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| **AP Computer Science** | **GraphicsLab08 Java Assignment** |
| **The Paint Brush Program** | **80, 90, 100, 105 & 110 Point Versions** |
| **Assignment Purpose:**  This assignment has multiple goals like the earlier Chapter 13 lab assignment. You need to demonstrate your knowledge of the advanced graphics routines presented in Chapter 21, demonstrate creativity and demonstrate the ability to work on this assignment with a partner in a small team. | |

Write an **applet** program that demonstrates mouse handling along with graphics display. Your program is meant to become a draw program similar in nature to the "Paintbrush" program. You will be expected to implement a variety of graphics draw features, but the actual output of your program is not shown. You personal creativity will take charge of the "look" of your program. This program is meant to be written with a partner.

**80 Point Version**

This is the basic paint program. It requires the following capabilities:

The program allows freehand drawing which the movement of the mouse like a pencil.

The program gives the opportunity to draw in one of five different colors with mouse selection.

**90 Point Version**

The 90-point version starts with all the capabilities of the 80-point version and adds the following:

Drawing must be restricted to the main paint canvas. Drawing must not show on any selection

windows, nor on the wrong side of the selection window.

**100 Point Version**

The 100-point version starts with all the capabilities of the 90-point version and adds the following:

The program allows the selection of three different paint thicknesses. It could be said that you

can draw with a **pen**, a **brush**, or a **roller**.

**105 and 110 Point Versions**

These versions start with all the capabilities of the 100-point version. Additional points can be earned by implementing or more of the features listed below. You will get five points for adding each one of these features for a total possible score of **110** points.

* Draw a straight line with a visible "elastic band" approach.
* Provide an eraser that removes any drawings.
* Provide a clear option that removes all drawings.

If you personally create any practical paint features that are not listed above, you may earn extra points as well. Just remember that the maximum score is **110** points, regardless of the number of features that you implement.