println("</ul>");
      out.println("</body></html>");
   }
}
```

Output:

Request Headers:

- **host:** localhost:8080
- **connection:** keep-alive
- **cache-control:** max-age=0
- **sec-ch-ua:** " Not A;Brand";v="99", "Chromium";v="98", "Google Chrome";v="98"
- **sec-ch-ua-mobile:** ?0
- **sec-ch-ua-platform:** "Windows"
- **upgrade-insecure-requests:** 1
- **user-agent:** Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102 Safari/537.36
- **accept:** text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
- **sec-fetch-site:** none
- **sec-fetch-mode:** navigate
- **sec-fetch-user:** ?1
- **sec-fetch-dest:** document
- **accept-encoding:** gzip, deflate, br
- **accept-language:** en-US,en;q=0.9
- **cookie:** _ga=GA1.1.1234567890.1234567890; _gid=GA1.2.1234567890.1234567890

Date : 05-03-2024

Experiment - 5.4

Aim:

Create a servlet that recognizes a visitor for the first time to a web application and responds by saying “Welcome, you are visiting for the first time”. When the page is visited for the second time, it should say “Welcome Back”.

Code:

```
import java.io.*;
import javax.servlet.*;
@WebServlet("/WelcomeServlet")
public class WelcomeServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        boolean isFirstTimeVisitor = true;
        Cookie[] cookies = request.getCookies();
        if (cookies != null) {
            for (Cookie cookie : cookies) {
                if ("visitedBefore".equals(cookie.getName())) {
                    isFirstTimeVisitor = false;
                    break;
                }
            }
        }
        // Set a cookie to remember the visitor
        Cookie visitedCookie = new Cookie("visitedBefore", "true");
        response.addCookie(visitedCookie);
        // Respond with a welcome message
        out.println("<html><head><title>Welcome</title></head><body>");
        if (isFirstTimeVisitor) {
            out.println("<h2>Welcome, you are visiting for the first time</h2>");
        } else {
            out.println("<h2>Welcome Back</h2>");
        }
        out.println("</body></html>");
    }
}
```

Output: