## **Space Explorer UML Diagram** Item Hezekiah Dacillo | Enyang Zhang GameEnvironment name: String + daysToPlay: int CrewMember Crew cost: int - value: int + partsRequired: int name: String crewName: String + currentDay: int = 1 - maxHealth: int - shipName: String + numberOfParts: int = 0 + Item(name:String, cost:int, value:int) - health: int - shieldLevel: int = 1000 - candy: Food - hunger: int = 0 maxShieldLevel: int = 1000 - apple: Food + getName(): String - tiredness: int = 0 crewList: ArrayList<CrewMember> + setName(name:String): void - sandwich: Food - numberOfActions: int = 2 medicalItemsList: ArravList<MedicalItem> + getCost(): int pizza: Food repairAbility: int - foodList: ArrayList<Food> + setCost(cost:int): void - fish: Food searchAbility: int - amountOfMoney: int = 100 + getValue(): int - chicken: Food crewType: String - bandage: MedicalItem + setValue(value:int): void + getName(): String sick: boolean = false medkit: MedicalItem + setName(name:String): void - rand: Random - potion: MedicalItem + getShipName(): String + shop: ArrayList<Item> CrewMember(name:String, crewType:String, + setShipName(name:String): void + stock: ArrayList<Item> health:int, repairAbility:int, searchAbility:int) + getShieldLevel(): int - state: MenuState + addShieldLevel(hp:int): boolean - selection: int + getName(): String + minusShieldLevel(hp:int): void + crewSelection: int + setName(name:String): void + getCrew(): ArrayList<CrewMember> + crewSelectionPilot: int MedicalItem Food <<enumeration>> + getType(): String + addCrew(crew:CrewMember): void foodSelection: int MenuState + getHealth(): int + removeCrew(crew:CrewMember): boolean - medicineSelection: int - name: String - name: String + getMaxHealth(): int + resetCrew(): void doctorSelection: int - cost: int - cost: int - MAIN + addHealth(health:int): boolean + getMedicalItems(): ArrayList<MedicalItem> haveDoctor: boolean = false value: int - value: int - ACTION + minusHealth(health:int): boolean + setMedicalItems(item:MedicalItem): void + haveMercenary: boolean = false - STATUS + getHunger(): int + getFoods(): ArrayList<Food> + searched: boolean = false - OUTPOST + addHunger(hunger:int): void + setFoods(food:Food): void reader: Scanner - NEXTDAY + minusHunger(hunger:int): boolean + getAmountOfMoney(): int - rand: Random - CREWMEMBER + getTiredness(): int + minusMoney(item:Item): void **SPACESHIP** + addTiredness(tiredness:int): void + addMoney(money:int): void + addParts(): void FOODSELECTION + minusTiredness(tiredness:int): boolean + userInputS(): String - ACTCREWSELECTION + getActionNumber(): int + userInputI(): int - MEDICALSELECTION + resetActionNumber(): void + duplicateNames(crewMemberName:String): boolean - ACTCREWSELECTIONPILOT + minusActionNumber(): void + doctorCheck(): void - DOCTORSELECTION + getSick(): void + mercenaryCheck(): void + sickCheck(): boolean + setPartsRequired(): void + healSick(): void + createCrew(chooseCrew:int,crew crewMemberName:String): void + feed(food:Food): void + init(): void + applyMedicalItem(medicalItem:MedicalItem): void + intOutpost(): void + sleep(): void + resetActionNumber(): void + toString(): String + summarvInfo(): void + searchTransporterParts(): boolean + mainMenu(): void + searchItem(): void + crewSelection(): void + statusMenu(): void + outpostMenu(): void + crewMemberStatus(): void + spaceshipStatus(): void + action(): void + foodSelection(): void Scavenger Mercenary AssistantPilot Pilot Mechanician Doctor + medicineSelection(): void name: String - name: String name: String name: String name: String + doctorSelection(): void name: String - crewType: String = "mercenary" crewType: String = "scavenger" crewType: String = "assistant pilot" crewType: String = "pilot" crewType: String = "mechanician" + crewSelectionPilot(): void crewType: String = "doctor" - health: int = 100 - health: int = 90 - health: int = 80 - health: int = 80 - health: int = 80 + mainGame(): void - health: int = 100repairAbility: int = 5 repairAbility: int = 20 - repairAbility: int = 20 repairAbility: int = 20 repairAbility: int = 100 + asteroidBelt(): boolean - repairAbility: int = 5- searchAbility: int = 5 searchAbility: int = 50 - searchAbility: int = 15 - searchAbility: int = 15 searchAbility: int = 20 + plague(): void - searchAbility: int = 5 + plagueDamage(): void + pirate(): void + healOther(patient: CrewMember, + dailyDamage(): void medicine:MedicalItem): void