ID	Test Case Title	Description
1	Config Selection: select-config-type --> pre-defined	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Select Pre-Defined Config' Expected Results: - The maze game should load using the default configuration file. Actual Results: - The maze game loaded using the default configuration file as expected.
2	Config-Selection: select-config-type --> custom	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' Expected Results: - A window confirmation box should appear, confirming if this action was intended Actual Results: - A window confirmation box appeared, allowing me to confirm my choice.
3	Config-Generation: custom --> room-quantity --> invalid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any value other than a positive integer into the text prompt box. Expected Results: - I would expect the question to repeat itself until a valid value is supplied. Actual Results: - The text prompt reappeared instantly - asking the same question.
4	Config-Generation: custom --> room-quantity --> valid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box. Expected Results: - The next question should appear in the prompt - which should be asking for information on **all** of the passages for **every** room. Actual Results: - The next question appeared, asking me whether the North passage of room 0 was open.
5	Config-Generation: custom --> loop-rooms --> room-passage --> connecting-room --> invalid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter a value less than 0 OR greater than room quantity OR a non-integer value Expected Results: - I would expect the question to repeat itself until a valid value is supplied. Actual Results: - The text prompt reappeared instantly - asking the same question.

ID	Test Case Title	Description
6	Config-Generation: custom --> loop-rooms --> room-passage --> connecting-room --> valid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter an integer value between 0 and room quantity Expected Results: - The next prompt should appear - asking for the direction the passage leads to in the connecting room Actual Results: - The prompt appeared, asking the expected question.
7	Config-Generation: custom --> loop-rooms --> room-passage --> connecting-room --> direction --> invalid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter an integer value between 0 and room quantity 5.) Enter any string other than the 4 available directions (North, East, South, West) Expected Results: - I would expect the question to repeat itself until a valid value is supplied. Actual Results: - The text prompt reappeared instantly - asking the same question.
8	Config-Generation: custom --> loop-rooms --> room-passage --> connecting-room --> direction --> valid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter an integer value between 0 and room quantity 5.) Enter one of the 4 available directions (North, East, South, West) (case insensitive) Expected Results: - I would expect the next question to appear, for the next passage in that room. Actual Results: - The prompt appeared, asking for information on the next passage.
9	Config-Generation: custom --> loop-rooms --> threats --> invalid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Try to enter a threat type which is not in the mentioned list. Expected Results: - I would expect an alert to appear - informing the user that they entered an invalid threat type Actual Results: - The alert appeared, reading - "Invalid threat type - Please try again."

ID	Test Case Title	Description
10	Config-Generation: custom --> loop-rooms --> threats --> valid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter a valid threat type mentioned in the list. Expected Results: - The next question should appear - asking for the treasure type in that room. Actual Results: - The prompt appeared, asking for the treasure type.
11	Config-Generation: custom --> loop-rooms --> treasure --> invalid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Try to enter a treasure type other than 'gold' or 'key'. Expected Results: - I would expect an alert to appear - informing the user that they entered an invalid treasure type Actual Results: - The alert appeared, reading - "Invalid treasure type - Please try again."
12	Config-Generation: custom --> loop-rooms --> treasure --> gold	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Enter treasure type 'gold'. Expected Results: - I would expect the next prompt to ask how much gold. Actual Results: - The prompt appeared, asking for the value in gold.
13	Config-Generation: custom --> loop-rooms --> treasure --> key	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Enter treasure type 'key'. Expected Results: - If a key has not already been placed, then i would expect the next prompt to ask for information on the next room. Actual Results: - The prompt appeared, asking for the details on the next room.

