

Department of Computer Science & Engineering



UNIVERSITY INSTITUTE OF ENGINEERING

Department of Computer Science & Engineering

Subject Name: Project Based Learning in Java Lab

Subject Code: 20CSP321

Submitted to: Er.Parveen Tanwar Sir

Faculty name: Er. Parveen Tanwar Sir

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UID: 20BCS3504

Section: 607

Group: B

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Ex. No	List of Experiments	Conduct (MM: 12)	Viva (MM: 10)	Record (MM: 8)	Total (MM: 30)	Date	Remarks/Signature
1.1	Create an application to save the employee information using arrays.					03/09/22	
1.2	Design and implement a simple inventory control system for a small video rental store.					05/09/22	
1.3	Create a application to calculate interest for FDs, RDs based on certain conditions using inheritance.					10/09/22	
2.1	Create a program to set view of Keys from Java Hashtable.					29/09/22	
2.2	Create a program to show the usage of Sets of Collection interface.					07/10/22	
2.3	Write a Program to perform them basic operations like insert, delete, display, and search in list. List contains String object items where these operations are to be performed.					12/10/22	
2.4	Create a menu-based Java application with the following options. 1.Add an Employee 2.Display All 3.Exit If option 1 is selected, the application should gather details of the employee like employee name, employee id, designation and salary and store it in a file. If option 2 is selected, the application should display all the employee details. If option 3 is selected the application should exit.					13/10/22	
3.1	Create a palindrome creator application for making a longest possible palindrome out of given input string.					03/11/22	
3.2	Create a Servlet/ application with a facility to print any message on web browser.					04/11/22	
3.3	Create JSP application for addition, multiplication and division.						

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Experiment 3.2

Student Name: Pranjal Kumar

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Branch: CSE

Section/Group: 607-B

Semester: 5th

Date of Performance: 04/11/22

Subject Name: PBLJ Lab

Subject Code: 20CSP-321

AIM:

Create a Servlet/ application with a facility to print any message on web browser.

Software/Hardware Requirements:

VS Code or Eclipse

Algorithm/ PsuedoCode:

STEP 1- Create a index.jsp file in a webapp directory.

STEP 2 - Create a package named as fun and create a java file named as functions.java .

STEP 3 - functions.java file contains the logic for checking the validation in the form of submitting.

STEP 4- At Last start the server and display the output on the web browser.

STEP 5- EXIT

JAVA CODE/INPUT:

Index.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
<style>
    h1{
        margin: auto;
        width: 60%;
```

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```
padding-left: 100px;
}
body {
    background: orange;
    color: white;
}
.fall {
    background: grey;
    color: white;
    border: 2px solid blue;
    width: 45%;
    margin: auto;
}
.input-group {
    position: relative;
    margin: 23px;
    left: 175px;
}
button {
    position: relative;
    left: 35%
}
button:hover {
    cursor: pointer;
    background: black;
    color: white;
}
h3 {
    margin: auto;
    width: 40%;
    padding: 5px;
}
</style>
</head>
<body>
    <h1>Welcome the AP Auctions, Please Enter the Bid</h1>
    <form class="fall" name="register_form" action="%=request.getContextPath()%>/functions"
method="post" >
        <div class="input-group mb-2">
            <input type="text" name="name" id="name" onkeypress="return /[0-9a-zA-
Z]/i.test(event.key)" class="form-control input_user" required="required"
placeholder="Item ID">
        </div>
        <p class="error" id="name_id"></p>
        <div class="input-group mb-2">
            <div class="input-group-append">
                <span class="input-group-text"><i class="fas fa-user"></i></span>
            </div>
            <input type="text" name="branch" id="branch" onkeypress="return /[0-9a-zA-
Z]/i.test(event.key)" class="form-control input_user" required="required"
placeholder="Item Name">
        </div>
        <p class="error" id="branch_id"></p>
        <div class="input-group mb-2">
            <div class="input-group-append">
                <span class="input-group-text"><i class="fas fa-user"></i></span>
            </div>
            <input type="text" name="branch" id="branch" onkeypress="return /[0-9a-zA-
Z]/i.test(event.key)" class="form-control input_user" required="required"
placeholder="Item Name">
        </div>
        <p class="error" id="branch_id"></p>
        <div class="input-group mb-2">
            <div class="input-group-append">
                <span class="input-group-text"><i class="fas fa-user"></i></span>
            </div>
            <input type="text" name="branch" id="branch" onkeypress="return /[0-9a-zA-
Z]/i.test(event.key)" class="form-control input_user" required="required"
placeholder="Item Name">
        </div>
        <p class="error" id="branch_id"></p>
    </form>
</body>
```

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```
<input type="text" name="course" id="course" onkeypress="return /[0-9a-zA-Z]/i.test(event.key)" class="form-control input_user" required="required"
placeholder="Your Name">

</div>
<p class="error" id="course_id"></p>
<div class="input-group mb-2">
  <div class="input-group-append">
    <span class="input-group-text"><i class="fas fa-
user"></i></span>

  </div>
  <input type="email" name="email" id="email" onkeypress="return /[0-9a-zA-
Z.@_]/i.test(event.key)" class="form-control input_user" required="required"
placeholder="Email">

</div>
<p class="error" id="email_id"></p>

<div class="input-group mb-2">
  <div class="input-group-append">
    <span class="input-group-text"><i class="fas fa-
user"></i></span>

  </div>
  <input type="number" id="number" onKeyPress="if(this.value.length==10)
return false;" name="number" class="form-control input_user" required="required"
placeholder="Amount Bid">

