Project 3 Design Document

My vision for Project 3 is to create a collection of ellipses that have unique visual and auditory reactions based on how the user interacts with them. As the user scrolls down the page, they will encounter each ellipse as a horizontally-centered white stroke centered over a black background (project will be in greyscale). Each ellipse will only react once hovered over, and that reaction will pause or reset once the cursor is no longer interacting with it. Some of the elements that will change depending on the way the cursor moves upon them include: movement, size, speed, audio frequency, audio rate, and volume.

In terms of structure, each ellipse will be an individual class that will share common properties which will be given by a parent class. More specifically, each ellipse will represent a "Scene" class, and there will be a parent "Scene" for their shared behaviours. The "Scene" that is hovered over will be called on and therefore will be the only active class.

The use of conditionals, loops, arrays, sounds, and other topics covered in class will depend on the performance of each ellipse. For example, Prototype 1 represents expanding ellipses that vary in growth speed based on the position of the cursor in relation to the canvas center. The audio frequency also changes based on the mouse location: the frequency decreases as it approaches the center. This prototype will be further adapted and improved to be used as one of the ellipses for the project.



