## Introduction:

In this exercise you will design an app similar to the paint application of MS Windows.

In the basic app – you should have a canvas to draw on (by either touching or dragging on the screen). The following features should be implemented:

- 1. The option to draw with any one of three colors by choosing from a number of color buttons.
- 2. The option to clear the canvas by clicking on a wipe button.
- 3. If the canvas is touched- a dot of the color of choice should be drawn.
- 4. If the user drags on the canvas, a curve in the color of choice is drawn

Now try modifying your program according to extension I and then extension II.

## Extension I:

- 1. Add two new buttons Big and Small
- 2. If the "big" button is chosen followed by a touch on the canvas a big dot of the last selected color should be drawn. Similarly, if the "small" button is chosen followed by a touch operation, smaller dot should be drawn.
- 3. If the "big" button is chosen followed by a drag operation on the canvas a thick curve should be drawn. Similarly for the "small" button followed by a drag operation a thin curve should be drawn.

## **Extension II:**

- 1. Add three new buttons: "Line", "Circle" and "Spray"
- 2. If the "Line" button is chosen followed by a drag on the canvas, a curve of selected thickness (big or small) should be drawn (similar to extension I).
- 3. If the "Circle" button is clicked followed by a drag operation, a circle should be drawn whose center is at the point where the user first touched the screen and whose radius depend on far the user drags on the screen.
- 4. If the "Spray" button is clicked followed by a drag operation, dots should be sprayed randomly along the trajectory that the user drags on the canvas.

A tutorial on the PaintPot application (excluding the extensions) is available at: http://www.appinventorbeta.com/learn/tutorials/paintpot/paintpot-part1.html