

- Map Engine

- The text and the background change color according to location ✓
- Lets player move about ✓
- Allows player to teleport ✓
- Runs all the animations O
- Allows entry and movement in buildings O
- Permanently changes according to ingame events O
- Dungeons generate infinitely O
- Dungeons will slowly kill the player O
- Certain areas can have unique movement rules O
- There are randomly spawned items O
- There are items that only spawn a set number of times O

- Combat Engine

- 2 text displays with color for showing combatants O
- 1 BW text display to show combat events and attack countdowns O
- Turnbased ✓
- Up to 6 on 6 combat ✓
- Displays selected player side combatant and targeted enemy for non AOE ✓ abilities
- Shows queued attacks O
- Allows use of items in the bag/inventory O
- No chore fights where you win by spamming one attack O
- No enemies will employ combat strategies that only serve to distance their inevitable loss. example: you take 90% of their HP so they heal back to 100% and this goes on for 4 to 20 turns O
- Enemy AI will use complex strategies and react to the players actions O

- Crafting System O

- Alchemy >> makes potions and gun type weapons
- Herbology >> gathers plants for various uses
- Mining >> gather metals and gems for various uses
- Blacksmithing >> craft metal weapons and armor
- Crystology >> turns crystals into various useful objects

- Creature Collection System O

- The habitat most similar to place of capture increases success rate
 - Some creatures can be befriended into joining the player
 - Some creatures have to be tamed by showing how much more powerful the player is
 - Legendaries cannot be captured but will offer help in return for payments
- Performance ✓
 - Do not use 100% of a single CPU core

Feedback from adviser

- Would've been better to have a more accessible client. Choice of an adult was good rather than a student but should have been adult who you would have been able to talk to more easily
- You bit of waaaayyyy more than you could chew
- So the decision to swap from a game to just a game engine was a good one

My Evaluation

The decision to make a fully fledged game even in 2D was terrible. Just making map classes took hours and hours. The creatures attack and item classes were more of the same. I didn't even get to creating items. However much I did not make a game, I did make a good engine. It doesn't break and has simple rules that always work. The GUIs and backbone for the game I wanted to make are all there. Some of the artistic features are missing. The combat system does not currently work. However even without those the current engine does allow for a variety of extensions to be built on top of it. This is because after decided to give up on making a game I focused on making the engine modular and extendible. The map system does support adding in dungeons easily. Someone just has to write a dungeon extension and trigger it from the current one using the dothing() method that every map file has. The same goes for attacks and movement. It's a great engine but it's not a game.

My Recommendations

1. Image sprites for creatures, items and player. This is just a case of replacing the text fields with swing Panels and using the standard image packages. I think this should take about 4 hours to do and was an intended expansion of the engine for the future when I made it.
2. There is no delay available for timing animations in the current engine. So there are no animations. Adding this is just a case of making a method that will delay a screen update for a set amount of time while freezing the players movement using the movelocker boolean of the MFC class.
3. Convert the map and creature engine from class based to text file based where the text files use some kind of scripting language. This would lower the engines RAM usage and make it possible for people to extend the game without source code

access. This is very doable however it is completely beyond my current programming abilities.