

# JOptionPane Method Summary

You will be using the following static methods from the [JOptionPane](#) class. The actual parameters that you use *may* vary for each dialog.

## 1. Message Dialog (`showMessageDialog`)

```
public static void showMessageDialog(Component parentComponent,  
                                     Object message,  
                                     String title,  
                                     int messageType)
```

`showMessageDialog` method brings up a dialog that displays a message with an “OK” button and displays an icon determined by the `messageType` parameter.

### Parameters:

- `parentComponent`: Should be set to null.
- `message`: The Object to display. Can be a String.
- `title`: The title String for the dialog
- `messageType`: The type of message to be displayed. Refer to the **Message Types** section below for a list of options.

### Message Types (`JOptionPane static fields`)

- `ERROR_MESSAGE`: Used for error messages. Display a red “X” icon on the dialog.
- `QUESTION_MESSAGE`: Used for question messages. Displays a question mark icon on the dialog.
- `INFORMATION_MESSAGE`: Used for information messages. Displays an information icon on the dialog.
- `WARNING_MESSAGE`: Used for warnings. Displays a yellow exclamation point icon on the dialog.
- `PLAIN_MESSAGE`: No icon is used.

## 2. How to show several buttons (showOptionDialog)

```
public static int showOptionDialog(Component parentComponent,  
                                  Object message,  
                                  String title,  
                                  int optionType,  
                                  int messageType,  
                                  Icon icon,  
                                  Object[] options,  
                                  Object initialValue)
```

showOptionDialog brings up a dialog with buttons.

### Parameters:

- parentComponent: Determines the Frame in which the dialog is displayed; if null, or if the parentComponent has no Frame, a default Frame is used
- message: The Object to display. Can be a String.
- title: The title String for the dialog
- optionType: An integer designating the options available on the dialog. Refer to the **Option Types** section below for a list of options.
- messageType: An integer designating the kind of dialogue window to be displayed, primarily used to determine the icon. Refer to the **Message Types** section above for a list of options.
- icon: A custom icon to display in the dialog. Can be null. **You will not be using custom icons in this lab.**
- options: An array of objects indicating the possible choices the user can make. Can be a String array. **The string objects in this array are used to override the default string on dialog buttons**
- initialValue: the object that represents the default selection for the dialog; only meaningful if options is used; can be null

**Return Value:** an integer indicating the option chosen by the user, or CLOSED\_OPTION if the user closed the dialog

### Option Types (JOptionPane static fields)

- DEFAULT\_OPTION: Only displays one button: "OK"
- YES\_NO\_OPTION: Displays two buttons: "Yes", "No"
- YES\_NO\_CANCEL\_OPTION: Displays three buttons: "Yes", "No", "Cancel"
- OK\_CANCEL\_OPTION: Displays two buttons: "OK", "Cancel"
- PLAIN\_MESSAGE: To be used while creating custom options

### 3. Getting Text Input (showInputDialog)

```
public static String showInputDialog(Component parentComponent,  
                                     Object message,  
                                     String title,  
                                     int messageType)
```

showInputDialog shows a dialog requesting the user to enter input in a text field.

#### Parameters:

- parentComponent: The parent Component for the dialog. Can be null
- message: The Object to display. Can be a String.
- title: The String to display in the dialog title bar
- messageType: The type of message that is to be displayed. Refer to the **Message Types** section above for a list of options.

**Return Value:** The String that the user typed, or null meaning the user clicked the “Cancel” button.

### 4. Showing a Dropdown Menu (showInputDialog)

```
public static Object showInputDialog(Component parentComponent,  
                                     Object message,  
                                     String title,  
                                     int messageType,  
                                     Icon icon,  
                                     Object[] selectionValues,  
                                     Object initialSelectionValue)
```

showInputDialog prompts the user for input in a dialog. The user will be able to choose from a dropdown menu containing selectionValues.

#### Parameters:

- parentComponent: The parent Component for the dialog. Can be null.
- message: The Object to display. Can be a String.
- title: The String to display in the dialog title bar
- messageType: The type of message to be displayed. Refer to the **Message Types** section above for a list of options.
- icon: The Icon image to display. You will not be using custom icons in this lab.
- selectionValues: An array of Objects that gives the possible selections. Can be a String array.
- initialSelectionValue: The value used to initialize the input field Can be null.

**Return Value:** The user's input, or null meaning that the user clicked the Cancel button.

## 5. Showing a Confirm Dialog (showConfirmDialog)

```
public static int showConfirmDialog(Component parentComponent,  
                                    Object message,  
                                    String title,  
                                    int optionType)
```

Brings up a dialog where the number of choices is determined by the optionType parameter.

### Parameters:

- parentComponent - determines the Frame in which the dialog is displayed; if null, or if the parentComponent has no Frame, a default Frame is used
- message - the Object to display
- title - the title string for the dialog
- optionType - an int designating the options available on the dialog: YES\_NO\_OPTION, YES\_NO\_CANCEL\_OPTION, or OK\_CANCEL\_OPTION

**Return Value:** an int indicating the option selected by the user