



Experiment-3.3

Student Name: Sanchit Singal

UID: 21BCS1569

Branch: BE-CSE

Section/Group: 606-B

Semester: 6th

Date of Performance: 16/04/24

Subject Name: Project Based learning with Java

Subject Code: 21CSH-319

- **Aim:** Create an application for online auction using Servlet and JSP.
- **Objective:** The objective of this experiment is to Create an application for online auction using Servlet and JSP.
- **Input/Apparatus Used:**
 - Hardware - Laptop
 - Software - VS Code, Java JDK
- **Procedure/Algorithm/Pseudocode:**
 - Algorithm for index.jsp:
 1. Output welcome message.
 2. Display available items as links to their respective item pages.
 - Algorithm for item.jsp:
 1. Parse item ID from request.
 2. Initialize current bid variable.
 3. If bid is submitted, update current bid.
 4. Display item details including name and current bid.
 5. Display bidding form with input field for bid amount.
- **Code:**
 - Algorithm for index.jsp:

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

<head>
<title>Online Auction System</title>
<style>
body {
```



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

```
font-family: Arial, sans-serif;

margin: 0;
padding: 0;
background-color: #f2f2f2;
}

.container {
max-width: 800px;
margin: 50px auto;
padding: 20px;
background-color: #fff;
border-radius: 5px;
box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}

h1,
h2,
h3 {
color: #333;
}

ul {
list-style-type: none;
padding: 0;
}

li {
margin-bottom: 10px;
}

a {
text-decoration: none;
color: #007bff;
}

a:hover {
text-decoration: underline;
}
</style>
</head>

<body>
<div class="container">
<h1>Welcome to Online Auction System</h1>

<h2>Available Items</h2>
<ul>
<li><a href="item.jsp?id=1">Item 1</a></li>
<li><a href="item.jsp?id=2">Item 2</a></li>
needed -->
```

<!-- Add more items as

```
</ul>
</div>
</body>
</html>
```

o **Algorithm for item.jsp:**

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
    <title>Item Details</title>
    <style>
body {
    font-family: Arial, sans-serif;
margin: 0; padding: 0;
    background-color: #f2f2f2;
}
.container {
    max-width: 800px; margin:
50px auto; padding:
20px; background-
color: #fff; border-
radius: 5px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}
h2, h3
{
    color:
#333;
}
p {
    margin: 10px 0;
}
form {
    margin-top: 20px;
}
label {
    font-weight: bold;
}
input[type="number"] {
width: 100px;
padding: 5px; border:
1px solid #ccc;
    border-radius: 3px;
```

```
    }
    input[type="submit"] {
        padding: 8px 20px;
        background-color: #007bff;
        color: #fff;
        border: none;
        border-radius: 3px;
        cursor: pointer;
    }
    input[type="submit"]:hover {
        background-color: #0056b3;
    }
</style>
</head>
<body>
    <div class="container">
        <h2>Item Details</h2>
        <%
            int itemId = Integer.parseInt(request.getParameter("id"));
            String itemName = "Item " + itemId;

            // Retrieve the current bid from request attribute or initialize it
            double currentBid = (request.getAttribute("currentBid") != null) ?
            (double) request.getAttribute("currentBid") : 100.0;

            // Handle bid submission
            if(request.getParameter("bid") != null) {
                String bidAmountStr = request.getParameter("bidAmount");
                if(bidAmountStr != null && !bidAmountStr.isEmpty()) {
                    double bidAmount = Double.parseDouble(bidAmountStr);
                    if(bidAmount > currentBid) {
                        currentBid = bidAmount;
                    }
                }
            }
        %>
        <h3><%= itemName %></h3>
        <p>Current Bid: $<%= currentBid %></p>
        <form action="item.jsp?id=<%= itemId %>&bid=true" method="post">
            <label for="bidAmount">Place Your Bid: $</label>
            <input type="number" id="bidAmount" name="bidAmount" step="0.01" min="<%=
currentBid + 1 %>">
            <input type="submit" value="Place Bid">
        </form>
        <a href="index.jsp">Back to Items</a>
```



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

```
</div> </body>  
</html>
```

- **Observations:**

Welcome to Online Auction System

Available Items

[Item 1](#)

[Item 2](#)

Item Details

Item 1

Current Bid: \$101.02

Place Your Bid: \$

[Back to Items](#)

Item Details

Item 2

Current Bid: \$100.0

Place Your Bid: \$

[Back to Items](#)

- **Learning Outcomes:**

- Understanding of web development fundamentals
- Proficiency in Servlets and JSP.
- User authentication and session management.
- Scalability and performance considerations.