

Milestone1_TheWorld Model Name	Tesing Plan Unit Test Name	Suppose Fail?	Classes and Methods	Input	Exepectation	Output Example (notes):
DrLucky	initialize DrLucky Success		DrLucky_Implement(String, Int, Int)	"DrLucky", 10, 10	Success Create a DrLucky Class	
	initialize DrLucky Zero Hp	Fail	DrLucky_Implement(String, Int, Int)	"deadDr", 0, 10	IllegalArgumentException	
	initialize DrLucky Negative HP	Fail	DrLucky_Implement(String, Int, Int)	"negativeDr", -1,10	IllegalArgumentException	
						At least need 1 room to start the game.
	initialize DrLucky Zero Rooms	Fail	DrLucky_Implement(String, Int, Int)	"DrLucky", 8,0	IllegalArgumentException	
	get Name String		getName() : String		A string of its name.	"DrLucky"
	get Current Hp Postive		getCurrentHp() : Int		A postive int of its current hp.	10
	get Current Hp Negative		getCurrentHp() : Int		A negative int of its current hp.	-3
	get Current Hp Zero		getCurrentHp() : Int		A Zero Ingeger of its current hp.	0
	get Current Room Number Success		getCurrentHp() : Int		An Integer of its room number	2
	get Current Room Number Negative	Fail	getCurrentHp() : Int		IllegalStateException	
	move DrLucky to next room Success		moveDrLucky()		Check dr lucky move to rooms in increase order of the total room.	ex: move rom in 0,1,2,3,4,5,....
						ex: previous hp is 10, decrease by 6, now hp is 4
	decreaseDrLuckyHp		decreaseHp(Int)	6	decrease dr lucky's health accordingly	
Item	Initialize Item Success		Item_Implement(String, Int)	"Sharp Knife", 3	Success Create an Item Class	
	Initialize Item Negative Damage	Fail	Item_Implement(String, Int)	"Bandaid", -2	IllegalArgumentException	
	get an Item Name		getItemName() : String		A string of its name.	"Sharp Knife"
	get an Item Damage		getItemDamage() : Int		An integer of its damage	3
	test toString		toString() : String		A string with name & damage	"Sharp Knife damage 3"
Room						
	Initialize Room Success		Room_Implement(roomName : string, roomNumber : int, topRowY : int, topColX : int, botRowY : int, botColX : int)	"Trophy Room", 10, 21, 15, 26	Success Create a Room Class	
	Initialize Room Fail Negative	Fail	Room_Implement(roomName : string, roomNumber : int, topRowY : int, topColX : int, botRowY : int, botColX : int)	"Negative Room", -1, 3, 2, 2	IllegalArgumentException	
	Initialize Room Fail Oversize	Fail	Room_Implement(roomName : string, roomNumber : int, topRowY : int, topColX : int, botRowY : int, botColX : int)	"Negative Room", 1000, 3, 2, 2	IllegalArgumentException	
	get Room Name		getRoomName()		A string of its name.	"Trophy Room"
	get Room Location		getLocation() : Int []		An array of int represent its location, in terms of its topleft corner rowY colX, and bottom right corner rowY, colX	10, 21, 15, 26
	get All Items With Damage		getAllItemsWithDamage() : Map<String, Integer>		A dictionary of all the item in the room with damage amount.	{"SharpKnife": 3, "Crepe Pan" : 3}
	get One Item Success		getOneItem(String) : Item	"Revolver"	An Item object	Item Obj
	get One Item Fail	Fail	getOneItem(String) : Item	"Not an item in room"	null item does not exist	null
	add One Item Success		addOneItem(Item)	An item object	Item added success	Item Obj
	add One Item Already Exist Fail	Fail	addOneItem(Item)	An already existing item object in the room	IllegalArgumentException	
	remove One Item Success		removeOneItem(Item)	An already existing item object in the room		

	remove One Item Non exist Item	Fail	removeOneItem(Item)	An non existing item object for the room.	IllegalArgumentException	
						"Trophy Room, inlcuding: Sharp Knife damage 3, Revolver damage 3 "
	test toString		toString() : String		A string with Room name, and Items in the room with damage,	3 "
World_Implement	test create Graph representation		createGraphBufferedImage() : BufferedImage		Success BufferedImage class be created	BufferedImage
	get World Name		getWorldName() : String		A string with Room name	"Mansion"
						"Library", "Tennessee Room", "DiningRoom", "Billiard Room".
	get Neighbors Room List		getNeighborsRoomList(String) : List<String>	"Trophy Room"	A list of String which are neighbors of the input Room name	
	get Total Room Number		getTotalOfRoom() : Int		An Integer of total room number in the World	10
	get Total Item Number		getTotalOfItem() : Int		An Integer of total Item number in the world	8
					A string of Room Name, DrLucky, players, items and neighbors of the room.	
	get One Room Info Success		getOneRoomInfo(String)	"Armory"		
	get One Room Info Failed	Fail	getOneRoomInfo(String)	"Not a Valid room"	IllegalArgumentException	A room not exist, throw Error
	move DrLucky in the World to next room		moveDrLucky()		Check dr lucky move to rooms in increase order of the total room.	
CreateWorldHelper	test World Build Success		readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	Success World correctly created and returnd	A correct build txt file given
	test World Build Worng File type	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.ababa"	IllegalArgumentException	
	test World Build File Not Exist	Fail	readBuildTxtFile(Readable fptr) : World	"Not exist file"	IllegalArgumentException	
						1st line boundry must all be postive
	test World Build Boundary Zero	Fail	readBuildTxtFile(Readable fptr) : World	"MansionWrongBoundry.txt"	IllegalStateException	
						1st line boundry must all be postive
	test World Build Boundary Negative	Fail	readBuildTxtFile(Readable fptr) : World	"MansionWrongBoundry.txt"	IllegalStateException	
						1st line must have a world name
	test World Build No World name	Fail	readBuildTxtFile(Readable fptr) : World	"No name Mansion.txt"	IllegalStateException	
						1st line boundry must be 2 postive integer.
	test World Build Incorrect Boundary	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	
						2nd line need to have a dr lucky's name
	test World Build DrLucky Name Invalid	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	
						2nd line 1 col need to have dr's Hp, Hp need to be postive Int.
	test World Build DrLucky Hp Invalid	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	
						3rd line col 1 need to have a postive int reflect total room numbers, and match follwing lines of rooms.
	test World Build Total Room Number Invalid	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	

test World Build Total Room Number Mismatch	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	4th line to following lines, should match 3rd line, the total room numbers
test World Build Room Format Error	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	Room spec line shoud looks like this: int int int int String, to represent it's topLeft and botRight location
test World Build Room Format Oversize Error	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	Room spec location our of World size
test World Build Room Format Overlap Error	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	Rooms cannot overlap each other
test World Build Room Format No Isolated Room	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	No isolated room in the World
test World Build Room Format Error No Name	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	Rooms must have a Name
test World Build Room Format Error Duplicated Name	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	Rooms Name cannot be duplicated
test World Build Total Items number invalid	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	No items number given
test World Build Items Number Mismatch Error	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	Items in the txt not match item amount
test World Build Items Duplicated Name Error	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	item name can not be duplicated
test world Build Items No damage Given Error	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	Item must have a damage int
test world Build Items damage not postive	Fail	readBuildTxtFile(Readable fptr) : World	"Mansion.txt"	IllegalStateException	Item must have a postive damage int