<https://blanghamm.github.io/>

When starting this project I spent time looking at various artists to determine which route to take. The artists I looked at helped with initial inspiration however they did not use coding in the same way to create their art. Looking at sections of their work highlighted areas of interest and the way in which different elements reacted with each other.

Beeple’s piece Family Day uses a combination of geometric shapes and pastel colours to create an image that is both simplistic and contrasting. I was influenced by the use of basic geometric shapes repeated which inspired my use of basic shapes repeated to take something simplistic and develop a contrasting and interesting generative art piece. I went on to look at another artist called Novastructura. His piece Nuclei also uses an abundance of simple geometric shapes to create a piece that seems random at first but overall has large areas of symmetry. I was influenced by the way the objects interacted with each other and used this to create areas of symmetry throughout my piece even though the way it is generated is inherently random.

Another artist I looked at was Peter Olschinsky. His work Escherization doesn’t share the same properties as the first two pieces, it does use geometrical shapes however it has been washed over by random colours to disfigure the shapes. The way in which the colours bend and morph over the geometrical shapes adds to complexity of the image. When developing the project Olschinsky’s work was a key inspiration as the way the shapes and colours interact with each other helped form ideas about how the shapes should intertwine to create a complex patterns.

When initially developing the project the piece started out with eight squares of equal size moving inwards and outwards. The squares were moving due to their interaction with perlin noise. The next stage involved adding ellipses that followed the same pattern but instead centered around the eight squares. These were also controlled by perlin noise. The next step was to remove the background from redrawing every frame, this would cause the shapes to leave a trail which would result in the creation of the complex shapes.

Building on these initial ideas the next step was to add a layer of user interaction this would grant the user some control over how the work was generated, this would also lead to the creation of new complex patterns. A single mouse click would allow the user to begin rotating the work on a central axis. They would also be able to pause the work as it was generating by hitting the spacebar. The initial problem was making sure that once a parameter had been changed that it was possible to revert the parameter change. A single mouse click would cause the piece to begin rotating but without introducing a variable it was impossible to stop the piece from continuing to rotate. I also had this problem when using the spacebar to pause the art work; without the introduction of a variable I was not able to restart the animation.

Future upgrades to the piece would include the ability to spawn multiple instances of the generative piece with varying degrees of speed and size, also the ability to change the colours of these sections.

*Pieces referenced below:*

Beeple, 2017, *Family Day* [ONLINE] Available at: <https://www.instagram.com/p/BUVsqplj2ro/?taken-by=beeple_crap>

Olschinsky, PO 2015*, Escherization [*ONLINE*]* Availableat: [*http://www.olschinsky.at/ESCHERIZATION*](http://www.olschinsky.at/ESCHERIZATION)

Novastructura, 2008, *Nuclei* [ONLINE] Available at: <http://www.novastructura.net/wp/works/nuclei/>