Character Class Diagram

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| Super class -Character |
| String name, int health, int defence, int damage, boolean isalive, int questID, int weaponDmg, int gp, int lives |
| Getters + setters for all variables |
| Sub Class - Player |
| Int numOfPotions, int potHealAmount |
| attack(), fight(), menu(), randDrops() |

**Pseudocode**

Character Class:

fight()

-runs into monster and monster name is displayed

-Fight starts

-Prompt player for attack, heal or run

-if attack is chosen

-perform attack() method

-if monster health drops below zero

-monster is dead

-print monster drops item for player

-if player health drops below zero

-check if player has any lives left

-if yes, then go back to previous checkpoint

-if no, game over

-if heal is chosen then

-check if player has any potions left

-if yes, increase player hp

-display player hp

-if not, print that player has run out of potions

-if run is chosen then,

-force player to stick to fight

attack()

Calculate random damage for the player using weapon damage, default damage

Calculate a random number for the enemy's defence.

Minus the random defence value from the total player damage

Repeat calculation for enemy, minus the damage from players defence

Apply the damage value to the enemy

Calculate new enemy health and print

Check to see if enemy is dead

If not dead, enemy attacks

Apply enemy damage to player

Calculate new enemy health and print

menu()

Print out menu options

Ask player for choice

If player choose heal

Print numofpotions

Ask for player input

Player uses potion, check health is not full and they have potions

Set players new health

Print health

If player chooses status

Print out players status

ranDrops()

Calculate random number

If number is 1, drop 1

If number is 2, drop 2

Otherwise no drop

Map class

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| --- |
| Maps |
| Int iscomplete, String name, int questID, arraylist inv, String choice. Array equippedItems, array wepName, array armName |
| Maps(constructor), Getters and setters for all variables, equipItem(), mapDirection(), devMenu(), Methods for all other map tiles. |

Pseudocode:

equipItem()

Print out inventory

Print out current equipped items

Ask player what they want to equip

Player chooses an item

Check to see if they have

Set player weapon damage to item weapon damage value

Add current equipped item to inventory

Replace equipped item with new item

Remove item from inventory

mapSquare()

Print current location

Check iscomplete

If new area or quest, story progresses

When finished, set iscomplete

If not new area, print out direction options