CART-263-2234-B André Neder de Almeida Student ID: 40208953

Reflective Essay

I always try my best to think out of the box. Often it results in amazing ideas, some of which I'm able to bring to reality and fulfill my objectives. Other times, this proves to be a double-edged sword and I tend to find these with all tools and materials I come across. With programming it has not been different.

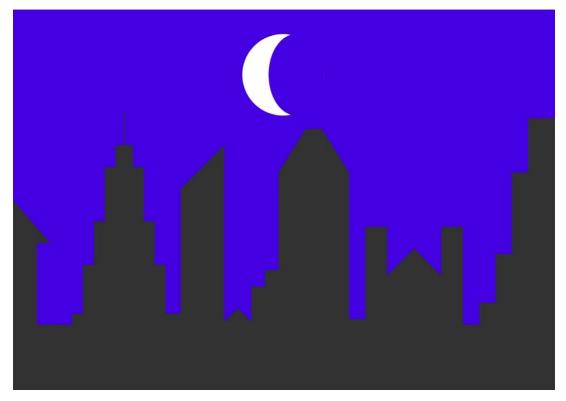
During the past year, I have rediscovered programming and the possibilities it could bring to my practice. With *Programming for Artists* (IMCA 221) and *Creative Computation I* and *II* (CART-253,263), I have forced myself into coding, a skill I have dodged for over 10 years.

Learning to code in a creative setting was a game-changer (and game maker) for me. It wasn't just about picking up a new skill, it was about connecting with fellow creatives, finally having the support I needed to learn, and achieving goals that before seemed unreachable. This experience changed my perspective on coding entirely, turning it from something I avoided into a powerful tool and material for self-expression and creation, and set me off to become the kind of programmer I wanted to be.

One of my main objectives in life is to entertain people by providing great stories or experiences. And another has always just been to "make stuff", with any mediums possible. The layer that programming has added to this is simply incredible because it allows me to have people interact with my experiments and to explore different ways of achieving one goal or conveying one idea.

I think that the best example that I can give is my first exercise with P5 JS, for the objectives were simple: make a change of colour, make an object move and make an object change size while using map and constrain. Context was not required, but I wanted to add some and I wanted to make it look good, so my experiment was a city skyline with buildings that alternated between day and night with a moving sun and moon. The only thing missing at the end was a change of size and I struggled a lot with it initially, and then I saw the perfect opportunity to make the moon phases, and by

doing that I could explore the documentation and start thinking like a creative programmer.



Day and Night

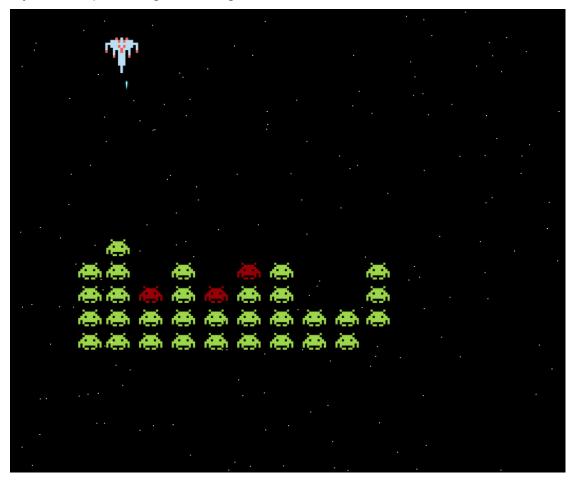
Despite of how important this exercise was for my learning process, it showed me how trying to do things to an unnecessary level of perfection could affect me. This helped me address a problem I wasn't sure I had, for even simple things would take me hours to accomplish just because I wanted to have it done well to the minimum details and I wanted to make something different from everybody else.

When producing at any medium, I always remember the quote by the great Shigeru Miyamoto: *delayed game will eventually be good, a bad game is bad forever*, which gives me a spectator's perspective of my work and makes me improve until I'm eventually satisfied. As much as I've already been like that with my other practices, I have learnt to let go at many levels to preserve my mental health and with programming I've come to learn how much room it can leave for improvements and continuation.

This semester, I continued to expand my programming skills by exploring new libraries and tools, including Phaser 3. Phaser 3 has opened up a whole new realm of possibilities for me, particularly in the field of game development. Despite of having

worked with P5 Play priorly, with Phaser 3, I've been able to take my coding skills to the next level and explore new avenues of engagement. However, even with the powerful capabilities of Phaser 3 and other libraries such as Al and speech, I've still encountered challenges in striving for perfection.

The game *Invade Spacers*, was my attempt to create a reverse version of the classic *Space Invaders*, Making it I faced many challenges, the biggest of which was making each first sprite of a column be able to shoot and cooldown after shooting. A problem that was totally unnecessary, but a feature I really wanted to have in and that I'm glad I accomplished. Even though Phaser is very similar to P5 Play, there is a huge learning curve for the many different methods one needs to learn, however, the Phaser documentation and community immerse you in the game making environment to the point that you end up wanting to make games.



Invade Spacers

Although I have a great passion for gaming, I'm not sure I want a future in game development, but I'd rather want to develop web experiences and installations to achieve my life objectives, since it aligns with my current career path and personal interests.

In conclusion, my journey into programming has been transformative. Through Creative Computation I and II, I've learned valuable coding skills and discovered a passion for a new creative expression. Learning to code opened doors to new possibilities and connections with fellow creatives.

Despite challenges, I've embraced imperfection and strived for improvement. Exploring libraries like Phaser 3 has expanded my horizons, despite the learning curve. Overall, programming has shaped me as a thinker and problem solver, and I'm excited to continue exploring its endless possibilities.