

Pre-Reflective Essay

Since starting computational arts and specifically completing cart253 last semester, I've felt a lot more comfortable programming in general. I have some previous experience working with Python mainly during my time in engineering, which I found very boring and tedious work. I then learned some C# for unity programming when I was making a game for my portfolio. I also have some Arduino language programming knowledge as well for some side projects I've done for fun. After last semester, I've learned how to program in JavaScript (obviously), HTML and CSS. Out of the three I've learned; I am most comfortable with JavaScript. In terms of creative expression, I am very excited to learn more JavaScript and implement it into creating more immersive and unique gameplay. The aspect I find most challenging in coding is object-oriented programming. My main issue when using object-oriented programming is communicating between the different script files. I would like to learn how to properly and effectively use it while making larger scale projects.

Currently, I am interested in incorporating A.I. into my games. I want to create an A.I. chat bot where I can customize the personality of the bot and incorporate it into NPCs in the world. I was inspired by this game called Vaudeville, which is an L.A. noir type game where you interrogate different A.I. NPCs to find out which one is a murderer. The coding that went into the chat generation I find very intriguing. Another coding project that has inspired me was this game called Rain World, which uses A.I. generative animation for creatures in the game to make their interactions more realistic in an environmental sense. Such as different creatures interacting with each other and the player as well as unique creature animation that feels more fluid and realistic. I would love to figure out how they were able to code such complex features.

As mentioned before, the biggest coding idea I would like to attempt this semester is a functioning chat bot that can have different personalities depending on the setting. To push this concept even further, I want to make a personality setting where the chat bot responds in haikus or in rhyme. I'm not sure how hard it will be to make this project and I fear that I might be overambitious, but I am willing to size the scale down if necessary (perhaps focusing only on a working chatbot that is able to give responses). The section of the course that I find aligns with this project is the machine learning models. The voices

section of the course may also be implemented in my chat bot idea, allowing the bot to express vocally. Even the game engine section of the course would allow me to figure out how I could be able to use my chat bot in a video game. I'm hoping I will be able to make this as my final project and even use it in future projects beyond this course. I don't fully understand the scope and difficulty of this project yet, but I am eager to find out and figure out a way to make it feasible.