



**UNIVERSITI MALAYSIA TERENGGANU**

---

**CSM3023 WEB BASED APPLICATION DEVELOPMENT  
BACHELOR OF COMPUTER SCIENCE (MOBILE COMPUTING)  
WITH HONORS**

**LAB 03**

**SEMESTER I 2023/2024**

---

**Prepared for:**

**DR MOHAMAD NOR BIN HASSAN**

**Prepared by:**

**NUR ATIRAH BINTI SHAMSUDDIN (S67397)**

## Task 1: Passing Data from Main JSP's page to other Jsp'spage

Output:

### Passing data from main JSP's page to other JSP's page

Member Registration

Ic No

Name

### Passing data from main JSP's page to other JSP's page

Thank you for rejecting in this event..!

This is your details;

IC No : 031130050504

Name : NUR ATIRAH BINTI SHAMSUDDIN

#### Reflection

1. How do you want to submit specific information from one form to next form?

- By using action attributes in form tag.

2. What happened if the field name you specify in `request.getParameter("field_name")` in second page is different from the field name you defined in first page?

- The input from the first page cannot be submit to second page. The request is null in second page.

## Task 2: Using mathematics operation in jsp.

Output:

### Basic calculator program in jsp

5	+	5
---	---	---

Calculate Result = 10

### Reflection

1. How do you want to submit specific information from one form to next form?

- By using action attributes in form tag.

2. What happened if the field name you specify in `request.getParameter("field_name")` in second page is different from the field name you defined in first page?

- The input from the first page cannot be submit to second page. The request is null in second page.

## Task 3: populated an Array Values into Html's table

Output:

Read Java array and populate it into HTML's table

Salesman	Jan	Feb	Mac
Salesman 1	2500	2100	2200
Salesman 2	2000	1900	2400
Salesman 3	1800	2200	2450

### Reflection

1. Write a simple syntax to declare 2D java array.

- `dataType[][] arrayName = new dataType[rows][columns];`

2. Define a sequence of steps on how you accomplish Task 7.

- By using table tag. `<th></th>` are to define the header of the table. `<tr></tr>` are to differentiate the row of the table. `<td></td>` are to input the record by row into the table.

3. What is the difference between HTML's page and JSP's page?

- HTML pages have fixed content that doesn't change unless manually updated, like a brochure. JSP pages mix regular HTML with smart Java code to create pages that can change their content dynamically, like a personalized greeting that changes based on who's visiting the site.

### Task 4 : Perform Calculation of Car Loan

Output:

## Perform Car Loan Calculation

Loan Calculation

Loan Amount\*

Period

Submit

## Perform Car Loan Calculation

### Detail of car loan:

Loan Request : 50000

Period of Payment : 7 years

Total Loan (+ interest) : 65,750.00

### Reflection:

1. How you want to retrieve data from previous page?
  - Using: name method in the calculateCarLoan page and request.getParameter("name") in the processCalculateCarLoan page
2. Where the construction of logic occur for calculating Total Loan (+ interest)?
  - The construction of logic for calculating the "Total Loan (+ interest)" occurs within the `<% %>` scriptlet in the processCalculateCarLoan.jsp file.

### Task 5: Using JSP Page Directive to call Java API

#### Output:

## Use JSP Page Directive

The number of records in ArrayList are 6

Record 1 is Mohamad Azam

Record 2 is Peter Chong

Record 3 is Rahimah Mansor

Record 4 is Sri Devi

Record 5 is Ng Hue Ween

Record 6 is S. Nagarajan

### Reflection:

1. What you have learnt from this exercise?
  - Declare and initialize an ArrayList in a JSP page.
  - Add elements to the ArrayList.
  - Retrieve the size of the ArrayList.
  - Retrieve and display elements from the ArrayList using a loop.
  - Use JSP scriptlets (`<% %>`) to embed Java code within the JSP page.

2. Write a sample syntax how you want to use java Math object in JSP?

- ```
<%  
    double number = 64;  
    double squareRoot = Math.sqrt(number);  
    out.println("Square root of " + number + " is " + squareRoot);  
%>
```

3. List and write a sample syntax for THREE(3) of JSP page directive.

- ```
<%@page    contentType="text/html"    pageEncoding="UTF-8"  
    isErrorPage="false" %>
```
- ```
<%@include file="header.jsp" %>
```
- ```
<%@taglib uri="/WEB-INF/mytags.tld" prefix="my" %>
```

### Task 6: Use JSP include directive for JSP Page

Output:

**ABC Sdn Bhd**

Java Server Page (JSP) is a technology for controlling the content or appearance of Web pages through the use of servlets, small programs that are specified in the Web page and run on the Web server to modify the Web page before it is sent to the user who requested it.

©2024-Nur Atirah, S67397

**Reflection:**

1. What have you learnt from this exercise?

- **How to include another jsp file into jsp file**

2. Write a syntax how you want to include common.html file that located at a directory known as *master*.

- ```
<%@include file="path/to/your/file.jsp" %>
```

### **Exercise.**

1. Write a JSP's page to convert temperatures to Fahrenheit temperatures and via versa.

## Convert temperatures to Fahrenheit temperatures

**Formula:  $F = (9/5)C + 32$**

Enter temperature in Celsius:

Temperature in Celsius: 37

Temperature in Fahrenheit : 98

2. Write a JSP's form that asks for the length and width of two rectangles. The program should tell the user which rectangle has the greater area, or if the areas are the same. [Note: All result must be in 2 decimal places].

Exercise 2

localhost:8080/Lab2/calcula

## Calculating Rectangle

### First Rectangle

Width:

Length:

### Second Rectangle

Width:

Length:

