Assessment-2 /Cat2 Lab/L11+L12 (SJTG17 16.05.2023)

Max Marks: 15

1. **Develop a simple <mark>To-Do List application</mark> using AWT/Swing in Java. The application should allow users to create tasks and mark them as completed. You need to implement the following features within the given time frame:**

➢ Design the user interface for the To-Do List application using Swing components such as labels, text fields, buttons, and lists. Consider the layout and organization of these components to provide a clean and user-friendly interface.

➢ Implement functionality to allow users to add new tasks to the list. When the user enters a task in the text field and clicks the "Add" button, the task should be added to the list.

➢ Implement functionality to allow users to mark tasks as completed. When a task is selected from the list and the user clicks the "Complete" button, the task should be marked as completed and visually indicated in the list.

➢ Implement functionality to allow users to remove completed tasks. When the user clicks the "Remove Completed" button, all the completed tasks should be removed from the list.

Test your To-Do List application by adding tasks, marking them as completed, and removing completed tasks. Verify that the tasks are displayed correctly, and the completion status is reflected accurately.

2. **Develop a <mark>simple calculator application</mark> using Swing/AWT in Java. The calculator should provide basic arithmetic operations such as addition, subtraction, multiplication, and division. Your task is to design the menu system and implement event handling to support these operations.**

➢ Design the user interface for the calculator using AWT components, including a MenuBar and a Menu for operations. Consider the layout and organization of these components to provide a user-friendly interface.

➢ Implement event handling for the arithmetic operations menu. Add menu items for addition, subtraction, multiplication, and division.

➢ When a user selects an operation from the menu, prompt the user to enter two numbers through dialog boxes or input fields.

➢ Perform the selected arithmetic operation on the entered numbers and display the result in a dialog box or output field.

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