</div>

<p class="error"
id="number_id"></p>
<button type="submit" onclick=hide()>Submit Bid</button>
</form>
<script>
document.getElementById("name").addEventListener("keypress", myname);
document.getElementById("name").addEventListener("mouseover", myname);
function myname() {
  var name= document.register_form.name.value;
  var paragraph = document.getElementById("name_id");
  if(name.length==0){
    paragraph.textContent="Please enter your Id !!";
    document.register_form.name.focus();
  }
  if(name.length>5 && name.length!=0){
    paragraph.textContent="\ID should not be greater than 5 character !!!";
    document.register_form.name.focus();
  }
  if(name.length<5){
    paragraph.textContent="";
  }
}

document.getElementById("email").addEventListener("keypress", myemail);
document.getElementById("email").addEventListener("mouseover", myemail);
function myemail() {
  var email= document.register_form.email.value;
  var paragraph = document.getElementById("email_id");
  if(email.length==0){
    paragraph.textContent="Please enter your email !!";
    document.register_form.email.focus();
  }
  else if(!(/^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/).test(email)){
```

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```
        paragraph.textContent="Enter valid email !!!";
        document.register_form.email.focus();
    }
    else{
        paragraph.textContent="";
    }
}

document.getElementById("branch").addEventListener("keypress", mybranch);
document.getElementById("branch").addEventListener("mouseover", mybranch);
function mybranch() {
    var branch= document.register_form.branch.value;
    var paragraph = document.getElementById("branch_id");
    if(branch.length<1){
        paragraph.textContent="Please enter your Item Name !!";
        document.register_form.branch.focus();
    }
    else{
        paragraph.textContent="";
    }
}

document.getElementById("course").addEventListener("keypress", mycourse);
document.getElementById("course").addEventListener("mouseover", mycourse);
function mycourse() {
    var course= document.register_form.course.value;
    var paragraph = document.getElementById("course_id");
    if(course.length<1){
        paragraph.textContent="Please enter your Name !!";
        document.register_form.course.focus();
    }
    else{
        paragraph.textContent="";
    }
}

document.getElementById("number").addEventListener("keypress", mynumber);
document.getElementById("number").addEventListener("mouseover", mynumber);
function mynumber() {
    var number= document.register_form.number.value;
    var paragraph = document.getElementById("number_id");
    if(number.length==0){
        paragraph.textContent="Please enter your Amount Bid !!";
        document.register_form.email.focus();
    }
    else if(!(/^[6-9]\d{9}$/.test(number))){
        paragraph.textContent="Enter valid Amount Bid !!!";
        document.register_form.number.focus();
    }
    else{
        paragraph.textContent="";
    }
}

</script>
<h3>Bid Submitted</h3>
<h3>Your bid is now active. if your bid is successful, you will be notified within 24HRS</h3>
<h3> Item id:  <%=request.getAttribute("ans") %></h3> <br>
<h3> Item Name:  <%=request.getAttribute("ans1") %></h3> <br>
```

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```
<h3> Your Name <%=request.getAttribute("ans2") %></h3><br/>  
<h3> Email:<%=request.getAttribute("ans3") %></h3><br/>  
<h3> Your Amount: <%=request.getAttribute("ans4") %></h3><br/>
```

```
</body>
```

```
</html>
```

Functions.java

```
package fun;
```

```
import java.util.*;
```

```
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;
```

```
/**
```

```
 * Servlet implementation class functions
```

```
 */
```

```
@WebServlet(name="functions",urlPatterns={"/functions"})
```

```
public class functions extends HttpServlet {
```

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

```
        String a=request.getParameter("name");
```

```
        String b=request.getParameter("branch");
```

```
        String c=request.getParameter("course");
```

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```
String d=request.getParameter("email");  
String e=request.getParameter("number");  
try {
```

```
    String ans=a;  
    String ans1=b;  
    String ans2=c;  
    String ans3=d;  
    String ans4=e;  
    request.setAttribute("ans",ans);  
    request.setAttribute("ans1",ans1);  
    request.setAttribute("ans2",ans2);  
    request.setAttribute("ans3",ans3);  
    request.setAttribute("ans4",ans4);
```

```
request.getRequestDispatcher("index.jsp").forward(request,response);  
    }catch(Exception e1) {  
        System.out.println(e1);  
    }  
}  
}
```

OUTPUT:

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Welcome the AP Auctions, Please Enter the Bid

Item ID

Item Name

Please enter your Item Name !!

Your Name

Please enter your Name !!

Email

Please enter your email !!

Amount Bid

Bid Submitted

Your bid is now active. if your bid is successful, you will be notified within 24HRS

Item id: 1234

Item Name: rolex

Your Name Abhinay

Email:rsingh9766@gmail.com00

Your Amount: 10000

```
1 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2   pageEncoding="ISO-8859-1"%>
3 <!DOCTYPE html>
4 <html>
5 <head>
6 <meta charset="ISO-8859-1">
7 <title>Insert title here</title>
8 <style>
9   h1{
10     margin: auto;
11     width: 60%;
12     padding-left: 100px;
13   }
14   body {
15     background:orange;
16     color: white;
17   }
18   .fall {
19     background: grey;
20     color: white;
21     border: 2px solid blue;
22     width: 45%;
23     margin:auto;
24   }
25   .input-group{
26     position: relative;
27     margin: 23px;
28     left: 175px;
29   }
30   button{
31     position: relative;
```

Learning outcomes (What I have learnt):

1. Learn About the servlet
2. Learn about jsp and dynamic web project
3. Learn about the tomcat server and its integrations with the java.