Milestone4_TheView (Author: Zack Xue)	Tesing Plan Unit Test Name	Suppose Fail?	Classes and Methods	Input	Exepectation	Output Example (notes):
Mock GUI Contoller Test Test Case Name:	testGuiNewWorldSetupScreen()		WorldController_Console_Implement() testGuiNewWorldSetupScreen() ()	input : Readbale, worldModel : World, output : Appendable	Success Create a WorldController_Console	Attack success hp reduced
	testStartNewWorld()		testStartNewWorld() ()			
	testPlayerSeenSameRoomWithPet		testPlayerSeenSameRoomWithPet()		True means can be seen	
	testControllerConsoleCmdMovePlayer		testControllerConsoleCmdMovePlayer()		Move success	Player to next room
	testEndDrLuckyEscaped		testEndDrLuckyEscaped()		Target health postive and max trun reached	Target escapted
	testEndDrLuckyDead		testEndDrLuckyDead()		Target health 0	Get a winner name
	testPlayerAttackSuccessWithNoPet		testPlayerAttackSuccessWithNoPet()		target health reduce	
	testPlayerAttackFailOtherPlayerInNeighborWithPet		testPlayerAttackFailOtherPlayerInNeighborWithPet()		target health unchanged	
	testPlayerAttackFailOtherPlayerInNeighborWithPet		testPlayerAttackFailOtherPlayerInNeighborWithPet()		target health unchanged	
	testPlayerAttackFailOtherPlayerInNeighborNoPet		testPlayerAttackFailOtherPlayerInNeighborNoPet()		target health unchanged	
	testGuiGameOverScreen()		testGuiGameOverScreen()()		target health unchanged	
	testHumanItemAttackFailWrongItemName		testHumanItemAttackFailWrongItemName()		IllegalArgumentException	
	testGuiExeMove()		testGuiExeMove()()		False means cannot seen	
	testPlayerLookPlayersInNeighbor		testPlayerLookPlayersInNeighbor()		Players in neighbor room info	String representation of the roomInfo
	testPlayerLookPlayersInNeighbor		testPlayerLookPlayersInNeighbor()		Players in neighbor room info	
Test GUI Controller Mock Model Test:	testShowWelcomeInfo		showWelcomeInfo()			Dsiplay proper welcome screen & picture info
	testShowErroException		showErroException()	String		Display proper message when error happens
	testShowStartTurnInfo		showStartTurnInfo()	String		Display graph that user proplerly started the turn
	testShowOneRoomInfo		showOneRoomInfo()	String		
	testShowOnePlayerInfo		showOnePlayerInfo()			
	testShowTargetInfo		showTargetInfo()			
	testButtonClick		addButtonListener()	ButtonLinstener		button click detected
	testKeyboardInput		addKeyBoardListener()	KeyboardListener		keyboard input detected
	testMouseInput		addMouseListener()	MouseListener		mose move detected
Test for GUI Controller: Test Case Name:	testHumanItemAttackSuccessHumanWin		WorldController_Console_Implement() testHumanItemAttackSuccessHumanWin()	input : Readbale, worldModel : World, output : Appendable	Success Create a WorldController_Console	Attack success hp reduced
	testControllerConsoleCmdKillPlayer		testControllerConsoleCmdKillPlayer()			
	testPlayerSeenSameRoomWithPet		testPlayerSeenSameRoomWithPet()		True means can be seen	
	testControllerConsoleCmdMovePlayer		testControllerConsoleCmdMovePlayer()		Move success	Player to next room
	testEndDrLuckyEscaped		testEndDrLuckyEscaped()		Target health postive and max trun reached	Target escapted
	testEndDrLuckyDead		testEndDrLuckyDead()		Target health 0	Get a winner name
	testPlayerAttackSuccessWithNoPet		testPlayerAttackSuccessWithNoPet()		target health reduce	
	testPlayerAttackFailOtherPlayerInNeighborWithPet		testPlayerAttackFailOtherPlayerInNeighborWithPet()		target health unchanged	
	testPlayerAttackFailOtherPlayerInNeighborWithPet		testPlayerAttackFailOtherPlayerInNeighborWithPet()		target health unchanged	
	testPlayerAttackFailOtherPlayerInNeighborNoPet		testPlayerAttackFailOtherPlayerInNeighborNoPet()		target health unchanged	
	testPlayerAttackFailNoDrLuckyInRoom		testPlayerAttackFailNoDrLuckyInRoom()		target health unchanged	
	testHumanItemAttackFailWrongItemName		testHumanItemAttackFailWrongItemName()		IllegalArgumentException	
	testPlayerNotBeSeenWithPet1		testPlayerNotBeSeenWithPet1()		False means cannot seen	
	testPlayerLookPlayersInNeighbor		testPlayerLookPlayersInNeighbor()		Players in neighbor room info	String representation of the roomInfo
	testPlayerLookPlayersInNeighbor		testPlayerLookPlayersInNeighbor()		Players in neighbor room info	

			input : Readbale, worldModel : World, output : Appendable	Success Create a WorldController_Console	
Test for WorldController_Console _Implement		WorldController_Console_Implement()			
Class Name :	testControllerConsoleStartGameSuccess	startGame()		Game Console successfully started	See welcome info to the game program
	testControllerConsoleQuitGameSuccess	quitGame()		Game Console successfully quit the program	Quit back to root directory
	testControllerConsoleStartPlaySuccess	startPlay()		Game setup correctly and start the rounds/turns to play	Display one room info.
