

EX NO: 7

DATE:

SERVLET PROGRAMMING

AIM:

To write the program for the given problems using servlet

ALGORITHM:

STEP 1. HTML Form Setup:

- Create an HTML form for movie search with method `post`.
- Include an input field for the search term (`searchTerm`).

STEP 2. Servlet Initialization:

- Define a servlet class named `greet` that extends `HttpServlet`.

STEP 3. Request Processing:

- Override the `doPost` method to handle POST requests.
- Inside `doPost`:
 - Retrieve user's name (`uname`) and selected language (`select`) from request parameters.
 - Create cookies for `uname` and `select`.
 - Add cookies to the response.
 - Generate greeting messages based on the selected language.
 - Write HTML response with greetings and farewell messages.

STEP 4. Response Generation:

- Set response content type to "text/html; charset=UTF-8".
- Get PrintWriter object to write HTML content.

STEP 5. Cookie Management:

- Create cookies for storing user's name and selected language.

- Add cookies to the response.

STEP 6. Greeting Message Selection:

- Use if-else conditions to determine the greeting message based on the selected language.
- Generate personalized greeting messages based on language selection.
- Write the HTML content including the greeting message and a farewell message in the selected language.

PROGRAM 1 :

```
<!DOCTYPE html>
<html>
<head>
  <title>Movie Search</title>
</head>
<body>
  <h1>Movie Search</h1>
  <form action="http://localhost:38947/WebApplication14/MovieSearchServlet"
method="post">
    <label for="searchTerm">Search by Title or Actor:</label><br>
    <input type="text" id="searchTerm" name="searchTerm" required><br><br>
    <input type="submit" value="Search">
  </form>
</body>
</html>
```

```
import java.io.IOException;
import java.util.ArrayList;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet("/movies")

public class MovieServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;
```

```

// Dummy movie data

private List<Movie> movies = new ArrayList<>();


public MovieServlet() {
    // Sample movie data
    movies.add(new Movie("Inception", "Leonardo DiCaprio"));
    movies.add(new Movie("The Shawshank Redemption", "Tim Robbins, Morgan
Freeman"));
    movies.add(new Movie("The Godfather", "Marlon Brando, Al Pacino"));
    movies.add(new Movie("The Dark Knight", "Christian Bale, Heath Ledger"));
}


protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String action = request.getParameter("action");

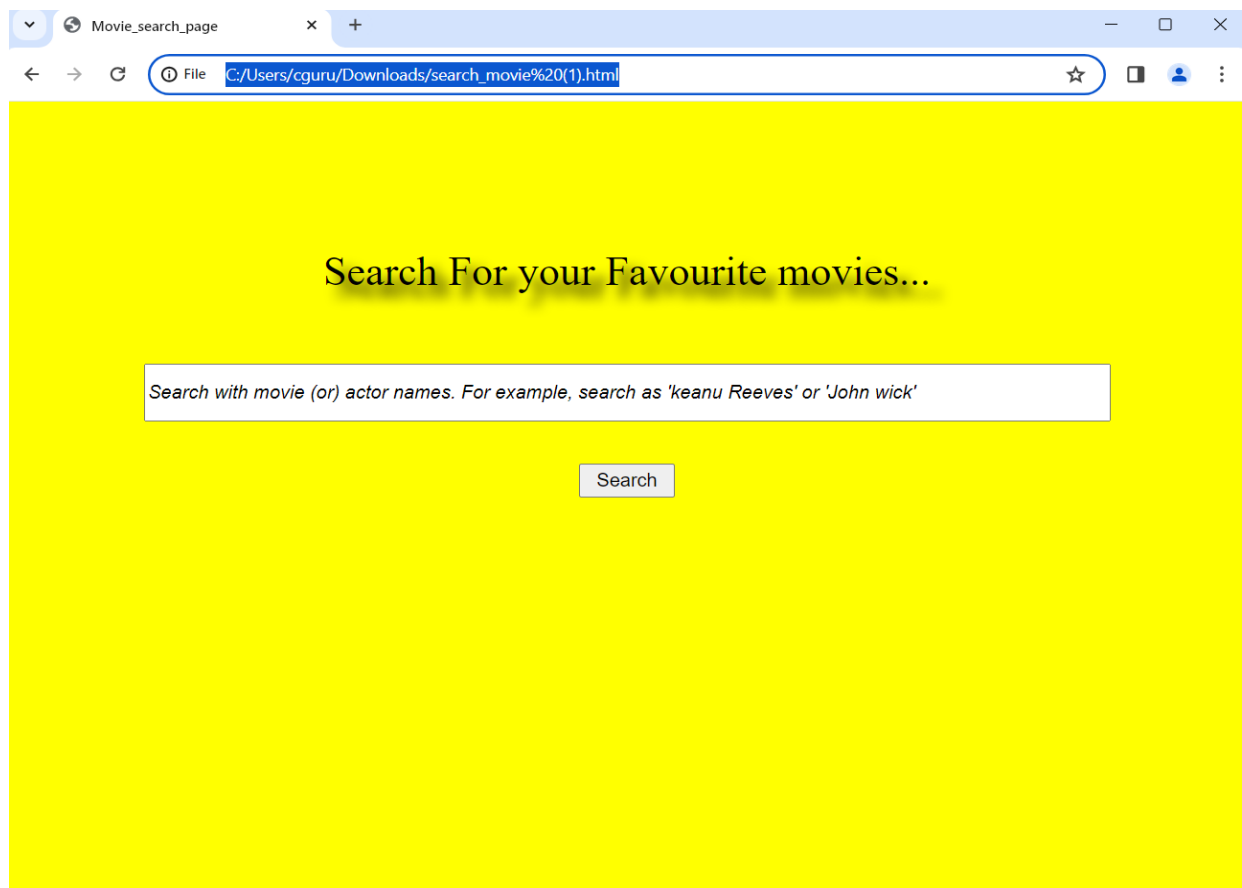
    if ("search".equals(action)) {
        String query = request.getParameter("query");
        List<Movie> searchResults = searchMovies(query);
        request.setAttribute("movies", searchResults);
        request.getRequestDispatcher("/movies.jsp").forward(request, response);
    } else {
        request.setAttribute("movies", movies);
        request.getRequestDispatcher("/movies.jsp").forward(request, response);
    }
}


private List<Movie> searchMovies(String query) {
    List<Movie> results = new ArrayList<>();
    for (Movie movie : movies) {

