Subject - state : std::pair<Coordinate, char> + notifyObserver() + attach(_ob : Observer*) - theGrid: std::vector<std::vector<std::shared_ptr<Cell>>> - chambers: std::vector<std::vector<Coordinate>> - PCLocation: Coordinate - h: int - race: std::string - StairLocation: Coordinate - td: std::shared_ptr<TextDisplay> - gameDiffLevel: int - seed: unsigned CS 246 A5 CC3K+ - flags: std::vector<std::string>>* + actionLog: std::vector<std::string> - addChamber(tempGrid: std::vector<std::vector<std::shared_ptr<Cell>>>&, c: Coordinate, tempChamber: std::vector<Coordinate>&) - countNeighbour(cdn: Coordinate&): std::vector<Coordinate> DDZ UML countNeighbour(cdn: Coordinate&, v: std::vector<Coordinate>&) + init(c: char) + updatePlayer() + updateGrid() + canMoveTo(cdn: Coordinate): bool + canMoveToNPC(cdn: Coordinate): bool + moveTo(newCdn: Coordinate) + usePotion(cdn:Coordinate) + PCattack(cdn:Coordinate) + printState(floorNum: int) + buyPotion(s: std::string) Cell - cdn: Coordinate Coordinate + getX(): int - + getY(): int + state(): int + getType(): std::string + getName(): std::string + canStep(): bool + attack(def:int): int + attacked(dmg : int) : int MapElement Item # maxHP: int # Atk: int # Def: int + state() + getTYpe() : std::string # canStep: bool # Atk : int # Def : int # withCompass: bool # withCompass : bool # moved : int + getType(): std::string # withBarrierSuit: bool # potionAtkEffect: int # potionDefEffect: int # moved: int + currInitState : int + attacked(dmg : int) : int + attack(PCDefence : int) : int + HP: int + coin: double + onTile: int + totalCoin: double + attack(NPCDefence: int): int + attacked(dmg: int): int + applyEffect(effect: int) + getType(): std::string + state(): int + resetCoin() + applyElimNPCAward() + getType() : std::string + state() : int Passage Observer) + state() + notify() + getName(): std::string + notify() + canStep() : bool + getName(): std::string + state() : int + state() : int + getName(): std::string Vampire Werewolf Troll Goblin Merchant Dragon Phoenix BarrierSuit TextDisplay Potion Treasure Compass + hatred: int - protect: Observer* effect: int - treasure: int - grid : std::vector<std::vector<char>> + getName(): std::string + state(): int + getName(): std::string + canStep(): bool + notify(whoNotified : Subject&) + getName(): std::string + attack(PCDefence : int): int + getName() : std::string + attack(PCDefence : int): int + state(): int + notify() + getName(): std::string + resetHatred() Human Dwarf + getName(): std::string + getName() : std::string + getName() : std::string + state(): int + state(): int + state() : int + getName() : std::string + attacked(dmg : int) : int + attack(PCDefence : int) : int + notify() + getName(): std::string + canStep(): bool + getName(): std::string + canStep() : bool + getName(): std::string+ applyEffect(effect: int) + getName(): std::string + applyEffect(effect: int) + applyEffect(effect: int) + applyElimNPCAward() + applyElimNPCAward()