

PGSS - Programming Lab
Task 2A Easing

Easing will be demonstrated in lab. Simply explained here, easing means that the code for having a figure follow the mouse in the window, instead of moving the figure directly to the new mouse location, you move it only part way. Typically, you declare an Easing Coefficient which is percentage of the way you move the figure closer to the mouse in each frame. For example considering only the x coordinate of the mouse, if the coefficient is .5 or 50%, when the mouse moves from the pixel 100 to pixel 200 and stops, the next frame will show the figure at position 150 which is half of the distance the mouse moved. If the mouse is not moved again, the next frame will show the figure at position 175. Then at position 187.5, then ... The figure "eases" up to the mouse location.

_____ Use your Task1C code as a start. Open a new empty Processing file or do a SaveAs for Task1C.pde and save it as Task2A. If you do not have Task1C done, you can do this with a simple circle or rectangle.

_____ Declare an easing coefficient variable and give it some reasonable value.

_____ Compute the difference between the mouse's current position and the figure's current position - do this for both mouseX and mouseY.

_____ Multiply both differences by the easing coefficient.

_____ Add the products from above to the current figure location.

_____ Draw the figure.

_____ Try this with and without background().

_____ Try this replacing background with a screen sized rectangle filled with a color that has varying degrees of transparency.

_____ Try this with different coefficient values.