1. **What limitations do you think your game engine would have? Try to explain what these limitations are. (Approx. 50-100 words)**

We have two main restrictions to our game engine: player movement, and texture limit. For our player, they would only be capable of moving in two axes (left or right, limited height by jumping/falling). Regarding our graphics, we would use sprites, instead of using hand drawn images. Our engine can only support pixelated images, not allowing us to get fully creative with our character and background design.

**2. How can you adapt your game engine in order to accept a different game genre? You may use diagrams, UML, etc. to help illustrate your example. (if your game genre was FPS pick a different genre for instance RPG and describe how your engine would be different). (Approx. 200-300 words)**

If we had to adapt our engine for a different genre, we could adapt it for a FPS. Our game engine already contains some qualities that could be used for this other genre, all we would need to do is tweak and make some changes. We would change the character movement components to include the Z-axis for more mobility, forcing the player to use the level geometry to obstruct enemies’ vision and projectiles, while requiring greater maintenance of spatial awareness. In order to let the player look around, we’d add a mouse input to allow for camera controls. At the same time, we’d also give our player the ability to fire a weapon with the mouse, and use a reticle system for aiming. Our enemies may have a more complex AI system, allowing for player tracking and obstacle avoidance, while also implementing a minimum distance for enemies to act upon them. We’d also try to implement more 3D graphics instead of just using 2D assets entirely within our engine. For environment/level design, we’d have the opportunity to create textures and backgrounds ourselves instead of using premade assets, allowing us to be a little more creative with our design. Finally, we would try to implement a particle system for special effects such as fire, lightning/electricity, and a new lighting system with our camera.