	testControllerConsoleGetOneRoomInfo	getOneRoomInfo(String)	String-room name	String of the info of the room	Room number, name, items, players, target in the room, neighbors
	testControllerConsoleGetPlayersInfo	getPlayersInfo()		Give the list of the players and make selection from this list	player 1, player 2, player 3 to select.
	testControllerConsoleCreateMapPngSuccess	createGraphBufferedImage()		A png file of the world Map corrected. Return True success created.	WorldMap.png generated
	testControllerAddOnePlayerSuccess	addOnePlayer()	String of the player name & initial room	A player added successfully	
	testControllerConsoleCmdMovePlayer	cmdMove()	String of the moving target room	Human player can move successfully	
	testControllerConsoleCmdPickPlayer	cmdPick()		Human player can pick item successfully	
	testControllerConsoleCmdLookAroundPlayer	cmdLookArround()		Human player can look around and disply lookaround info mation	String representation of the roomInfo
	testControllerConsoleCmdKillPlayer	cmdKill()		Human player can hurt dr lucky	
	testControllerConsoleCmdMoveComputer	cmdMove()	String of the moving target room	Computer player can move successfully	
	testControllerConsoleCmdPickComputer	cmdPick()		Computer player can pick item successfully	
	testControllerConsoleCmdLookAroundComputer	cmdLookArround()		Computer player can look around and disply lookaround info mation	String representation of the roomInfo
	testControllerConsoleCmdKillComputer	cmdKill()		Computer player can hurt dr lucky	
Test for Controller:		WorldController_Console_Implement()	input : Readbale, worldModel : World, output : Appendable	Success Create a WorldController_Console	
Test Case Name:	testHumanItemAttackSuccessHumanWin	testHumanItemAttackSuccessHumanWin()			Attack success hp reduced
	testControllerConsoleCmdKillPlayer	testControllerConsoleCmdKillPlayer()			
	testPlayerSeenSameRoomWithPet	testPlayerSeenSameRoomWithPet()		True means can be seen	
	testControllerConsoleCmdMovePlayer	testControllerConsoleCmdMovePlayer()		Move success	Player to next room
	testEndDrLuckyEscaped	testEndDrLuckyEscaped()		Target health postive and max trun reached	Target escapted
	testEndDrLuckyDead	testEndDrLuckyDead()		Target health 0	Get a winner name
	testPlayerAttackSuccessWithNoPet	testPlayerAttackSuccessWithNoPet()		target health reduce	
	testPlayerAttackFailOtherPlayerInNeighborWithPet	testPlayerAttackFailOtherPlayerInNeighborWithPet()		target health unchanged	
	testPlayerAttackFailOtherPlayerInNeighborWithPet	testPlayerAttackFailOtherPlayerInNeighborWithPet()		target health unchanged	
	testPlayerAttackFailOtherPlayerInNeighborNoPet	testPlayerAttackFailOtherPlayerInNeighborNoPet()		target health unchanged	
	testPlayerAttackFailNoDrLuckyInRoom	testPlayerAttackFailNoDrLuckyInRoom()		target health unchanged	
	testHumanItemAttackFailWrongItemName	testHumanItemAttackFailWrongItemName()		IllegalArgumentException	
	testPlayerNotBeSeenWithPet1	testPlayerNotBeSeenWithPet1()		False means cannot seen	
	testPlayerLookPlayersInNeighbor	testPlayerLookPlayersInNeighbor()		Players in neighbor room info	String representation of the roomInfo
	testPlayerLookPlayersInNeighbor	testPlayerLookPlayersInNeighbor()		Players in neighbor room info	
WorldCommand	tetsWorldCmdKillReduceHpToZeroSuccess	cmdKill() & execute()		Completely killed DrLukcy & game over	Display reuslt & winner info

Model	Test Name	Status	Method	Input	Expected Behavior	Expected Output
	tetsWorldCmdKillReduceHpSuccess		cmdKill() & execute()		Kill success, DrLucky's hp decreased	Display result info
	tetsWorldCmdKillFailed	Failed	cmdKill() & execute()		try to execute the Kill command, but failed due to game rule kill condition not meet	Display kill failed info
	testWorldCmdGetOnePlayerInfoSuccess		cmdGetOnePlayerInfo() & execute()	String of the player name	String of the player info, items, current Room info	"Player1 has items: ....., currently in room # ...."
