**What limitations do you think your game engine would have? Try to explain what these limitations are.**

I believe that one of the potential limitations for our engine would be having a complex environment or a high number of AI enemies in one scene. This would take a lot of computational power and would need to be done in a multi-threaded environment. Multithreading is beneficial in complex games, but there is a fine line for the benefit factor.

**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.**

Our primary game type, and therefor our focus for this engine, is first person shooters. If we were to change the genre to be a top down role-playing game, then the primary difference between the two genres would be the input scheme / controls. The controller inputs remain the same in the event of a controller, one stick aiming and the second controlling movement. The actions and abilities would remain the same for the players, as there would just be a change of camera angle and not too much else. One mechanic that will change for both the enemies and the players might be the cover mechanic. In the event of first-person shooters, a player is able to duck and hide behind objects; however, in top down role-playing games, it is not easy to illustrate depth for two dimensional objects. In the event of the top down game, it will be simple 2d object collision: if there is line of sight, no objects in-between, then it will register as a hit in the event of a range attack, or visible in the case of sight. The remainder of the items, actions, enemies and player abilities could remain the same.