ID	Test Case Title	Description
14	Config-Generation: custom --> loop-rooms --> treasure --> key --> multiple-keys	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Enter treasure type 'key'. 7.) Repeat steps 4-6 for the next room. Expected Results: - If the key has already been placed, then i would expect the next prompt to ask for the value of gold instead - as only one key can be placed. Actual Results: - The prompt appeared, asking for the value in gold.
15	Config-Generation: custom --> missing-key-treasure	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Enter treasure type 'gold'. 7.) Repeat steps 4-6 for the **every** room. Expected Results: - If the treasure type for every room has been set to 'gold', then it should force the user the pick a room to place the key in - replacing the 'gold' treasure in that room. Actual Results: - The prompt appeared, reading - "You have not placed the key for the exit! Which room will the key be in? Enter the RoomID here." **This prompt only accepts values between 0 and room quantity.**

ID	Test Case Title	Description
16	Config-Generation: custom --> set-exit-room --> invalid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Enter valid information for the treasure in that room. 7.) Repeat steps 4-6 for the **every** room. 8.) Enter an invalid roomID for the exit passage to be in. ('invalid' classes as either a room with no free passages, or a value outside of the roomID range) Expected Results: - If the entered value was invalid, and couldn't be linked to a room - i would expect to see the same prompt appear - waiting for a valid roomID. - If the entered value was valid, but the room it referenced to had no unused passages - then i would expect to see an alert informing me of this before repeating the prompt. Actual Results: - After entering a non-existent roomID, the prompt simply reappered - asking the same question. - After entering a valid roomID which has all 4 of it's passages in use, i saw the alert which read "That room has no free passages, please choose another.". Before the prompt reappeared asking the same initial question.
17	Config-Generation: custom --> set-exit-room --> valid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Enter valid information for the treasure in that room. 7.) Repeat steps 4-6 for the **every** room. 8.) Enter a roomID for the exit passage to be in. (between 0 and roomQuantity) Expected Results: - I would then expect the next prompt to ask which passage leads to the exit in the specified room. Actual Results: - The prompt appeared, reading - "What passage leads to the exit? North, East, South or West?"

ID	Test Case Title	Description
18	Config-Generation: custom --> set-exit-room --> set-exit-passage --> invalid-typo	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Enter valid information for the treasure in that room. 7.) Repeat steps 4-6 for the **every** room. 8.) Enter a roomID for the exit passage to be in. (between 0 and roomQuantity) 9.) Enter any string other than the 4 available directions (North, East, South, West) Expected Results: - I would expect an alert to appear - informing the user that they entered an invalid direction. Actual Results: - The alert appeared, reading - "Invalid Passage direction, or it already leads to another room - please try again."
19	Config-Generation: custom --> set-exit-room --> set-exit-passage --> invalid-occupied	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Enter valid information for the treasure in that room. 7.) Repeat steps 4-6 for the **every** room. 8.) Enter a roomID for the exit passage to be in. (between 0 and roomQuantity) 9.) Enter a passage direction that already connects two rooms together. Expected Results: - I would expect an alert to appear - informing the user that they entered an invalid direction. Actual Results: - The alert appeared, reading - "Invalid Passage direction, or it already leads to another room - please try again."
20	Config-Generation: custom --> set-exit-room --> set-exit-passage --> valid	Steps to Reproduce: 1.) Click "New Game" 2.) Click 'Create New Custom Config' 3.) Enter any positive integer into the text prompt box for room quantity. 4.) Enter valid information on the passages for that room. 5.) Enter valid information for the threat in that room. 6.) Enter valid information for the treasure in that room. 7.) Repeat steps 4-6 for the **every** room. 8.) Enter a roomID for the exit passage to be in. (between 0 and roomQuantity) 9.) Enter a direction which points to an unused passage (passageIsOpen = false). Expected Results: - I would then expect the config generation to finish, then load the maze game using the newly generated configuration. Actual Results: - The game loaded in, displayed one of the rooms that i had just created.

