Introduction to Programming II Project Log

Project title:	The Music Visualizer Project
Topic:	Matrix Extension

What progress have you made this topic?

I found the firework beats extension very interesting and complex. But I choose not to use this extension in my project because I prefer to try my ideas. I did use an idea from this topic, and added it in my Matrix extension but used a simpler approach. It inspired me to use the fill of the Matrix and align it with the level of volume of the music and once the level is higher than 0.055 the circle gets filled with a random color. In the last 2 weeks, I finished my Matrix extension.

What problems have you faced and were you able to solve them?

The main issue I had finishing my Matrix Extension was the circle shapes. I initially created 2 var one for the index and one for the circle and then added the vertex or points. But it wouldn't form a circle shape, but then I did some research on p5.js and realized that I needed to add the sinus and cosinus towards the circle. So this solved my problem.

What are you planning to do over the next few weeks?

I am planning to finish my redPill extension and make further progress on my art extension if I have extra time. But in the next 2 weeks, my main focus will be on the redPill extension.

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

I still have 2 extensions I need to finish within the timeframe of 6 weeks. I do believe I am on target to finish this project in time.

Introduction to Programming II Project Log

Project title:	The Music Visualizer Project
Topic:	RedPill Extension

What progress have you made this topic?

In this topic, I finished my redPill Extension. I used the p5.FFT to analyze the sound and connect it to the strokes of the redPill. I also learn how to implement the colorMode in my RedPill function without affecting the color of the other extensions. Because of this, the colors of the strokes of the redPill uses the HSB color system.

What problems have you faced and were you able to solve them?

The problem I faced was the colorMode(HSB), initially I added the colorMode without using the push in the this.draw function of the redPill. But this affected the colors of the other extension. So I ended up using the push function in the draw function of the redPill and I added the colorMode after the push function was called. This resolved the issue.

What are you planning to do over the next few weeks?

Over the next 2 weeks, I am planning to finish my final Art Extensions, I am planning to add parts of the redPill and Matrix extensions to the Art Extension. And I will also take a look back at all the extensions I've finished and try to improve my code quality to make it more readily and user-friendly.

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

I am on target of finishing my Music Visualizer project on time, I still have 2 weeks to finish my Art Extension and 2 weeks for testing and improving my code quality.------------

Introduction to Programming II Project Log

Project title:	The Music Visualizer Project
Topic:	Art Extension

What progress have you made this topic?

In this topic, I finished my Art Extension. A lot of my inspiration came from the matrix movie. I added a red pill and blue pill, inspired by the redPill extension. I placed it on the canvas so that it look like eyes shapes, all while still interacting with the sound. I also added text to the canvas but used an array that represent different letters, and then make the letters appear randomly on the canvas. The text matrix under the pills only appears when the sounds pass the threshold of 0.05 of amplitude.

What problems have you faced and were you able to solve them?

The problem I initially had was in the text matrix. I couldn't make the letters appear randomly on the canvas but only the full word. I then had the idea to use an array and put each letter inside the array. I assign it to a variable and use the random function to randomize the letters. Then I only needed to margin where the letters would appear on the canvas.

What are you planning to do over the next few weeks?

Over the next 2 weeks, I am planning to work on my code quality to make it more readily and user-friendly for the entire project. I will also try to improve my ReadMe page, so the changes I've made are more understandable. I will be making a testing sheet and letting my friends test the project so I can get better feedback. From the testing, I will see if there are major bugs I might need to fix.

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

I am on target of finishing my Music Visualizer project on time, I still have 2 weeks to do the testing and improve my code quality.-

Introduction to Programming II Project Log

Project title:	The Music Visualizer Project
Topic:	Testing, usability, stability and code quality

What progress have you made this topic?

In this topic, I focused on the testing and code quality of my project. I made a testing sheet for my project so I can get feedback from the users. I didn't come to any major issues and everything went very well. I also clean up my code and added a better explanation of what each code meant. I also finished my README page and explained the changes I've made in the extensions.

What problems have you faced and were you able to solve them?

I didn't face any real issues when it came to testing my project, the testing went pretty smoothly and I didn't come across any major bug. The same goes for my code quality improvement, I didn't face any major issues that I couldn't handle.

What are you planning to do over the next few weeks?

For the remainder of the time, until I need to submit my project. I will read my code and try to look for ways I might improve my code quality. I might also do minor changes towards the design of the extensions but not the functions themselves.

Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?

I am on target of finishing my Music Visualizer project on time.