	testWorldCmdGetOnePlayerInfoFailed	Failed	cmdGetOnePlayerInfo() & execute()	String of the player name that doesn't exist in the game	Error info displayed by the console	"The player name you entered does not exist in this game round"
	testWorldCmdMoveSuccess		cmdMove() & execute()	String of the room name moves to	Success moved to the targeted room	
	testWorldCmdMoveFailed	Failed	cmdMove() & execute()	String of an Invalid room name	Error info displayed by the console	"The room name is invalid or not existi in the game"
	testWorldCmdAddOneHumanPlayerSuccess		addOnePlayer() & execute()	String of a duplicated player name	A player added successfully	"Player 1 added successfully"
	testWorldCmdAddOneHumanPlayerDuplicatedNameFailed	Failed	addOnePlayer() & execute()	String of a duplicated player name	Error info displayed by the console	"The player name already exist in the game, try a different name"
	testWorldCmdAddOneHumanPlayerWrongInitialRoomFailed	Failed	addOnePlayer() & execute()	String of a player name with invalid initial room info	Error info displayed by the console	"The player can not be placed in that room due to room number in correct"
	testWorldCmdPickSuccess		cmdPick() & execute()		Picked item success	
	testWorldCmdPickDuplicatedFailed	Failed			Error info displayed by the console	"Duplicated item detected"
	testWorldCmdLookAroundSuccess		cmdLookAround() & execute()		Display the lookaround info	String representation of the lookaround roomInfo
	testWorldCmdCreateMapPngSuccess		createGraphBufferedImage() & execute()		A png file of the world Map corrected. Return True success created.	WorldMap.png generated
Model: Player_Implement	testPlayerHumanCreatedSuccess		Player_Implement()	name : String, room : int, checkComputer : boolean	A human player created successfully	
	testPlayerComputerCreatedSuccess		Player_Implement()	name : String, room : int, checkComputer : boolean	A computer player created successfully	Computer player flagged for this player
	testPlayerCreateNullNameFailed	Failed	Player_Implement()	Player name is Null	IllegalArgumentException	
	testPlayerWithInvalidItemLimitFailed	Failed	Player_Implement()	name : String, room : int, checkComputer : boolean	IllegalArgumentException	Player limit is negative, failed
	testPlayerCheckPlayerHumanSuccess		checkComputerPlayer()		False for human player	FALSE
	testPlayerCheckPlayerComputerSuccess		checkComputerPlayer()		True for computer player	TRUE
	testPlayerGetPlayerName		getPlayerName()		Player's name in string	"Player name 1"
	testPlayerGetPlayerRoomNumber		getPlayerName()		getPlayer's current room in int	"1"
	testPlayerMoveToRoomNumberSuccess		moveToRoomNumber()	int : room number	move player successfully to the targte room	
	testPlayerMoveToRoomNumberFailed	Failed	moveToRoomNumber()	int : invalid room number	IllegalArgumentException	Room number can not be the same room number & must exist in the Game world
	testPlayerPickOneItemSuccess		pickUpOneItem()	Item	item picked success	
	testPlayerPickOneItemOverLimitFailed	Failed	pickUpOneItem()	Item	IllegalArgumentException	Item over limit, thus player cannot add more items
	testPlayerPickOneItemDuplicatedFailed	Failed	pickUpOneItem()	Item	IllegalArgumentException	Iteam already exist in the player itemlist thus can not added again.
Model: Mock_World Ms3MockWorldTest	testGetNeighborsRoomList		getNeighborsRoomList("Room1")			Check gameLog make sure the correct function is called and executed!

