Post-Reflection
Surprise Them: The Importance Of Giving Meaning To Code Elements

Yejin Oh 40229957

Concordia University

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Dr. Pippin Barr

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Revisiting My Programming Knowledge

At the beginning of this course, my programming knowledge was minimal. I had barely any experience with p5.js–my understanding of programming concepts was limited to foundational HTML and CSS, which I used to create a simple "gallery" type website and a point-and-click game for a previous class. This background somewhat prepared me in areas such as structures and calling functions however, the complexities of interactive design were my biggest learning curve.

Going into the initial major coding project (Art Jam), I felt frustrated and burnt out from previous experiences submitting programming projects where I felt like I kept missing the point–hearing things like *focus more on the code, it's a coding class!* Not only was my professor unhappy with my work but more significantly, I hated my *own* work. I started hating everything I was submitting at school so much that, I avoided submitting at all. I knew it was time to reevaluate my intentions during the process of developing projects. Throughout the semester, I made it a point to let go of my creative identity–to learn something impactful to create a new creative signature or, find what my *personality in the code* is, as Pippin would say.

One of the first lessons I learned was the importance of thorough documentation. Initially, I would write code without much thought about labelling or commenting, which made it difficult to understand and recall my own work later on. After the first coding assignment, I quickly recognized that clear comments are essential for clarifying my thought process and making my code understandable to others. This practice not only aids in debugging but also allows me to revisit projects after some time has passed without losing track of my intentions.

Another significant change has been using GitHub for version control. At the beginning of the course, I had little experience with version control systems nor did I

understand the importance. Regularly uploading my work to GitHub has allowed me to keep track of edits and revisions effectively. This practice has made it easier to review changes over time and understand how my projects have evolved. It has also instilled a sense of discipline in managing my codebase, ensuring that I can always revert to previous versions if needed. Additionally, GitHub has been helpful for collaboration as I can easily share my projects to get help debugging or getting feedback from the live file/game. Ultimately these are rudimentary aspects of the coding process however, it was so basic I overlooked them initially but, surprise, surprise! They're actually really useful and I should have listened from the beginning.

Last but most importantly, my ability to code dynamic interactions has improved significantly. I have transitioned from creating predictable designs to coding interactive elements that enhance user engagement. For example, when coding games or experiences, I like to focus on incorporating elements that are unexpected and/or relay a more profound message. These changes reflect a deeper understanding of programming as a tool for creativity rather than just a technical skill. The ability to create interactive experiences has transformed how I approach artistic projects.

The Relationship Between Programming Knowledge and Creative Practice

These new programming skills have directly influenced my creative practice in several ways. I always enjoy designing with a focus on user experiences (UX) rather than user interaction (UI), but I often struggle to communicate these designs exactly into code. Instead of fully realising my initial vision, I often opt for simpler solutions that do not *fully* represent what I initially planned to create. This poor practice only took away the fun from the creative process.

While I am comfortable with UX design principles, implementing complex interactions that align with my creative vision remains a challenge. This course has highlighted the need for persistence in overcoming obstacles during the coding process even if that means completing parts of the project little by little over weeks to not get overwhelmed and quit–*How do you eat an elephant? One bite at a time.*

Moving forward, I want to focus on several areas–investing time in execution, and enhancing user experience; One of the key lessons I've learned is the importance of committing time to fully realise my designs rather than settling for easier alternatives. I now recognize that investing time in execution is crucial for achieving the quality and depth that I desire in my work. Another area where I want to improve is enhancing user experience by incorporating elements that surprise users or add depth to interactions. This includes thinking critically about how users will engage with my projects and what emotions I want them to experience while interacting with them.

I learnt to be a programmer but this class taught me what it means to be an artist who codes; I can now create more engaging experiences that communicate meaningful messages beyond surface-level aesthetics.

Revisiting My Big Idea

Reflecting on what I've learnt this semester, my understanding of "Thursday is Teal" has changed significantly. While the original concept remains ambitious, my new understanding of programming has highlighted a more profound side to this project. My perspective on the project has shifted to focus more on accessibility and its potential as an emotional and intellectual probe. Even a simplified version focused on p5.js can offer valuable insights into how we perceive and process sensory information. This realisation has made the project feel more achievable and, in some ways, more impactful.

The accessibility aspect has become a central focus. I now understand how creative coding can address medical challenges, particularly for individuals with hearing or other sensory impairments. By translating music into visual art, the project could provide alternative ways to experience sound, potentially opening new avenues for inclusive design in digital art. Emotionally and intellectually, I see greater potential in exploring the boundaries between senses, even within the constraints of web technologies. While the full synesthetic experience may not be currently achievable, the project can still prompt users to reflect on their sensory perceptions and challenge their understanding of how we integrate different sensory inputs.

Technically speaking, I've gained a deeper appreciation for the complexities of audio processing and real-time visualisation. Although I can't implement advanced features like AI-driven analysis or haptic feedback, I now understand when to use the Web Audio API for basic audio input and create dynamic visualisations that respond to sound. This knowledge opens up possibilities for creating meaningful interactions between audio and visual elements.

Moving forward, I'm excited to explore how these tools can be used to create emotionally resonant and intellectually stimulating experiences through a dynamic use of the human senses. The project has evolved from a technically ambitious yet emotionally or intellectually predictable concept to a more dynamic focus on accessibility and sensory integration, through web-based creative coding.

Conclusion

Reflecting on this course has shown significant growth in my technical skills and artistic perspective. My understanding of programming has shifted from viewing it as a purely logical discipline to recognizing it as a medium for creative expression. This change

has allowed me to explore new forms of interaction and storytelling. As I move forward, I am eager to integrate deeper meaning into my projects while continuing to develop my technical abilities in creative coding. The skills I have gained will serve as a foundation for my future work as an artist who codes, enabling me to create projects that are visually engaging and rich in emotional depth.

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