

Experiment 4 – Social Media Dashboard using Servlet & JSP

Subject: CE931

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Definition

This project is a simple **Social Media Dashboard** built using **Servlet and JSP** where:

- JSP is used for UI (input, design, post form)
 - Servlet handles logic (store data, CRUD operations)
 - Posts are displayed dynamically
 - Time of post publishing is shown
-

Features Covered

1. JSP sends data to Servlet
2. Servlet stores response
3. Servlet sends data back to JSP
4. Post upload & display
5. CRUD operations (Create, Read, Update, Delete)
6. Post time display

File 1: Social.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"%>
<!DOCTYPE html>
```



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```
<html>
<head>
<title>Social Media Dashboard</title>

<style> body font-family:Arial,
background:#f2f2f2;

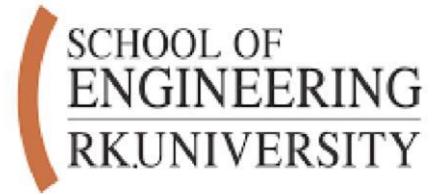
}
.box width:600px margin:auto,
background:#fff padding:20px;
borderradius:10px; textarea
width:100% height:80px,
padding:8px; button
padding:8px x 15px background
:#007bff color:white
;
border:none
e,
borderradius
:5px;
cursor:point
er;
}

.post background:#eee,
padding:10px;
```



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```
margintop:10px;  
borderradius:6px;  
}  
</style>
```

```
</head>
```

```
<body>
```

```
<div class="box">  
    <h2>Social Media Dashboard</h2>  
  
    <!-- CREATE POST -->  
    <form action="SocialServlet" method="post">  
        <input type="hidden" name="action" value="create">  
        <textarea name="content" placeholder="What's on your mind?"  
        required></textarea><br><br>  
        <button type="submit">Post</button>  
    </form>
```

```
<hr>
```

```
<h3>Posts</h3>
```

```
<!-- READ POSTS -->
```

```
 ${posts}
```

```
</div>
```

```
</body>
```

```
</html>
```

File 2: SocialServlet.java

```
package RAM_23SOECE11606;

import java.io.IOException; import
java.text.SimpleDateFormat; import java.util.*; import
jakarta.servlet.*;

import jakarta.servlet.annotation.WebServlet; import
jakarta.servlet.http.*;

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

// In-memory storage (DB simulation) static List<Post> postList = new
ArrayList<>();

protected void doGet HttpServletRequest request, HttpServletResponse
response
```

```

        throws ServletException, IOException {
    displayPosts request, response ;
}

protected void doPost HttpServletRequest request, HttpServletResponse
response
throws ServletException, IOException {

String action = request.getParameter("action");

// CREATE if
"create".equals action)) {
    String content = request.getParameter "content";
    String time = new SimpleDateFormat "dd-MM-yyyy HH:mm:ss".format new Date();
    postList.add new Post content, time));
}

// UPDATE if "update".equals action)) int index =
Integer parseInt request.getParameter("id"); String newContent = request.getParameter("content");

if index >= 0 && index < postList.size() {
    Post p = postList get index);
    p.content = newContent; // update content
}
}

```

```

// DELETE if ("delete" equals action) { int index =
    Integer.parseInt request.getParameter("id")); if (index >= 0 && index < postList.size()) {
        postList.remove(index);
    }

    displayPosts request, response ;
}

// READ (Display posts)
private void displayPosts HttpServletRequest request, HttpServletResponse
response
throws ServletException, IOException {

    StringBuilder sb = new StringBuilder ();

    for (int i = 0; i < postList.size(); i++) {
        Post p = postList.get (i);

        sb.append "<div class='post'>";

        // UPDATE FORM sb.append "<form method='post' action='SocialServlet'>"; sb.append "<input
        type='hidden' name='action' value='update'>"; sb.append "<input type='hidden' name='id'
        value=\"" + i + "\">";

        sb.append "<textarea name='content'
style='width:100%;height:60px;'>" + p.content + "</textarea><br>";
    }
}

```



```
sb.append("<small>Posted at: " + p.time + "</small><br><br>"); sb.append("<button type='submit'>Update</button>"); sb.append("</form>");

// DELETE FORM sb.append("<form method='post' action='SocialServlet' style='margin-top:5px;'>");

sb.append("<input type='hidden' name='action' value='delete'>"); sb.append("<input type='hidden' name='id' value=\"" + i + "\">"); sb.append("<button style='background:red;'>Delete</button>"); sb.append("</form>");

sb.append("</div>");

