cosc2391/2401 Software Architecture: Design and Implementation
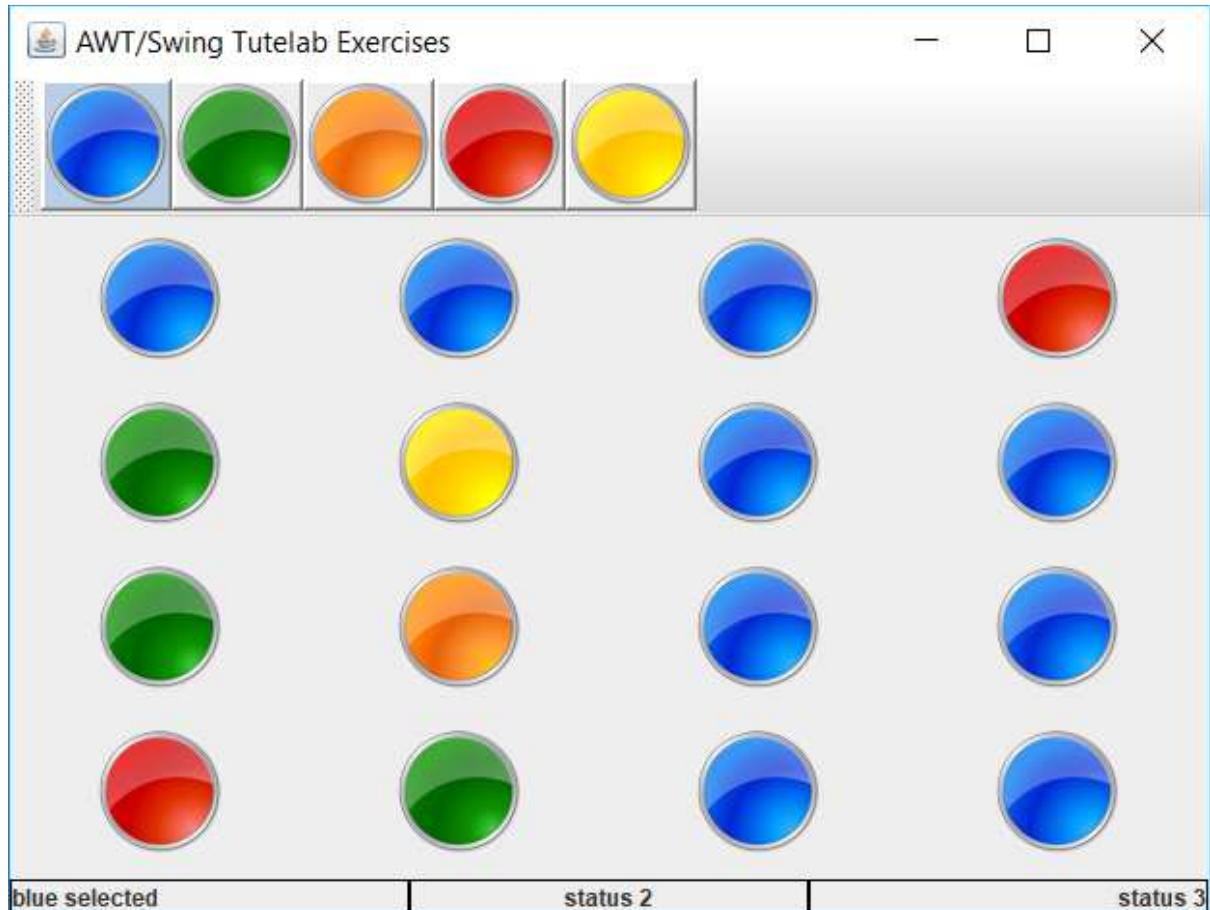
**TuteLab 7 – AWT/Swing and Patterns (Event Handling)**



Last week you were asked to implement the basic UI application shown in the screenshot above.

This week you are going to continue working on this example but will now implement some behavior based on user interaction by implementing appropriate event management code.

**Toolbar**: As stated last week the toolbar consists of a set of different coloured buttons whereby selection is mutually exclusive i.e. radio button behavior where only one button at a time can be toggled.

**Main Panel**: When the mouse is moved over any of the circles in the main panel that circle should change its colour to the currently selected colour (in the screenshot above you can see that a number of the circles have been coloured blue). This is done by changing the icon to the appropriate .png image.

**Status Bar:** When the toolbar is toggled the first (left hand) segment of the status bar is updated to display the currently selected colour.

**IMPLEMENTATION HINTS**

One of the main challenges you will have is which classes should be responsible for the event handling and how this functionality should be implemented (we recommend implementing event handling functionality in a separate class rather than as an inner class or combined event source/listener).

You will also need to consider how references are passed from one class to another as well as whether you should expose various container classes (the toolbar etc.) or forward this behavior from your main application Frame class.

As with last week you should aim for high cohesion and should avoid hard coding sizes etc.