

**CMAC3720 Team Game Assignment**  
**Spring 2024**

Each team will create a 3D Role Playing Game with the following features.

1. A cohesive story that drives the game.
  - a. Why are the characters in the game doing what they are doing?
  - b. Why does the player's character want to do what you want them to do?
2. A game world that fits with the story and supports the game play.
  - a. At least one structure must exist which requires a key to enter.
  - b. The world should be large enough to allow some amount of exploration by the player.
3. A sequence of quests for the player's character to fulfill.
  - a. The quests should increase in difficulty.
  - b. The quests should logically follow one another.
  - c. There should be three quest which do not include combat, which should be done from a third-person perspective.
  - d. There should be three quest which do include combat, two of which must be done from a first-person perspective.
4. A set of items to collect throughout the game.
  - a. Some items may be traded or bought in the game.
  - b. Some items may be used to make other items.
  - c. An inventory system must be used to hold, display, and retrieve the items held.
  - d. Ammunition and possibly armor should be available for collection and use.
5. The player's character should be able to move throughout the game world and do some specialized activities.
  - a. The player's characters abilities should grow as the game advances.
  - b. The player's character should be able to interact with the NPCs.
  - c. Character abilities may include sensing, strength, speed, etc.
  - d. The player's character should be able to have a choice of weapons.
6. The NPCs should have possibly similar abilities to the player's character.
  - a. Some NPCs should be working against you.
  - b. Some NPCs should be helping you.
  - c. Some NPCs should be disinterested in you.
7. The player's character should gain experience through successful questing.
  - a. Advanced experience should be reflected in some useful way in the game.
8. Combat involving the player's character is to be done in at most three quests in the game.

There must be three quests with no combat.
9. An appropriate user interface must be included.
  - a. Real-time player status should be presented.
  - b. Other useful information may be displayed.
10. The game must use behavior trees to control the NPCs.
  - a. There must be a BT for the enemy NPCs.
  - b. There must be a BT for the disinterested NPCs.