Login

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Case | txtUser | txtPass | Expected | Result |
| TC1 | Empty String | Valid String | Display a message "enter your Username" | Display two messages "enter your username" and "invalid username/password" |
| TC2 | Valid String | Empty String | Display a message "enter your Password" | Display two messages "enter your Password" and "invalid username/password" |
| TC3 | Empty String | Empty String | Display a message "enter your Username" | Display two messages "enter your username" and "invalid username/password" |
| TC4 | Invalid Username | Invalid Password | Display a message "invalid Username /Password" | Display a message "invalid Username /Password" |

Create New Account

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Case | txtUser | txtPass | Expected | Result |
| TC1 | Empty String | Empty String | Display a message "Please enter username and password", do not let user play a game | Create an account and user is able to play a game |
| TC2 | txtUser.length>50 | 0<txtUser.length<=50 | Display an error message "The length of username must be less than 50 characters", do not let user play a game | Create an account and user is able to play a game |
| TC3 | 0<txtUser.length<=50 | txtUser.length>50 | Display an error message "The length of password must be less than 50 characters", do not let user play a game | Create an account and user is able to play a game |
| TC4 | Sql hacking code | Sql hacking code | Will be recognized as a valid username or password and does not have any bad effect on database | Will be recognized as a valid username or password and does not have any bad effect on database |
| TC5 | 0<txtUser.length<=50 | 0<txtUser.length<=50 | Next form will be shown while "continue save game" is disabled and "play new game" is enabled | Next form will be shown while "continue save game" is disabled and "play new game" is enabled |

Start Game

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Case | TC1 | Expected | Result | TC2 | Expected | Result |
| PlayerName | Empty String | Close the program | Still playing | Length of PlayerName>50 | Display an error message, close the program | Still playing |
| FloorNumber | Negative value | Display an message, close the program | Raise exception, program crash | Out of bound value depends on difficulty | Display an message, close the program | Raise exception, program crash |
| Coord | Out of bound value | Display an message, close the program | Raise exception, program crash |  |  |  |
| Difficulty | Negative value | Display an message, close the program | Go through infinite loop, freeze the program | Value greater than 3 | Display an message, close the program | Go through infinite loop, freeze the program |
| CaseHint | Empty String | Continue the game | Continue the game | Random string | Continue the game | Continue the game |

Generate Random Sequence

|  |  |  |  |
| --- | --- | --- | --- |
| Case | Number of floors | Expected | Result |
| TC1 | <0 | Display an error message, close the program | Overflow exception, program crash |
| TC2 | 0 | Display an error message, close the program | Index out of range exception, program crash |
| TC3 | 1 | Continue the game | Continue for this function, fail for the rest (out of bound) |
| TC4 | >1 | Continue the game | Continue the game |

Add Monster

|  |  |  |  |
| --- | --- | --- | --- |
| Case | Current | Expected | Result |
| TC1 | <0 | Display an error message, close the program | Out of bound exception, program crash |
| TC2 | 0-3 | Display an error message, close the program | Continue the game and Monsters will be displayed as Items |
| TC3 | 4 | We have the Monster display on Screen | We have the Monster display on Screen |
| TC4 | >4 | Display an error message, close the program | Out of bound exception, program crash |

Save Game

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Case | ScareMeter | TimeRemain | Expected | Result |
| TC1 | Reaches the max value | >0 | Disable Save button | Save button is not disabled, User can click on save button but it does not save the player's game |
| TC2 | Does not reach the max value | =0 | Disable Save button | Save button is not disabled, User can click on save button but it does not save the player's game |

Black Box

|  |  |  |
| --- | --- | --- |
| Case | Input | Expected |
| Launch application | Double click on application icon | Provide new users an option of creating account and existing user logging in to the game  After user log in the game, a pop up window will provide a user an option of choosing difficulty |
| Floor Path | Go to elevator spot using key press X and C | Go to next correct floor in sequence.  Initially a player is on top of the building |
| Move | Moving on floor using key press W,A,S,D | W goes up, A goes left, S goes down, D goes right |
| Picking up the items | Pick up the items using key press E | The item get removed from the floor, and the player will have that item in his/her inventory |