Concordia University

Reflective Essay

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As I reflect on my academic journey in programming, especially over the past semester, I can distinctly see the profound impact it has had on shaping my approach and perspective towards creative computing. My foray into programming started with basic skills in HTML and JavaScript, but this semester, I expanded my horizon by exploring new frameworks that not only enhanced my skills but also pushed the boundaries of my creative expression.

Exploration with Phaser 3, ml5.js, and p5.speech

One of the highlights of the past semester was my engagement with Phaser 3, a versatile game development framework. Working with Phaser 3 was exhilarating; it allowed me to build a game engine from scratch, which was both challenging and rewarding. This framework stood out to me because of its robust features that streamlined the development process and its excellent support for interactive and dynamic game elements. Creating a game engine not only bolstered my programming capabilities but also allowed me to integrate a high degree of creativity and interactivity into the projects. While Phaser 3 was a joy to work with, my experiences with ml5.js, which is designed to facilitate machine learning in web environments, were mixed. I found ml5.js to be somewhat buggy and less reliable, particularly when implementing more complex AI features. This challenge has sparked my interest in exploring other AI frameworks that offer greater stability and broader functionalities. Finding a robust and efficient tool for AI in creative coding is now a priority for me, as I wish to delve deeper into this intriguing intersection of technology and art.

Among all the frameworks I explored, p5.speech was my favorite. It was an empowering tool that significantly enhanced my competence and confidence in programming. p5.speech made it possible to implement interactive voice recognition and responsive speech synthesis in my projects, which opened up a new dimension of creative possibilities. The ability to integrate and manipulate voice data in real-time was not only fascinating but also expanded the scope of what I could achieve in my creative endeavors.

Creative Coding: Challenges and Insights

Throughout the semester, managing creativity under tight deadlines emerged as a formidable challenge. The constraint of time often limited my ability to experiment extensively and refine my projects. This experience highlighted an important lesson: creative coding requires a balance between innovation and practical implementation, especially within time-limited contexts.

Moreover, this semester provided a critical insight: while I thoroughly enjoy creative coding, the pressures and challenges associated with it make me appreciate it more as a hobby than a potential career path. This realization is pivotal as it helps realign my future endeavors with more clarity and focus on personal satisfaction rather than professional obligation.

Future Directions and Aspirations

Looking ahead, I am eager to explore and integrate more advanced artificial intelligence technologies into my programming projects. My mixed experiences with ml5.js highlighted the need for a more robust and reliable AI framework. I am particularly interested in discovering an AI tool that offers both the sophisticated capabilities and stability that ml5.js lacked. This search for a better framework is not just about enhancing the technical robustness of my projects but also about expanding the creative possibilities they can embody.

Additionally, I plan to continue my work with Phaser 3 and p5.speech. Phaser 3 has proven to be an exceptional tool for game development with its extensive functionalities that simplify the coding process while allowing room for creative layout and interaction design. I aim to delve deeper into developing more complex game environments and exploring new genres of games that can be both entertaining and educational.

p5.speech has opened up new avenues in how applications can interact with users through natural language. I plan to further experiment with this framework to refine the voice recognition features and expand the interactivity of my projects. The ability to

process and respond to voice commands accurately and creatively can transform how users engage with digital interfaces, making them more accessible and enjoyable.

My future projects will likely involve a synthesis of these technologies, aiming to create innovative, user-friendly, and visually appealing digital experiences. By continuing to learn and experiment with AI, game development, and voice interaction technologies, I hope to push the boundaries of what is possible in creative coding. This integration of diverse technologies not only challenges me technically but also fulfills my creative aspirations, making each project not just a task, but a journey of discovery and invention.

Ultimately, the goal is to blend these powerful technologies to not only achieve high functionality and user engagement but also to ensure that these digital experiences are inclusive and accessible to a wide audience. This means designing applications that are not only technically proficient and creatively compelling but also socially responsible and universally usable. The principles of sustainability and inclusivity will guide my use of technology as I move forward, ensuring that my work contributes positively to both the field of creative computing and to society at large.

By weaving these advanced tools into the fabric of my programming practice, I aspire to create not just functional and aesthetically pleasing digital artifacts, but also to innovate and inspire within the realm of creative technology. As I transition from simpler projects to more complex and integrated ones, I look forward to the new challenges and opportunities that these future explorations will bring.