

1) UML

2) TEST PLAN

Class Name	Test Name	Test Condition	Input Examples	Expected Output
Controller	startGame()	Game starts successfully	Initialized game components	Successfully starts the game
Controller	processCommand(Command)	Valid move command execution	Player1 issues a move command to room B	Command executes successfully, Player1 in room B
Controller	processCommand(Command)	Invalid attack command	Player1 attacks a non-adjacent player	Returns "Target not in range" Returns
Controller	displaySpaceInfo(Space)	Display info for populated space Adding	Room A with 2 players and 1 item	detailed room description
Controller	addHumanPlayer(String name)	human- controlled player	Add Player1	Player1 added successfully
Controller	addComputerPlayer()	Adding computer- controlled player	Add AIPlayer	AIPlayer added successfully
Controller	getNextPlayer()	Get next player in a cycle	Players: [Player1, Player2, Player3]	Returns Player2
Controller	isGameOver()	Check game over by turn count	Max turns reached	Returns true

		Highlight		
		current	Current	
		player in	player:	Player1 is
Controller	highlightCurrentPlayer(Player)	view	Player1	highlighted
			Player1	Move
			moves from	succeeds,
		Valid move	room A to	Player1 is in
MoveCommand	execute()	command	room B	room B
				Item
			Player1 picks	successfully
		Valid item	up "Sword"	added to
PickUpItemCommand	execute()	pickup	in room A	inventory
		•	Player1 tries	
			to pick up	Returns
		Invalid item	"Shield" not	"Item not
PickUpItemCommand	execute()	pickup	in room	found"
•				Attack
			Player1	succeeds,
		Successful	attacks	Player2
AttemptAttackCommand	execute()	attack	Player2	loses health
,			•	
		Attack fails	Player1	Returns "No
		due to lack of	attacks with	weapons
AttemptAttackCommand	execute()	weapon	no weapons	available"
		Render all	World has 5	Successfully
		spaces and	spaces, 2	renders the
GameView	renderWorld(World)	players	players	world
dameview	Tender World (World)	piayors	players	World
			,	51
		Highlight	Active player:	Player1 is
GameView	renderPlayer(Player)	active player	Player1	highlighted
			"Player1	Message
		Display game	moved to	displayed
GameView	updateGameState(String)	state update	room B"	successfully
	apade dame date (biring)	•		· ·
		Target moves	Target moves	Target
		to adjacent	from room A	successfully
World	moveTarget()	space	to room B	moves
		Retrieve all		Returns all
		spaces in	World has 5	space
World	getSpaces()	world	spaces	objects
	getapaces()	Retrieve	Spaces	
		description	Room A with	
		for populated	2 items, 1	Returns
World	getDescription()	space	player	room details
VV OTTU	gemescription()	space	piayei	100m uctans

			Player1 moves from	
		Move to valid	room A to	Move
Player	move(Space)	space	room B	succeeds
Player	pickUpItem(Item)	Add item to inventory	Player picks up "Shield"	Item successfully added to inventory
Player	attemptAttack(Player)	Valid attack	Player1 attacks Player2 in adjacent space	Attack succeeds, Player2 loses health
Player	canSee(Player)	Visibility check	Player1 in room A, Player2 in room B	Returns true
Pet	moveTo(Space)	Move to connected space	Pet moves from room A to room B	Move succeeds
Pet	blocksVisibility()	Visibility blocked by pet	Pet in room A	Returns true
PlayerInventory	addItem(Item)	Inventory full, item added based on priority	Inventory: full, Item: "Sword" (higher priority)	Replaces lower- priority item
PlayerInventory	removeItem(Item)	Remove item not in inventory	Inventory does not contain "Potion"	Remove fails, returns "Item not found"
Target	move(World)	Target moves to a connected space	Target moves from room A to room B	Move succeeds
Target	getDescription()	Retrieve target details	Target in room A	Returns detailed description