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

If you are modifying anything, you now need to become familiar with a new codebase. If there is a bug in the engine, unless it is open source you can't fix it. The engine was not designed properly for your game; it may be less efficient than code you write specifically for your game. If a game is small, the overhead of using an engine may not be worth the time invested to write code yourself. If your game engine also has any editors or tools, you will have to build and test those as well before turning them over to artists or relying on them yourself.

1. 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 the game was to adapt to turn based strategy game, we would have to increase the numbers of actors within the game. The character class structure would change because now we are using multiple units and using a map generator. So each character that is picked has special units with abilities. Thus, actors with special abilities would have to be created. Also, we have to create environment AI that will randomize the different types of landscape units. If the player was playing alone, then we have an AI controlling the enemy character and create a resource management system. Where players would have to go out and reproduce resources to build units. In addition, there will be randomization for spawn points where players will be generated to a random point on the map. We would have to create a control interface for the players to change the level of difficulty. Also, we would have to incorporate online multiplayer option that will allow players to connect through the internet and match with appropriate opponents. Next, we need to incorporate rank played games and different versions of the game (i.e. death match, king of the hill, and kill the king).