**Pre-Reflection**

As a recent Computer Science graduate from CEGEP, I have programming experience. Throughout my studies in CEGEP, I had the opportunity to learn various programming languages and technologies that are continuously changing. Although, through the program, I was taught to solve technical problems, and I did not fully get to explore much creative programming. Creative programming is essentially a project that invokes sentiments, feelings, and thoughts through digital or physical elements, which are produced programmatically. It has a mix of technical coding and creativity.

I had the opportunity to work with creative programming libraries and Application Programming Interfaces (API). For example, I used the Hyper-Text Markup Language (HTML) based API called Canvas. This API allows developers to manipulate the webpage and create drawings through the HTML canvas element. I found this quite similar to the JavaScript p5 library we are currently learning in this course. I used the Canvas API in an animation and drawing assignment, the project incorporated a splash page animation for a poker game program. My chosen game theme was a bank robbery, so I displayed 37 frames of a robber holding a bag full of money tiptoeing on the bottom of the screen. I also drew two circles to simulate a lamppost with flickering lights. Essentially it was a great learning experience and different from what I was typically used to doing.  I was very proud that I fused my technical programming skills with a more creative skillset, it helped me step out of my comfort zone and explore different technologies.

I am interested in story-based video games. Creative projects where the player's choice matters and how the users’ interactions can influence the different outcomes of the final ending. For example, the Quarry is an interactive video game where the player controls six different characters and helps them survive the night at a summer camp with a dangerous creature. These games give the user the freedom to make their paths and not be forced to follow a specific path. Due to the programmatic nature of the video game, the outcomes aren’t linear, and they are continuously adapting to the user’s decisions. Programming was used to create a more immersive gaming experience, to personalize the gameplay. Choice matters games also enhance replay value since the player is more intrigued to discover the different outcomes of the game.

Additionally, I have an interest in scrollable storytelling also known as Scrollytelling. Scrollable storytelling allows the developers to tell a story through scrolling on a web page. Many websites we come across incorporate Scrollytelling, this gives a more captivating experience for the users. For example, the World Wildlife Fund main page uses Scrollytelling to explain a story, show statistics. They also make the message that they are trying to spread stronger, by making text bigger and drawing elements as you scroll. Scrollytelling can also be used for selling products, Apple uses it sleekly, to display the different features and specifications of their devices. I find it interesting how you can elevate a static web page to feel more engaging by utilizing Scrollytelling.  I have taken a crash course on scrollable storytelling using the Scrollama JavaScript library. I do hope to utilize this skill in future assignments or projects. Scrollytelling enhances the user experience on a web page because instead of viewing a static webpage, the user plays a key role in the immersive web experience.

Lastly, I am also interested in utilizing audio elements in programming. I saw a project online where someone created an interactive birthday cake using the device's microphone. The program displayed a cake with lit-up candles and when the user would blow towards the screen, the lights on the cake would blow out. The project was posted via Instagram by Tru Narla a software engineer at Discord. I researched that project and realized the developer used the microphone on the electronic device to measure the force of how many candles could get blown out based on the intensity of the blow. That video spiked my interest in utilizing audio elements with programming to make small projects. Therefore, I created a boombox project using the Web Audio API that allows developers to manipulate audio on the web, add effects, create visualizations and much more. The cake program was a nice and creative project. Programming was used to create something dearer and more special to Tru Narla’s loved one. The role of programming brought something so simple and elevated it and made it more sentimental.

In the future, I hope to be involved in game development and produce a life simulation game or a role-playing game.  I have always been fascinated with games that take realism and incorporate it into a virtual world. It gives the players a way to escape reality and create their worlds or personas virtually. It is very dear to me since those games’ genres were the first type of games I remember playing. I want to be able to give other people the ability to make their realities through my work, I think that would be amazing. Programming is vast and continuously changing, it can allow you to do many things, such as complex data algorithms or simple static pages. With the proper knowledge and dedication, I would be capable of creating a sandbox world where others can escape and enjoy a break from reality.

**Works Cited:**

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