Week 2 submissions for journal.

Graphical user interface, application, Word

Description automatically generated

Journal entry Week 2:

beginShape tutorial <https://youtu.be/76fiD5DvzeQ>

Interesting piece on using trigonometry commands to create Polar to Cartesian coordinates. Can use a coordinate of another object to create a new coordinate maintaining a constant but altering angle. Also links to this video explaining conversion between polar and Cartesian. <https://youtu.be/N633bLi_YCw>

Was going to use beginShape for the hair function on my first week 6 coding challenge however after reviewing this: <https://youtu.be/enNfb6p3j_g> realised a bezier curve may provide a more condensed efficient and fluid curve for hair. This allows for a continual drawing using Bezier verticies. This video then goes to explore using quadratic Bezier curves in order draw singular lines across a curve using a function called ‘lerp’. This is of a particular interest for my animated p5 project as I intend to use such grid patterns in a fluid, aesthetic manner to provide a ‘retro-fi’/retro sci-fi experience. A potential extension to this would be to investigate using cubic Bezier curves by using the ‘lerp’ function to ‘lerp’ 2 quadratic lerp functions.

Week 2 primarily began with myself establishing a design idea for a final project, as well as working on a static imaging coding task sheet having to create a self portrait.

This is the link for my final week 2 task:  
[Task 6 Week 2 coding tasksheet.](https://s35gray.panel.uwe.ac.uk/creative_coding/p5.js/Week%202%20tasks/Task6/)

Tasks 1 through 5 for the same weeks sheet can be found here:  
[Tasks 1-5 week 2 coding tasksheet.](https://s35gray.panel.uwe.ac.uk/creative_coding/p5.js/Week%202%20tasks/Tasks1_5/)

My week 2 task saw me exploring the following resources to advance my P5 skills. Firstly creating a portrait required the use of complex shapes. In order to create the hair, at first I thought of using a number of quads, however this presented a challenge, I would require a number of quads and the end result would have a blocky effect. I looked into a feature called createShape() as this would allow me to dictate an unlimited number of vertices to create the required shapes. createShape() is cleverly explained here by Daniel Schiffman on 'The Coding Train':  [https://youtu.be/76fiD5DvzeQ,](https://youtu.be/76fiD5DvzeQ) When Daniel goes through the createShape function, he then digresses onto using trigonometry to create polar and Cartesian coordinates in a manner that can produce some really interesting artistic effects (noted for my use later of course!). Daniel then goes onto explain curveVertex, an additional function that allows you to create a vertex to control a curve within the createShape() function, this almost seemed perfect for creating the effect I wanted for my hair. Within this video, Daniel goes onto explain the curveVertex function and how I could apply that to my work, but also goes onto mention briefly 'Bezier' curves which I thought would be a little easier to control for the shapes I'd like to achieve for my portrait. Fortunately, Daniels also done a video on bezier curves: <https://youtu.be/enNfb6p3j_g> which allowed me to create the shapes that I'm after, i successfully implemented these into my week 2 coding task.

In the interest of selecting and drafting potential final designs that I would like to work on for my final coursework, I began by exploring the myriad of creative coding based designers that can be found online. During my research I found a particular fascination with Patrik Huebner's work (https://www.patrik-huebner.com). Patrik's work seems to really capitalise on implementations of captured data available through various API's to create content for businesses and projects that are extremely relevant. A particular example that has really inspired me here is: <https://www.brute-wine.com/?mode=landor>. in Patriks words 'I developed a web-based, generative, interactive 3D-particle-weather simulation that allowed for an unforeseen level of visual exploration and interpretation'. For me this kind of implementation of creative coding and design really captures my interest, and such design seems to have this fortunate by-product of creating corporate identity in it's outputs, cool! Notably what has inspired me from this artist and what i'd like to explore is such creative coding opportunities using variable values taken from public data such as seismic charts to create beautiful, encapsulating works of art. A notable API I found that could potentially provide such data: <https://www.seismicportal.eu/webservices.html>

I have concluded that one of my art projects will be animated, and I'm going for a 'Synthwave' inspired theme and will explore the potential for an EQ. Synthwave is a genre of music heavily inspired by the Sci-Fi, Action and early video-game scene of the 1980's. Synthave's general visual aesthetics feature lots of Neon colours, sometimes a DeLorean, bright pinks and purples are also frequently found. Going back to the Bezier curve video by Daniel Schiffman, the video explains quadratic and cubic Bezier curves, and within their demonstrations i've come to realise that with functions such as 'lerp' in tandem with converting audio frequencies to a numerical value and storing them as variables, I may be able to use curves with fixed vertices at either end to create an equaliser effect for my Synthwave final art piece!