```

```
        if (movie.getTitle().toLowerCase().contains(query.toLowerCase()) ||  
            movie.getActors().toLowerCase().contains(query.toLowerCase())) {  
            results.add(movie);  
        }  
    }  
    return results;  
}  
}
```

OUTPUT:



Your Search Results are...

-> DHANUSH - MOONU

-> DHANUSH - PATTAS

-> DHANUSH - THIRUCHITRAMBALAM

-> DHANUSH - YAARADI NEE MOHINI

-> DHANUSH - KODI

-> DHANUSH - VIP

-> DHANUSH - VAATHI

PROGRAM 2 :

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Create Quiz</title>
  <link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
  <h1>Create Quiz</h1>
  <form action="QuizServlet" method="post">
    <label for="question">Question:</label>
    <input type="text" id="question" name="question" required><br>
    <label for="answer">Answer:</label>
    <input type="text" id="answer" name="answer" required><br>
    <button type="submit">Add Question</button><br><br>
```

```
</form>

<h2>Quiz Preview</h2>

<ul>

    <!-- Servlet will populate this list -->

</ul>

</body>

</html>
```

```
import java.io.IOException;
import java.io.PrintWriter;
import java.util.ArrayList;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
```

```
@WebServlet("/QuizServlet")
public class QuizServlet extends HttpServlet {

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

        String question = request.getParameter("question");
        String answer = request.getParameter("answer");

        HttpSession session = request.getSession();

        @SuppressWarnings("unchecked")
        ArrayList<String> quiz = (ArrayList<String>) session.getAttribute("quiz");

        if (quiz == null) {

            quiz = new ArrayList<>();
```

```
        session.setAttribute("quiz", quiz);
    }

    quiz.add("Q: " + question + " - A: " + answer);

