Player Item -MaxHp: int #m name: string -currentHP: int #m item quantity: int Inventory -attack: int #item timestamp: static int -defense: int +enumItemCat : enum ItemCat -m inventory : vector<Item*> -inv : Inventroy +Item(in name: string, in itemType: enum) +~inventoryr() -equipped_weapon : Item Weapon +output(): void +getName(): string -equipped armor: Item Armor +<<virtual>>~Item() +add(Item* item): void +Player(in hp: int, in attk: int, in def: +getItemQuantity() const : int +getSize(): int int) +get timestamp(): static int +getItem(in index): Item* +getMaxHP(): int +getItemCat()const : void +removeItem(): void +setMaxHP(in value : int) : void +<<virtual>> output(???) const : void +getCurrentHP(): int +<<friend>> operator<<(in ostream , out +setCurrentHP(in value: int): void Item&) +getAttack() : int +getDefense(): int +equipWeapon(inout weap : Item Weapon*): Void +equipArmor(inout weap : Item Armor*): Void +addToInventory(in item : Item*): void +outputInventory(): void +useItem(in choice : int) : void Item Weapon Item Armor Item Potion +<<friend>> operator<<(in ostream , out p: Player&) #m armor defense: int #m increase health: int #m weapon damage: int #m increase maxhealth: int +Item Weapon(in name: string, +Item Armor(in name: string, in armor defense: int) +Item Potion(in name: string, in weapon damage: int) +~Item Armor() in increase health: int) +~Item Weapon() +output(in ostream&) const : void +output(in ostream&) const : void +Item Potion(in name) +getArmorRating() const : int +~Item Potion() +getWeaponDamage() const : int +get pic axe(): void +get pic shield() : void +output(in ostream&) const : void +getArmorRating() const : int +getPotionRating() const : int +get pic sword(): void +get pic chest() : void +get MaxIncr() const : int +get pic mace(): void +<<friend>> operator<<(in ostream , out +get pic helmet(): void +get pic potion(): void +<<friend>> operator<<(in ostream , out +<<friend>> operator<<(in ostream , out Item Armor&)

Item Armor&)

Item Armor&)

#name : string #MaxHp:int #currentHP: int #attack:int #defense: int +Enemy(in _name : string, in hp : int, in attk : int, in def: int) +<<virtual>>~Enemy() +getName(): string +getCurrentHP(): int +setCurrentHP(in value: int): void +<<virtual>> getAttack() : int +<<virtual>> getDefense(): int +<<virtual >> getCombatChoice(in struct Cooldowns &cds)??????? StrongEnemy #equipped_weapon : Item_Weapon #equipped_armor : Item_Armor +StrongerEnemy(in _name : string, in hp : int, in attk : int, in def : int) +~StrongerEnemy() Dependency +getAttack() : int +getDefense(): int getCombatChoice(struct Cooldowns &cds) : Cooldowns (Struct) Action +heavy: int +dodge: int +block: int +combat(inout player: Player&, in room: int) BestEnemy +BestEnemy(in _name : string, in hp : int, in attk: int, in def: int) +~BestEnemy() getCombatChoice(struct Cooldowns &cds) : Action

Dungeon

#dungeon : vector<Room> #ascii_map[8][9] : char #currentRoom : Room*

- +Dungeon()
- +move(in index : int) : Room* +getCurrentRoom() : Room*
- +<<friend>> operator<<(in ostream , out

Dungeonr&)

```
#enemy:bool
#item : bool
#visited: bool
#north: int
#south:int
#east : int
#west:int
#y:int
#x:int
```

- +Room()
- +Room(in nrth, sth, est, wst, to_x,
- to_y) //All are in's and int's
- +set_visited(): bool
- +get_north() : int +get_south() : int
- +get_east() : int
- +get_west() : int
- +get_x(): int
- +get_y(): int
- +get_enemy():bool +get_item(): bool
- +set_enemy(in value : bool) : void +set_item(in value: bool) : void