Criteria	Summary	Pre-Condition	Expected Result	Steps	Actual Result	Status
			GAME MANAGEMENT			
Start a New Game	The system starts a new game, with a new save file, after inserting the [new] command in the main menu.	None	The system has to create a new JSON file with the game data of the game and the player has to play the game	Run the code and type [new] command	The system creates a new JSON file with the game data of the game and the player can play it	PASS
Load the last game	The system loads the last played game by using the [continue] command in the main menu.	There has to be at least one saved game on the cloud	The system has to load the saved JSON from the cloud on the game and the player should be able to continue a mid-run game	Run the code and type [continue] command	The system loads the saved JSON from the cloud on the game and the player can to continue a mid-run game	PASS
Load a past game	The system has a "saved game management" section that can be accessed by inserting [load] command in the main menu	There has to be at least one saved game on the cloud	The user should be able to choose which file load on from the cloud and the player should be able to continue a mid-run game	Run the code and type [load] command	The user is able to choose which file load on from the cloud and the player can continue a mid-run game	PASS
Auto-save game locally	The system saves the game in a json format locally after clearing each room	None	The system should save locally the game data on a JSON after clearing each room	Clear a room	The game save the game data on a JSON file after each cleared rooms	PASS
Auto-save game on cloud	The system saves the game data on a Firebase cloud after quitting the game	Have internet connection	The system should saves the current game JSON file on a Firebase server when the player quit the game	Use the command [quit]	The system saves the local json file with the current game data after the player choose to quit the game	PASS
Display available commands	The system shows all available commands for the current section using the [help] command.	None	The system should print a list of available command with a description of what each command does, only when the player typed help command	Use [help] command	The system print a list of available command with a description of what each command does, when the player typed help command	PASS
Alert on command not permitted	The user is informed if the inserted command is not available in that section.	None	The system should print that the inserted command was not available or spelled wrong	Misspell a command or use a disallowed command	The system prints a red alert whenever the player misspells a command or use a disallowed command	PASS

Criteria	Summary	Pre-Condition	Expected Result	Steps	Actual Result	Status
			MAP and EXPLORATION			
Available directions	The system displays the available directions to move towards from the current room.	Start a new game or load an existing one. Must be in a "MOVING" status.	The systems calls the "getAvailableDirections()" method and prints them.	Run the code and type [new] - [continue] - [load] commands. Directions are always shown when available	The system displays the available directions to move towards from the current room.	PASS
Move the player	The system moves the player to the inserted direction if available	Start a new game or load an existing one. Must be in a "MOVING" status.	The system checks if the inserted direction is reachable. If true the systems changes the player coordinates into the new ones.	The user inserts [gn], [gs], [ge] or [gw] command.	The system moves the player to another room or floor.	PASS
Map	The system displays the map which contains the current position of the player and the visited rooms with their type	Be in a "MOVING" game status.	The system checks the visited rooms and prints them in the map. If the "North Star" item is held in the inventory, the system should print every room of the floor even if they are not visited.	Clear a room or insert [map] command	The systems prints the map containing visited rooms. The full map is shown if the "North Star" item is held in the inventory.	PASS
Return	The system teleports the player back to the starting room of the floor	Be outside of combat	The system gets the start room coordinates and moves the player there.	Insert the [return] command.	The systems teleports the player back to the start room.	PASS
Locked Room	Some rooms are locked and require the "Special key" item to be accessed.	Find a locked room.	The system checks if the "Special Key" item is held in the inventory. If true the locked room can be visited, otherwise the player is informed that he room is locked.	Defeat the "Glitched" mob to acquire the "Special Key" item. Then find the locked loot room located in the second floor and move there.	The sytem moves the player into the locked room, consuming the "Special Key" item. If that item is not held in the inventory, the system prevents the player from entering the room.	PASS
Healing	The system automatically heals the player (1 hp and 1 mana) after clearing hostile rooms and restores 1 mana after clearing trap rooms.	Start a new game or load an existing one	When the system calls the "room.clear()" method, heals the player of 1 hp and 1 mana if the cleared room was hostile and heals 1 mana if the cleared room was trap.	Clear a room by defeating a mob or survive the trap effect.	The system heals the player (1 hp and 1 mana) after clearing hostile rooms and restores 1 mana after clearing trap rooms.	PASS