    response.sendRedirect("index.html");
}
}
```

OUTPUT:

Question 1

Here Question goes here...

What is the capital of India

Option 1: DELHI

Option 2: CHENNAI

Option 3: MADURAI

Correct Answer: DELHI

Question 2

Here Question goes here...

Which planet is known as red planet

Option 1: SUN

Option 2: EARTH

Option 3: MARS

Correct Answer: MARS

Question 3

Here Question goes here...

From whom ash got his first Pokemon?

Option 1: Prof. Sycamore

Option 2: His mother

Option 3: Prof. Oak

Correct Answer: Prof. Oak

Cancel

Next

Successfully created your quiz!

Start your Quiz

1) Which is the first Pokemon does Ash Ketchum catch?

☐ Pikachu ☒ CaterPie ☐ Charmander

2) Why Greninja left Ash & stayed in Kalos region itself?

☒ To save kalos region ☐ as greninja found his mate ☐ as he hates Ash

3) From whom ash got his first Pokemon?

☒ Prof. Sycamore ☐ His mother ☐ Prof. Oak

VIEW RESULTS

Your Results are...

1 - Correct Answer

2 - Correct Answer

3 - Wrong Answer.

Correct Answer: Prof. Oak

Your score: 2/3

PROGRAM 3:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Language Selection</title>
</head>
<body>
  <h1>Select Your Preferred Language</h1>
  <form action="LanguageServlet" method="post">
    <label for="language">Preferred Language:</label>
    <select id="language" name="language">
      <option value="english">English</option>
      <option value="french">French</option>
      <option value="spanish">Spanish</option>
    </select>
    <button type="submit">Submit</button>
  </form>
</body>
</html>
```

```
import java.io.IOException;
```

```

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet("/LanguageServlet")
public class LanguageServlet extends HttpServlet {
    protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
        String language = request.getParameter("language");

        // Store the selected language in a cookie
        Cookie cookie = new Cookie("preferredLanguage", language);
        cookie.setMaxAge(30 * 24 * 60 * 60); // Cookie valid for 30 days
        response.addCookie(cookie);

        // Redirect to the greeting page
        response.sendRedirect("GreetingPage");
    }
}

import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet("/GreetingPage")

```

```

public class GreetingPage extends HttpServlet {

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

        // Retrieve preferred language from cookie

        String language = "";

        Cookie[] cookies = request.getCookies();

        if (cookies != null) {

            for (Cookie cookie : cookies) {

                if (cookie.getName().equals("preferredLanguage")) {

                    language = cookie.getValue();

                    break;

                }

            }

        }

        // Display greeting in the preferred language

        String greeting = "";

        switch (language) {

            case "english":

                greeting = "Hello!";

                break;

            case "french":

                greeting = "Bonjour!";

                break;

            case "spanish":

                greeting = "¡Hola!";

                break;

            default:

                greeting = "Hello!";

        }

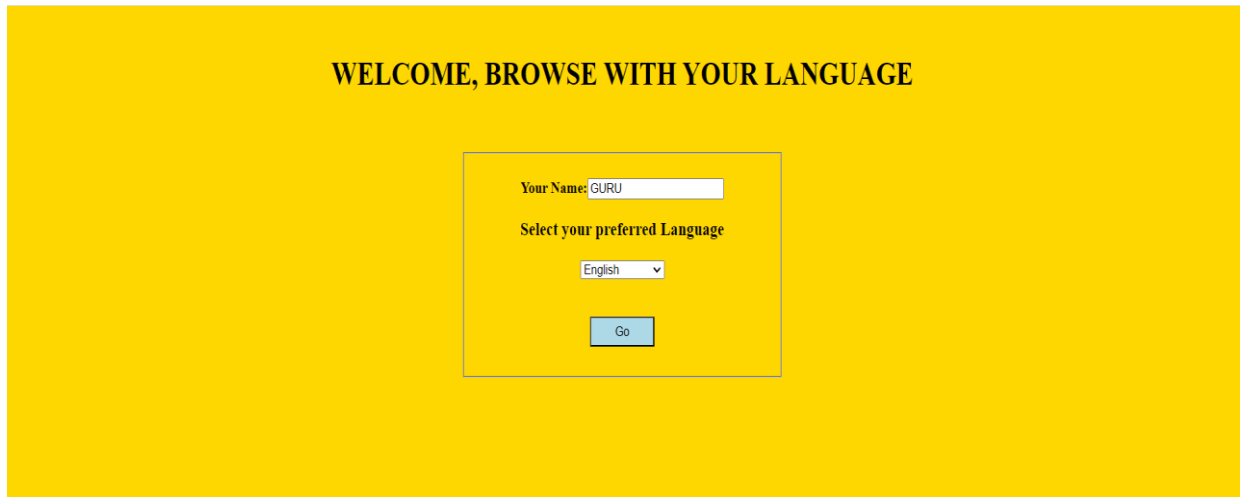
    }

}

```

```
response.setContentType("text/html");  
response.getWriter().println("<h1>" + greeting + "</h1>");  
}  
}
```

OUTPUT:



WELCOME, BROWSE WITH YOUR LANGUAGE

Your Name:

Select your preferred Language

▼

HAVE A GOOD DAY;

Code/Output (20)	
Quiz (5)	
Record (5)	
Total (30)	
Initial	

RESULT:

Program for the given problems are done and output is verified successfully

