

Ship
<div>-name:String -crew:int -cargoSize:int -currentCargo:int -maxHp:int -resistance:int -sailSpeed:int</div>
<div>+getAttribute():type +setAttribute(type) +addAttribute(int) +displayShip()</div>

Upgrade
<div>-description:String -cost:int -upgradeType:int</div>
<div>+getAttribute():type +setAttribute(type)</div>

RandomEncounter
<div>-name:String -description:String -chance:int -stealAmount:int -damage:int -reward:int -delay:int</div>
<div>+getAttribute():type +setAttribute(type) +createRandomEncounter()</div>

Island
<div>-name:String -store:Store -routes:ArrayList<Route></div>
<div>+getAttribute():type +setAttribute(type) +visitStore():Store +takeRoute(int):Route</div>

Route
<div>-description:String - Describe the route? Put the info below into words? -days:int -risk:int -islands:ArrayList<Island></div>
<div>+getAttribute():type +setAttribute(type) +createPossibleRandomEncounter()</div>

Item name
Quantity
Base Price
Cargo status
Island bought

Store
<div>-buyableItems:ArrayList<Item> -sellableItems:ArrayList<Item> -purchasedItems:ArrayList<Item> -expensiveItems:ArrayList<Item> -cheapItems:ArrayList<Item> -upgrades:ArrayList<Upgrade></div>
<div>+setBuyableItems(ArrayList<Item>): +buyItem(int):Item +sellItem(int): +viewBuyableItems():ArrayList<Items> +viewSellableItems():ArrayList<Items> +viewPurchasedGoods():ArrayList<Items> +leaveStore():Island</div>

Item
<div>-name:String -description:String -size:Int -price:Int -hasSold:bool -soldPrice:int -soldIsland:Island</div>
<div>+getAttribute():type +setAttribute(type)</div>

Command Line UI
<div>+invalidInput() +askName():String +askDays():int +askShip():Ship +displayIsland(Island):int +displayShop(Shop):int +displayUpgrade(ArrayList<Upgrade>) +displayBuy(ArrayList<Item>)</div>

Global Variables
<div>repairCost:int startingGold:int scoreWeights:int costPerCrewday:int favouredMult:int=1.5 unfavouredMult:int=0.5</div>

GameEvironement
<div>-characterName:String -possibleShips:ArrayList<Ship> -currentShip:Ship -possibleIslands:ArrayList<Island> -currentIsland:Island -currentGold:int = StartingCash -inventory:HashMap<Item, int> -daysLeft:int -currentHp:int -upgrades: ArrayList<Upgrade> -characterName</div>
<div><u>Bruh the title of this class is spelt wrong and I had no idea this whole time</u></div>
<div>+getAttribute():type +setAttribute(type) +takeDamage(int) +repair(int) +isAlive():boolean</div>

+getAttribute():type
+setAttribute(type)

+displayShop(Shop).init
+displayUpgrade(ArrayList<Upgrade>)
+displayBuy(ArrayList<Item>)
+displaySell(ArrayList<Item>)
+displayRoutes(ArrayList<Route>)
+displayRoute(Route)
+displayRandomEcounter(RandomE)
+displayEnd()
+viewInventory()
+main()