



**DEPARTMENT OF INFORMATION & COMMUNICATION TECHNOLOGY**  
**LABORATORY TASK 2 | SESSION 1 2025/2026**

<b>COURSE CODE : DFP50273</b>	<b>COURSE NAME : INTEGRATIVE PROGRAMMING AND TECHNOLOGIES</b>
<b>NAME :</b>	<b>REGISTRATION NO:</b>
<b>CLASS :</b>	<b>DATE :</b>
CLO1 : Construct the elements of GUI from java package that integrates database for an interactive GUI application ( P4, PLO 3 )	
<b>DURATION : 2 Hours</b>	

**Activity Outcome:**

1. Mixes media elements to enhance the GUI appearance. (CLO1:P4)
2. GUI will add function process with JAVA EventHandler. (CLO1:P4)

**Procedure: Follow the instructions below.**

**Question 1**

- i. Syarikat Buku EziReading want to develop a calculation book price system. You are required to build a user interface as Figure 1. You must use Swing components to build the user interface. You need to write Java Programs using the event handling for this task.  
Users can enter the books quantity and price. The system will automatically count the extended price. If customers are member, a 15% discount is given to total price. The program will use the following member function:.
  - o Calculate – to count the extended price. Member will get 15% discount.
  - o Clear – to reset all the input and output on the form.
  - o Exit – exit application

Bill

File

**BOOKS BILLING**

☐ non-member ☒ member

Books Title : Java: How to Program

Unit Price :

Quantity :

Sub Total :

Discount 15% :

Total :

CALC CLEAR EXIT

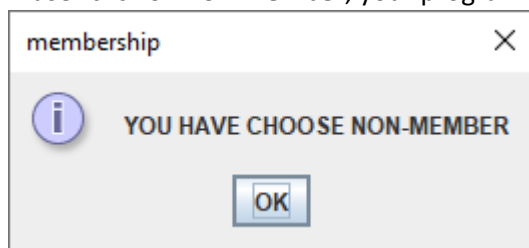
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*Syarikat Buku EZIReading  
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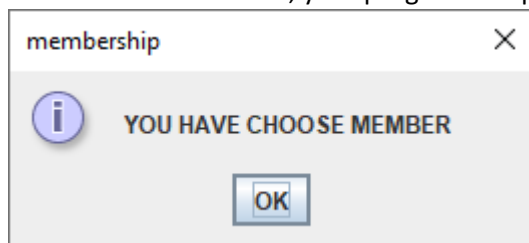
Figure1

Use JOptionPane class to create Message Dialog if user click on membership button.

If user click on **non-member**, your program will pop up message dialog as below:



If user click on **member**, your program will pop up message dialog as below:



If user choose item at JComboBox, your program will pop up dialog as below:

The image shows a Java Swing application with two windows. The main window, titled 'Bill', has a menu bar with 'File' and a title bar with standard window controls. The content area is titled 'BOOKS BILLING' and contains two radio buttons: 'non-member' (selected) and 'member'. Below these are labels for 'Books Title:', 'Unit Price:', 'Quantity:', 'Sub Total:', 'Discount 15%:', and 'Total:'. A JComboBox is positioned to the right of these labels, displaying a list of book titles: 'Programming with Java', 'Java: How to Program', 'Programming with Java', 'Java Programming Application', and 'Introduction to Java Programming'. The second item, 'Java: How to Program', is highlighted. A red dashed rectangle encloses the list. At the bottom of the 'Bill' window are three buttons: 'CALC', 'CLEAR', and 'EXIT'. Below the main window is a yellow rectangular area containing the text: 'Syarikat Buku EZIReading', 'No 88, Jalan Permatang Pauh,', '13500, Pulau Pinang', and 'Tel: 04-5375168'. A second window, titled 'BOOK', is open in the foreground. It has a title bar with a close button and a content area with a green square icon containing a question mark, followed by the text 'you choose : Programming with Java'. At the bottom of this window are two buttons: 'Yes' and 'No'.

Bill

File

**BOOKS BILLING**

☐ non-member ☐ member

Books Title : Programming with Java

Unit Price : Java: How to Program

Quantity : Programming with Java

Sub Total : Java Programming Application

Discount 15% : Introduction to Java Programming

Total :

CALC CLEAR EXIT

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Syarikat Buku EZIReading  
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BOOK

? you choose : Programming with Java

Yes No

If user is a **non-member** and click on button CALC, your program will automatically count the extended price as below:

The screenshot shows a Java Swing window titled "Bill". It contains a menu bar with "File". Below the menu bar, the text "BOOKS BILLING" is displayed in blue. There are two radio buttons: "non-member" (selected) and "member". Below these are several text fields and labels: "Books Title:" with a dropdown menu showing "Programming with Java", "Unit Price:" with the value "20", "Quantity:" with the value "2", "Sub Total:" with the value "40.0", "Discount 15%:" with the value "0.0", and "Total:" with the value "40.0". At the bottom, there are three buttons: "CALC", "CLEAR", and "EXIT". The "CALC" button is highlighted with a red dashed box. Below the buttons, there is a yellow rectangular area containing the following text: "Syarikat Buku EZIReading", "No 88, Jalan Permatang Pauh,", "13500, Pulau Pinang", and "Tel: 04-5375168".

If user is a **member** and click on button CALC, your program will automatically count the extended price as below:

The screenshot shows the same "Bill" application window, but now the "member" radio button is selected. The "Books Title:" dropdown still shows "Programming with Java". The "Unit Price:" field shows "20" and the "Quantity:" field shows "2". The "Sub Total:" field shows "40.0". The "Discount 15%:" field now shows "6.0", and the "Total:" field now shows "34.0". The "CALC" button remains highlighted with a red dashed box. The yellow area at the bottom contains the same text: "Syarikat Buku EZIReading", "No 88, Jalan Permatang Pauh,", "13500, Pulau Pinang", and "Tel: 04-5375168".

ii. Observe the final output of the program. Screenshot the output and the program coding.