ID	Test Case Title	Description
21	Maze-Game: user-actions --> change-room --> closed-passage	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Find a room with less than 4 open passages. 4.) Click "Change Room". 5.) Try to click a direction which does not lead to an open passage. Expected Results: - I would expect that particular button to be unclickable - preventing the user from going in that direction. Actual Results: - I was in a room with the north & east passages open, but the south & west buttons were greyed out and unclickable in the "Change Room' sub action menu.
22	Maze-Game: user-actions --> change-room --> open-passage	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Find a room with less than 4 open passages. 4.) Click "Change Room". 5.) Click a direction which leads to an open passage. Expected Results: - I would want to see the room change as the user would expect. It would be noticable by the contents of the room (threats, treasure or passages), or by the roomID in the room information section. Actual Results: - The room changed. I was able to tell by the change of threat type, and the change of the displayed RoomID.
22	Maze-Game: user-actions --> attack-threat --> wrong-action	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Click "Attack Threat". 4.) Click a threat action which would not defeat the present threat. Expected Results: - I would expect an alert to appear informing the user that the action had no effect on the threat. Actual Results: - The alert appeared, reading - "That had no effect on the threat."
23	Maze-Game: user-actions --> attack-threat --> bribe --> wrong-action	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Find a room with a threat other than a dungeon master. 4.) Click "Attack Threat". 5.) Click "Bribe [50 Gold]" Expected Results: - I would expect an alert to appear informing the user that the action had no effect on the threat. Also, if the player wealth is greater than 50 then remove 50 gold from the player's wealth. Actual Results: - The alert appeared, reading - "That had no effect on the threat." and my wealth was then reduced by 50 Gold.

ID	Test Case Title	Description
24	Maze-Game: user-actions --> attack-threat --> correct-action	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Click "Attack Threat". 4.) Click the corressponding threat action for the present threat. Expected Results: - I would expect the threat to disappear, then the treasure to appear. - I would also expect to see the "Room Threat" in the room information section to change to "Defeated". Actual Results: - I attacked a bomb threat with the "Defuse" action. - The bomb disappeared. - 100 Gold was displayed. - The room information "Room Threat" changed to "Defeated".
24	Maze-Game: user-actions --> collect-treasure --> threat-present	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Click "Collect Treasure". Expected Results: - I would expect an alert to appear informing the user that the threat is still in the room - blocking access to the treasure. Actual Results: - The alert appeared, reading - "You must first defeat the threat!"
25	Maze-Game: user-actions --> collect-treasure --> threat-defeated	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Defeat the present threat in the room. 4.) Click "Collect Treasure". Expected Results: - I would expect the treasure to disappear from the room, and then have the treasure value added to the player's wealth. - I would also expect to see the "Room Treasure" in the room information section to change to "Collected". Actual Results: - I collected the treasure of 150 Gold, and my wealth increased by 150 as expected. - The treasure disappeared from the room. - The room information "Room Treasure" changed to "Collected".
26	Maze-Game: user-actions --> new-game	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Click "Restart Game" Expected Results: - I would expect the game to start again - which could be noticeable by the fact that the player is placed in a random room. It is possible however that the randomly selected room is the same as the previous game, in which case the threats/treasures would reappear. Actual Results: - After clicking "New Game" the room was randomly changed and all threats were present once again.

ID	Test Case Title	Description
27	Maze-Game: user-actions --> complete-game --> missing-key	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Locate the exit passage by simply changing rooms without defeating any threats. 4.) Try to go down the exit passage. Expected Results: - I would expect an alert to appear, informing the user that they are not in possession of the key for the exit. Actual Results: - The alert appeared as expected, reading - "You need to find the key first!" - I was then returned to the same room to continue the game.
28	Maze-Game: user-actions --> complete-game	Steps to Reproduce: 1.) Click "New Game" 2.) Select a configuration. 3.) Locate the treasure type "Key" by changing rooms and defeating any threats. 4.) Collect the key. 5.) Locate the exit passage. 6.) Try to go down the exit passage. Expected Results: - I would expect the game to finish, alerting the user of their final wealth. Actual Results: - The alert appeared as expected, reading - "Game complete! You finished with 140 gold coins!"