

Project #7

NEBULA

Summary

A program that uses for loops to draw a series of nebulae.

Resources

- ❑ For Loops & Images Tutorial (Park)

On youtube <http://www.youtube.com/watch?v=ugYuWAQ25kA>
On the network S:\Malafarina\Videos\Processing Tutorials

- ❑ Modulus

- The % operator - Returns the remainder of a division
- Examples
 - `int x = 5 % 2; // x is 1`
 - `int y = 7 % 4 // y is 3`
 - `if(timer % 15 == 0) // every 15 frames, assuming timer is being incremented every`

Project

- Create a program that draws a nebula using shapes, fill, and loops.
- First, create a starfield in the background. This should consist of a random number of stars (Ex: 0 to 300) that appear in random positions on the screen. They can even vary in size, although this is not required.
- Second, create a nebula pattern using loops. This should be as random and varied as possible. You need to make it look cool, varied, and somewhat natural.
- Your program will display a new star pattern and nebula every 60 frames.
 - Hint: Use modulus to make sure you only act every few frames.
- Challenge: Create an object that moves in real time across the screen, like a comet or rocket ship. It should always start each new picture off the edge of the screen. If you need to update the image less frequently (every 5 seconds, instead of 1), that's fine!

