

# CMPE 261 - Large Scale Programming

## Worksheet(Week-03B)

### Part I

In this part you are asked to execute following statements in a test class and understand different **JOptionPane** dialogs.

#### 1 showMessageDialog

Displays a modal dialog with one button, which is labeled "OK" (or the localized equivalent). You can easily specify the message, icon, and title that the dialog displays. Here are some examples of using **showMessageDialog**:

```
//default title and icon
JOptionPane.showMessageDialog(null, "Eggs are not supposed to be green.");

//custom title, warning icon
JOptionPane.showMessageDialog(null, "Eggs are not supposed to be green.",
    "Inane warning",
    JOptionPane.WARNING_MESSAGE);

//custom title, error icon
JOptionPane.showMessageDialog(null, "Eggs are not supposed to be green.",
    "Inane error",
    JOptionPane.ERROR_MESSAGE);

//custom title, no icon
JOptionPane.showMessageDialog(null, "Eggs are not supposed to be green.",
    "A plain message",
    JOptionPane.PLAIN_MESSAGE);

//custom title, custom icon
JOptionPane.showMessageDialog(null, "Eggs are not supposed to be green.",
    "Inane custom dialog",
    JOptionPane.INFORMATION_MESSAGE,
    icon);
```

## 2 showOptionDialog

Displays a modal dialog with the specified buttons, icons, message, title, and so on. With this method, you can change the text that appears on the buttons of standard dialogs. You can also perform many other kinds of customization.

```
//Custom button text
Object[] options = {"Yes, please", "No, thanks", "No eggs, no ham!"};
int n = JOptionPane.showOptionDialog(null,
    "Would you like some green eggs to go "
    + "with that ham?",
    "A Silly Question",
    JOptionPane.YES_NO_CANCEL_OPTION,
    JOptionPane.QUESTION_MESSAGE,
    null,
    options,
    options[2]);

//default icon, custom title
int n = JOptionPane.showConfirmDialog(
    null,
    "Would you like green eggs and ham?",
    "An Inane Question",
    JOptionPane.YES_NO_OPTION);

Object[] options = {"Yes, please", "No way!"};
int n = JOptionPane.showOptionDialog(null,
    "Would you like green eggs and ham?",
    "A Silly Question",
    JOptionPane.YES_NO_OPTION,
    JOptionPane.QUESTION_MESSAGE,
    null, //do not use a custom Icon
    options, //the titles of buttons
    options[0]); //default button title
```

Note: check the value of “n” when different buttons have been clicked.

## 3 showConfirmDialog

- Using the **showConfirmDialog** static method to ask for user confirmation.

- This method displays a dialog with buttons on it, such as a Yes button, a No button, a Cancel button, or an OK button.
- You can select which buttons to appear or you can create your own buttons.
- Upon the user clicking a button, JOptionPane returns one of the following predefined ints:

```
JOptionPane.YES_OPTION  
JOptionPane.NO_OPTION  
JOptionPane.CANCEL_OPTION  
JOptionPane.OK_OPTION
```

```
//default icon, custom title  
int n = JOptionPane.showConfirmDialog(  
    null,  
    "Would you like green eggs and ham?",  
    "An Inane Question",  
    JOptionPane.YES_NO_OPTION);  
  
// an example to check return data  
int response = JOptionPane.showConfirmDialog(null, "Do you want to continue?",  
    JOptionPane.YES_NO_OPTION, JOptionPane.QUESTION_MESSAGE);  
if (response == JOptionPane.NO_OPTION) {  
    System.out.println("No button clicked");  
} else if (response == JOptionPane.YES_OPTION) {  
    System.out.println("Yes button clicked");  
} else if (response == JOptionPane.CLOSED_OPTION) {  
    System.out.println("JOptionPane closed");  
}
```

## 4 showInputDialog

The only form of **showXxxDialog** that does not return an integer is **showInputDialog**, which returns an Object instead. This Object is generally a String reflecting the user's choice. Here is an example of using **showInputDialog** to create a dialog that lets the user choose one of three strings:

```
Object[] possibilities = {"ham", "spam", "yam"};
```

```
String s = (String)JOptionPane.showInputDialog(  
    frame,  
    "Complete the sentence:\n"  
    + "\"Green eggs and...\n\"",  
    "Customized Dialog",  
    JOptionPane.PLAIN_MESSAGE,  
    icon,  
    possibilities,  
    "ham");  
  
//If a string was returned, say so.  
if ((s != null) && (s.length() > 0)) {  
  
    JOptionPane.showMessageDialog(null,s,"selected data is: ")  
}  
  
//If you're here, the return value was null/empty.
```

## Part II

In this part, you are asked to write a classes using **JOptionPane** dialogs.

### Problem-01

When the program runs, it asks to enter user name and passwords from a user. If the input data are correct, program displays a welcoming message. If input data are wrong, it asks to try again two more times. In case not able to enter correct data three times, program displays a warning message and asks user to see administrator of the program.

### Problem-02

Write a program that takes three integer number from a user, and displays the smallest on the screen.

## Part III

In this part you asked to design a simple GUI with **JFrame** class.

### Problem-01

Design a simple GUI interface with the size of 500x500 pixels.

- Put 3 buttons and two text fields. Put this items using the “null” layout.
- Repeat the same task with the **Flow** and **Border** layouts
- If you have time left, try the same task with the **Grid** layout.

## Part IV

Write a java Applet that displays the class that you have defined in part III.