# UI Assignment_1
# Simple Painting GUI Apps

Your mission in this exercise is to implement a very **simple Java painting application**. *Rapid Prototyping*

The JFrame is an example that can support the following functions:
*(However, you can use any other programming languages or Apps that you are comfortable to do the following GUI options as well)*

- Draw curves, specified by a mouse drag.
- Draw filled rectangles or ovals, specified by a mouse drag (don't worry about dynamically drawing the shape during the drag - just draw the final shape indicated).
- Shape selection (line, rectangle or oval) selected by a combo box OR menu.
- Color selection using radio buttons OR menu.
- Line thickness using a combo box OR menu.
- A CLEAR button.

You should read through the Java Swing Tutorial on Writing Event Listeners first.
For help on specific Swing components see How to

*Some other tips to get you started:*

- Put import java.awt.*; and import java.awt.event.*; at the top of your java source.
- To find the mouse coordinates of a mouse event (e.g., a click), use the int getX() and int getY() methods on the MouseEvent object.
- Remember that getGraphics() returns a Graphics object that represents one set of drawing parameter settings for the JFrame (there is no global Graphics object!).
- Heres a code snippet to draw a blue dot at X=10, Y=100 on the JFrame:

```
Graphics G=getGraphics();
G.setColor(Color.BLUE);
G.drawRect(10,100,1,1);
```

- Here's the mouse dragged handler we wrote in class for a (lame) painting function on the JFrame:

```
private void myMouseDragged(java.awt.event.MouseEvent evt) {
        int x=evt.getX();
        int y=evt.getY();
        java.awt.Graphics G=getGraphics();
        G.drawRect(x, y, 1, 1);
    }
```

- And another snippet to find out which item was selected from a combo box:

```
public void actionPerformed(ActionEvent e) {
  JComboBox cb=(JComboBox)e.getSource();
  String itemName=(String)cb.getSelectedItem();

  }
```

**Deliverable:**

1. Please submit your **source code** of your programming assignment *(any IDE you are using)*
2. *Provide **brief write up** (2-3 paragraphs) to describe about the program structure.*
3. **Screenshots** of your output within a MS Word .doc or Short Video Clip
4. ***Submit via d2l Module/dropbox on or before due date***