Criteria	Summary	Pre-Condition	Expected Result	Steps	Actual Result	Status
			COMBAT and INVENTORY			
Hostile encounter	The system displays mob/boss ascii and health bar	Start a new game or load an existing one	The system loads the mob info from the map.json and prints its ascii and health bar	Move into a never visited hostile room or boss room	The system displays mob/boss ascii and health bar	PASS
Combat commands	The system displays the available commands during combat	Be in a "FIGHTING" game status.	The system checks its current status and displays the correct available commands	Move into a never visited hostile room or boss room	The systems prints [atk] - [skill] - [inv]	PASS
Atk command	The player attacks the enemy	Be in a "FIGHTING" game status.	The system perfoms the attack against the enemy. The inflicted damage is calculated as ("Player attack " + "Weapon dice roll" - "Mob defense")	The user inserts [atk] during combat	The system performs the attack, it the enemy is not dead it attacks back and its health bar is updated. Player's weapon roll is also shown.	PASS
Skill command	The player activates its character skill	Be in a "FIGHTING" game status and have enough mana.	The system activates the right skill and subtract the required mana. The system then prevents the player from activating the skill again in the same "turn".	Insert the [skill] command during combat.	The system activate the skill and shows what skill is being used. The system prevents the user from insering another [skill] command in the same "turn".	PASS
Loot Mob	The player acquires xp, money and if he's lucky an item.	Defeat a mob or boss	The system invokes the "lootMob()" method. It gives the player xp and money based on the defeated mob/boss. If the player defeats a boss he also receives a guaranteed "Weapon Shard", otherwise he has a 20% chance to drop a random item.	Clear an hostile room by defeating its mob or boss	The systems shows how many xp and money the player acquired and if he found an item it also prints its ascii	PASS
Inventory	The system shows the player's inventory and the available commands during combat.	Be in a "FIGHTING" game status	The system shows held items list. The player can now consume an item, drop an item, get info on an item.	Insert the [inv] command. Insert the [use *item number*], [drop *item number*] or [info *item number*]	The system shows the items list, consumes the selected item, drops the selected item and prints the info of the selected item.	PASS

Criteria	Summary	Pre-Condition	Expected Result	Steps	Actual Result	Status
			LEVEL UP and STATUS			
Required XP	The player's level increases if he has enough xp points	Acquire enough xp points to level up	Upon defeating an enemy, the system calls the "addXp" method that contains the "levelUp" method which increases player's level and updates the required xp	Defeat mobs in the hostile rooms and acquire enough xp to level up.	The system increases player level and the required xp needed to level up.	PASS
Health and Mana Boost	Player's hp and mana value increase.	Acquire enough xp points to level up	Upon level up the system increases hp and mana stats by the result of D5 roll	Defeat mobs in the hostile rooms and acquire enough xp to level up.	The systems prints the stat increase, before and after.	PASS
Atk and Def Boost	Player's atk and def value increase	Acquire enough xp points to level up	Upon level up the system increases atk and def stats by the result of D3 roll	Defeat mobs in the hostile rooms and acquire enough xp to level up.	The systems prints the stat increase, before and after.	PASS
Full Restore	Player's hp and mana restore to the max value	Acquire enough xp points to level up	The system completely restores player's hp and mana to the new max values.	Defeat mobs in the hostile rooms and acquire enough xp to level up.	The system completely restores player's hp and mana to the new max values.	PASS
Status	The player can visualize a complete status report	Start a new game or load an existing one	A complete report of the player status, including character ascii and equipped weapon is printed	Insert [status] command.	The system shows player's ascii, hp, mana, atk, def, equipped weapon, weight and money.	PASS

Criteria	Summary	Pre-Condition	Expected Result	Steps	Actual Result	Status
			ROOM TYPES			
ASCII	The system prints the ascii of the enemy or trap or loot.	Start a new game or load an existing one	The system loads the correct room type from the map.json	Enter any unvisited room.	The system prints the correct ascii	PASS
Combat Room	The system prints the mob's ascii and starts fight	Start a new game or load an existing one	The system loads the correct room type from the map.json	Enter any unvisited combat room.	The system prints the correct ascii and the GameState is set to "FIGHTING".	PASS
Boss Room	The system prints the boss ascii and starts fight	Start a new game or load an existing one	The system loads the correct room type from the map.json and prevents the player to go back to exploring the floor as moving forces the player to change floor.	Enter any unvisited boss room.	The system prints the correct ascii and the GameState is set to "FIGHTING". After defeating the boss the player can only progress to the next floor.	PASS
Loot Room	The system prints thefound item's ascii	Start a new game or load an existing one	The system loads the correct room type from the map.json	Enter any loot room with unpicked up item inside.	The system prints the correct ascii	PASS
Trap Room	The system prints the trap ascii and apply its effect.	Start a new game or load an existing one	The system loads the correct room type from the map.json. The player has a 50% chance to avoid the trap effect.	Enter any unvisited room.	The system prints the correct ascii, "Windows Defender" ascii is printed if the player avoids trap effect.	PASS
Healing Room	The system prints the healing room ascii and heals the player.	Complete a floor.	The system loads the correct room type from the map.json and completely heals the player.	Defeat any boss and enter any direction command	The system prints the correct ascii and fully restores player's hp and mana	PASS

