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Code Tool Kit
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Python

The challenges of PYGAME

In this paper I will express the goals and challenges that I faced during the learning process of learning python. I began reading and research how python works and how do I create similar logical mechanics that I have done with other programming languages. The first challenge that I encountered was learning to understand not use brackets and semicolon which felt different and causes some confusion with re-reading code. Since it felt as all the code were scrambled together while also having no solid structure but as I continue to follow class assignments and watch video tutorials the more comfortable I became with viewing python syntax. They're still a lot of things I don't know or understand but I'm starting to grasp the basics structure of the language. As we learned more in class I started thinking about the final project and what are the sort of things I would want to develop for the final python application. I started researching old algorithms of retro games that are not being use or talked about in today industry. I played games like "A good snowman is hard" and "Spelunky" which are puzzle basic games where the levels are design in a simple text pad using either numbers or symbols that represents the digital assets. These symbol are then use to create or generate levels easily without much programming which is something that I'm very interested in since there are many opportunity for people who can create tools for development. I believe that these type of technical skills are important in my field

of study. So I began searching all over the internet for as much information about these type of level creation and how can I develop something similar or the algorithm technique that are done to achieved these type of creation.

As I read more and watch videos on YouTube about this subject or related mechanics I began to play around with pygame library and learning how some of the imports work and setting up basic method for making a “GUI” window screen display and frame rate meter. Once I had this working properly I move forward on how can I display images and color on screen so that I can dress up some of the game. After these things were in placed I began to face challenged with pygame with audio input where I couldn’t find great information on how to initialize the function to play the sound wave track or mp3. So at this time I decided to hit the forums and asks question on Stack overflow about how I could play sound with pygame. There were some helpful people who guide me to the right direction how to initialize one audio track at a time. This helped me to at least have some music aspects in my game. Once I got some background music playing I moved on to creating the level generator using similar technique called A* algorithms that I have seen people used in UNITY using c#. A* is a grid base movement system and allowed you also to place objects in a column and row structure. I follow a tutorials on how to setup A* and how to get the simple functionality working. After this was working everything else came easy how to add sprites/art to the game. I spend most of my time making the assets for the game and trying to make the visual presentable. Overall I learned a lot about python but mostly how to ask people for help when you are lost on how to get these difficult thing working. I’m glad that the programming community are very kind and eager to help anyone achieved their goals. I wouldn’t have been able to make this small experience without Stack Overflow help.