Rogue UML Classes

Character

* health : int
* damage : int
* armor : int
* crit : int
* name : string

+ Character()

+ Character(string, int, int, int, int)

+ ~Character()

+ set/get hp

+ set/get dmg

+ set/get armor

+ set/get crit

+ set/get name

+ attack() : int

+ getHit(int) : int

+ attackChar(Character&)

+ isDead() : bool

Player : Character

* xPos : int
* yPos : int
* xVel : int
* yVel : int
* exp : int
* max exp : int
* \*equipment : Inventory

+ Player()

+ Player(int, int)

+ render() : void

+ set/get xPos

+ set/get yPos

+ get exp

+ increase exp

+ set/get max exp

Enemy : Character

* xPos : int
* yPos : int
* xVel : int
* yVel : int
* exp : int
* \*loot : Inventory

+ Enemy()

+ Enemy(int, int)

+ render() : void

+ set/get xPos

+ set/get yPos

+ get/set exp

+ drop loot() : Item

+ generate item() : Item

Inventory

* capacity : int
* size : int
* \* stock : Item
* fill() : void

+ Inventory()

+ Inventory(int)

+ ~Inventory()

+ set/get capacity

+ set/get size

+ createInv () : void

+ createInv (Item&) : void

+ addItem(Item) : void

+ getItem(Item) : void

Item

* iDmg : int
* iArmor : int
* iCrit : int
* itemID : int
* iName : string

+ Item()

+ Item(int,string, int, int, int)

+ render() : void

+ set/get dmg

+ set/get armor

+ set/get crit

+ set/get itemID

+ set/get name

Random Item Generator

Item genItem(int scaling){

Srand(time(0));

int dmg, def, crit, id;

string name;

ifstream fPrefix;

fPrefix.open(“prefix.txt”);

string \*prefix =

ifstream fSuffix;

fSuffic.open(“suffix.txt”);

dmg = (rand()%11) + scaling;

def = (rand()%11) + scaling;

crit = (rand()%11) + scaling;

id = rand()%5;

switch(id){

case 0: //Generate helmet name

break;

case 1: //Generate chest plate name

break;

case 2: //Generate gloves name

break;

case 3: //Generate grieves name

break;

case 4: //Generate weapon name

break;

}

Item randItem(id, name, dmg, def, crit);

return randItem;

}