Test	Function	Notes	Verification
testGetWorldName	getWorldName()		Check gameLog make sure the correct function is called and executed!
testGetTotalOfRoom	getTotalOfRoom()		Check gameLog make sure the correct function is called and executed!
testGetTotalOfItem	getTotalOfItem()		Check gameLog make sure the correct function is called and executed!
testGetOneRoomInfo	getOneRoomInfo("Room1")		Check gameLog make sure the correct function is called and executed!
testMoveDrLucky	moveDrLucky()		Check gameLog make sure the correct function is called and executed!
testCreateGraphBufferedImage	createGraphBufferedImage();		Check gameLog make sure the correct function is called and executed!
testPrintWorldNeighborMap	printWorldNeighborMap();		Check gameLog make sure the correct function is called and executed!
testGetDrLuckyInfo	getDrLuckyInfo();		Check gameLog make sure the correct function is called and executed!
testPrintAllRoomInfo	printAllRoomInfo();		Check gameLog make sure the correct function is called and executed!
testAddOnePlayer	addOnePlayer("Player1", 0, false, 5);	Player name, limit, room, computer or not?	Check gameLog make sure the correct function is called and executed!
testSetTotalAllowedTurns	setTotalAllowedTurns(10);		Check gameLog make sure the correct function is called and executed!
testSetTotalAllowedPlayers	setTotalAllowedPlayers(4);		Check gameLog make sure the correct function is called and executed!
testCmdComputerPlayerAction	cmdComputerPlayerAction();		Check gameLog make sure the correct function is called and executed!
testCmdPlayerMove	cmdPlayerMove("Room2");	Player move String	Check gameLog make sure the correct function is called and executed!
testCmdPlayerLook	cmdPlayerLook();	Playe look string	Check gameLog make sure the correct function is called and executed!
testCmdPlayerPick	cmdPlayerPick("Item1");	Playe pick string	Check gameLog make sure the correct function is called and executed!
testCheckGameOver	world.setTotalAllowedTurns(5); world.cmdComputerPlayerAction(); world.cmdComputerPlayerAction(); world.cmdComputerPlayerAction(); world.cmdComputerPlayerAction();	combined different command input to run game until end.	Check gameLog make sure the correct function is called and executed!
testGetAllPlayerNames	getAllPlayerNames();		Check gameLog make sure the correct function is called and executed!
testGetAllPlayerInfo	getAllPlayerInfo();		Check gameLog make sure the correct function is called and executed!
testGetAllRoomNames	getAllRoomNames();		Check gameLog make sure the correct function is called and executed!
testGetOnePlayerAndRoomInfo	getOnePlayerAndRoomInfo("Player1");		Check gameLog make sure the correct function is called and executed!
testGetOnePlayerCurrentRoomName	getOnePlayerCurrentRoomName("Player1");		Check gameLog make sure the correct function is called and executed!
testGetCurrentPlayerName	getCurrentPlayerName();		Check gameLog make sure the correct function is called and executed!
testIsCurrentPlayerComputer	isCurrentPlayerComputer();	True or false depending currently player type	Check gameLog make sure the correct function is called and executed!
testGetCurrentPlayerIndex	getCurrentPlayerIndex();	int	Check gameLog make sure the correct function is called and executed!
testGetCurrentTurnNumber	getCurrentTurnNumber();	int	Check gameLog make sure the correct function is called and executed!

	Test		Method	Input	Expected/Return	Description
	testCmdPlayerMovePet		cmdPlayerMovePet()			player moved pet success & unable to see the room
	testPetWanderDfs		petWanderDfs()			pet move it self in DFS pattern
	testCmdKillSuccess		cmdKill(String : itemName) :		Boolean	kill success & target reduce the hp
	testCmdKillSuccessWithItem		cmdKill(String : itemName) :		Boolean	kill success & target reduce the hp based on item used
	testCmdKillSuccessWithNoItem		cmdKill(String : itemName) :		Boolean	kill success & target reduce the hp by 1
	testCmdKillFailed		cmdKill(String : itemName) :		cmdKill(String : itemName) :	Kill failed due to other player can see the current player
	testGetCurrentPlayerItems		getCurrentPlayerItems() :		List<String>	string of items available to player
	testGetWinnerPlayerExist		getWinner() :		String : PlayerName	winner namne
	testGetWinnerPlayerNotExist		getWinner() :		Null	No winner yet
Model: Pet_Implement	testPetCreatedSuccess		Pet_Implement(name : String)	String Pet name	A pet class created success!	See pet created in the world_Implement
	testGetPetNameSuccess		getPetName()		Player's name in string	"Player name 1"
	testGetPetNameFailed	Failed	getPetName()		No pet availbe in the world	Error: No pet availbe in the world
	testMovePetSuccess		movePet(RoomNum : Int)	Integer: valid room num	Move pet success & and unable to move success	