Criteria	Summary	Pre-Condition	Expected Result	Steps	Actual Result	Status
			NPCs			
Interaction	The player can interact with friendly entities in the Healing Room	Reach the healing room	The system sets its state to "MERCHANT SHOPPING" or "SMITH FORGING" and prints the correct ascii representing the npc.	Reach the healing room and insert [merchant] to talk with the merchant and [smith] to talk with the smith.	The system sets its state to "MERCHANT SHOPPING" or "SMITH FORGING" and prints the correct ascii representing the npc.	PASS
Merchant	Visualize merchant's item list	"MERCHANT SHOPPING" state	A numbered list of items on sale is shown with their price and weight.	Insert [merchant] command in the healing rooom	A numbered list of items on sale is shown with their price and weight. The system also shows player's money and free weight.	PASS
Buy	Buy items from the merchant list	"MERCHANT SHOPPING" state	The player can spend his in game currency to buy items.	Insert [buy *item number*] command	If the player has enough money and free weight to acquire the selected item, its removed from the merchant list and added to the player's inventory. The system blocks the interaction if the player has no money or free weight.	PASS
Smith upgrade	Uprade the equipped weapon	"SMITH FORGING" state	The player can consume his carried "Weapon Shard" items to upgrade the equipped weapon	Insert [give smith weaponshard] command	The system consumes the item from the player's inventory and upgrades the equipped weapon. The system also informs the player of how many "Weapon Shard" he has left in the inventory. The systems blocks the interaction if the player has none.	PASS

Criteria	Summary	Pre-Condition	Expected Result	Steps	Actual Result	Status
			ITEMS			
ASCII	The system shows the correct item ascii	Start a new game or load an existing one	The system shows the correct item ascii	Acquire, consume or drop an item.	The system shows the correct item ascii	PASS
Use	The player consumes the selected item	Have a consumable item in the inventory	The system removes the item from the inventory and apply its effect to the player.	Insert [use *item number*]. The number is the one from the inv print	The consumed item ascii is shown and its effect applied. During combat only one item can be consumed per turn.	PASS
Drop	The player drops the selected item	Have an item in the inventory	The system removes the item from the inventory.	Insert [drop *item number*]. The number is the one from the inv print	The dropped item ascii is shown and its removed from the inventory	PASS
Info	The player gets info the selected item	Have an item in the inventory	The system shows all the infos regarding the item	Insert [info *item number*]. The number is the one from the inv print	Item/Weapon Ascii is shown and its description printed.	PASS
Weight	Each item has a fixed weight and player has a fixed carriable weight	Acquire an item	The before adding an item to the player's inventory, the systems checks if the player has enough free weight to carry it	Pick up any item	The system only adds the item if the player has enough free weight.	PASS

Criteria	Summary	Pre-Condition	Expected Result	Steps	Actual Result	Status
			WEAPONS			
Effect	Some weapons have a special effect	Start the game with "DataThief" or "Hacker" or acquire the "Nanite Leech Blade"	The effect has a chance to trigger during combat	Insert [atk] command during combat	If the effect triggers its shown.	PASS
Swap	The player swaps the equipped weapon	Have a weapon in the inventory	The system swap a weapon in the inventory with the equipped one.	Insert [swap *weapon number*]. The number is the one from the inv print	The consumed item ascii is shown and its effect applied. During combat only one item can be consumed per turn.	PASS
Upgrade	Upgraded weapons deal more damage	Have an upgraded weapon equipped	Upgrade level level added to die roll	Upgrade a weapon via [give smith weaponshard] command while interacting with the [smith] enitiy.	The weapon deals more damage as its level is added to the die roll.	PASS

Criteria	Summary	Pre-Condition	Expected Result	Steps	Actual Result	Status
			GAME ENDING			
Lose	The player loses the game	Start a new game or load an existing one	When the player's hp reach 0, the "game over" ascii is shown and the save file is deleted. The user then returns to the main menu.	Reach 0 hp by fighting or trap room.	The game over ascii is shown and the save file is deleted. The user returns to the main menu.	PASS
Win	The player wins the game	Reach the final boss	When the player defeats the third boss and moves, the credits and score are shown. The save files is deleted and the user returns to the main menu.	Defeat the final boss of the game, the third one, located in the third floor of the game.	The credits and score are shown, the save file is deleted and the user returns to the main menu.	PASS