PROJECT REPORT "STEADY"
Program Design Method and Intro to Programming

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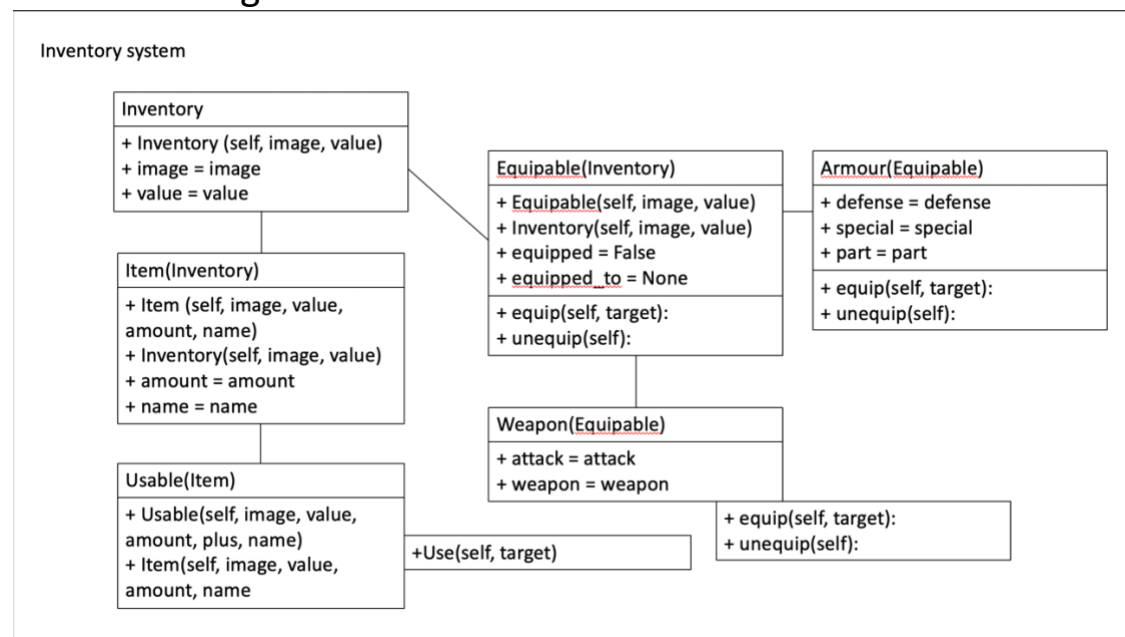Major: Computer Science

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Project Specification

  "Steady" is a simple RPG game, for the current build there is no plot or story, the player can take a quest and finish the quest to be able to access the shop where you could buy some items, the player could also fight enemy currently only one monster though, you can also travel by clicking at a point in a map.

Tools that are used to create the project:
- Renpy
- Atom
- Clip Studio Paint

Solution Design

Character

Player	Equip_weapon(self,weapon) (connected to the inventory)	Equip_Armour(self,armour, part) (connected to the inventory)
+ name (self, name, hp, mp, attack, defense, level) + name = name + hp = hp + mp = mp + attack = attack + defense = defense + level = level + weapon = None (connected to the inventory class) + gold = 0 + potion = 0 + armour = {"":None,"":None}	+ ask if weapon there is already weapon or not if it already have a weapon it will remove first (if self.weapon != None) + player attack += weapon attack + weapon = weapon	+ ask if armour there is already weapon or not if it already have a weapon it will remove first (if self.armour[part] != None) + player armour[part] = armour + player defense += armour defense + Monster -= armour special
	Unequip_weapon(self) (connected to the inventory)	**Unequip_Armour(self,armour, part)** (connected to the inventory)
	+ weapon != None + player attack -= weapon attack + weapon = None	+it will still ask If armour there armour because there is another armour in the player (if self.armour[part] != None) + player defense -= armour defense + player armour[part] = None + Monster += armour special

The Weapon and Armour should have the Equipable and their own __init__ but it doesn't fit in one page so I hope this should clear up if there is a confusion

Discussion

Inventory
Inventory is the main of the class, to give something a value and other class need inventory class for it to work. Image is for the image(like so it would give an Icon in this case, and value should be a coin but I haven't implement to selling item in this build)

Item
it uses the inventory and give another value that is amount and name even though in this project I haven't implement anything with name and amount but I could see how it work like (for example selected_item.name or selected_item.value) but since I didn't put name in every item probably it would crash and I need to redo all the code.

Usable
It uses the Item and plus, plus is for the amount of hp (for this build I haven't made use of mana but its pretty easy to make one just like if the item name called as lesser mana It increase the mana), this do need a function that is use and another function to be the target for in this case I need to put a function inside the character(well it doesn't really matter because renpy read all the file together so we don't need to import the module to the other file) to have a it use an item.

Equipable
It uses the same value as inventory but add equipped and equipped_to, where it going to be used in Weapon and Armour, equipped default value is false so if an item is equipped it will change into True and it will change the equipped_to into the target.

Weapon and Armour

Why did I put the explanation of Weapon and Armour as one is because they are actually almost similar, all the default value is None but the difference is Armour have multiple so it need a dictionary for example "head": None, I could use this in weapon to for example if I make the code the same like armour it will be "Left_hand": None and "Right_hand": None it just need to put the "part" on the character class, for the equip it will target the function on the character and equip the target into weapon or the armour that have been picked and if there is already something in the weapon or the armour it will change it into the one that is going to be used, for the unequip it only change the value into the default value.

Evidence