}

request.setAttribute("posts", sb.toString()); RequestDispatcher rd =
request.getRequestDispatcher("Social.jsp"); rd.forward(request, response);

}
```

File 3: Post.java

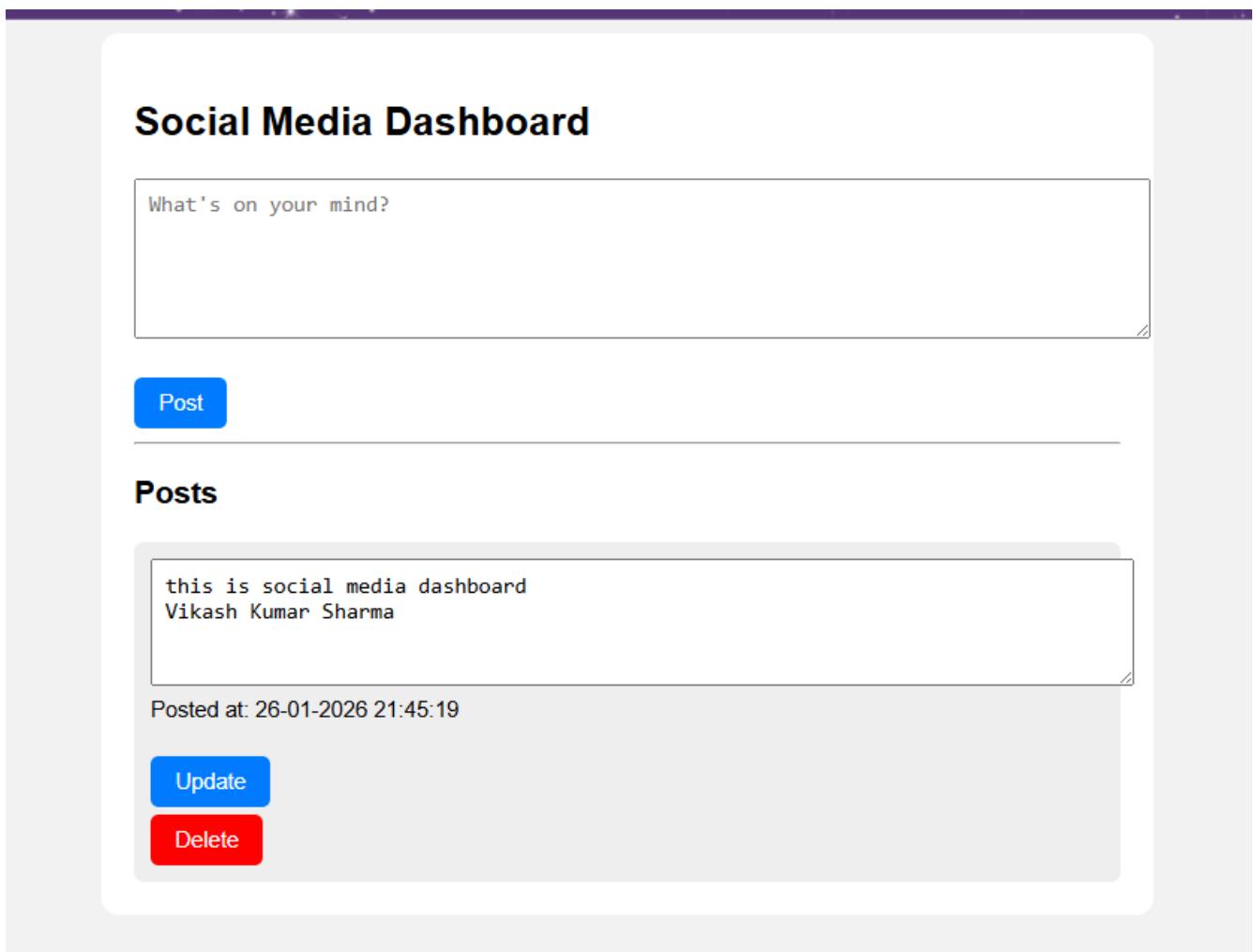
```
package RAM_23SOECE11606;

public class Post {
    public String content;
    public String time;
}

public Post String content String time | this content =
```

```
content; this.time = time;
```

OUTPUT:



The screenshot shows a "Social Media Dashboard" interface. At the top, there is a text input field with placeholder text "What's on your mind?". Below it is a blue "Post" button. The main area is titled "Posts" and contains a single post card. The post card displays the text "this is social media dashboard" and "Vikash Kumar Sharma". Below the post card, the text "Posted at: 26-01-2026 21:45:19" is shown. At the bottom of the post card, there are two buttons: "Update" (blue) and "Delete" (red).