

# Lab 6: Particle Effects

## Overview:

This week's coding examples in class (and posted on the website) show examples of drawing with particles. For this lab, create your own particle effects. You may choose to create a fractal or explosions or fireworks or particles that all attract each other or repel each other or oscillate between attraction and repulsion or follow the mouse around the canvas or form into letters or crystalize into snow flakes or some other creative thing. In order to get credit, your program must be significantly different from any of the given examples.

## Grading Rubric [20 points total]:

**[File Name: 1 point]:** Attached one file in Blackboard Learn with the file name:  
**ParticleEffects\_yourName.java.**

**[Particles: 7 points]:** Your program must use:

**javafx.scene.image.PixelWriter** to draw and move at least 1000 particles each frame.

**[Colors: 4 points]:** Your program must draw the particles using at least 100 different colors.

**[Creative and Interesting: 8 points]:** When run, your program must draw something that is creative and interesting to behold.

**Extra Credit [up to +20]:** Your program creates particle effects that are exceptionally creative and beautiful.

## Penalties:

**[-5 points]:** Code does not adhere to those parts of the hallowed CS-152 coding standard thus far covered:

- 1) Correct indenting (no tabs and two spaces per block level).
- 2) Correct placement of brackets.
- 3) A comment at the top of the class giving your full name and the date.
- 4) In-line comments as needed. "As needed".
- 5) Must compile without warnings with IntelliJ's default warning settings.

Note: all 5 points are lost if any **one** of the standards is severely broken.

Note: No more than -5 even will be assigned for this section even if the code is a total mess and breaks all our coding standards.