Test Case ID		Test Type	Test Scenario	Test Case	Pre Conditions	Test Step	Input Data	Expected Result	Actual Results		Pass/Fail
Example		*Expected*	*Add Item Button Functionality*	*Check output of item on treeview proceeded by button press*	*Entry widget must have a input*	*1. Open Window* *2. Navigate to interactive widgets* *3. Input a task that would like to be completed in entry* *4. Press the Add Item Button*	*- Do the laundry*	*Display "Do the laundry" in the treeview widget*	*Displayed the "Do the laundry" task in the treeview widget*		*Pass*
1		Expected	Frame Widget Placement	Check if main frame for all widgets is placed in tkinter menu	Initiate programme	1. Open Window	(Nil)	Displays main frame in the centre	Succeeded expected result		Pass
2		Expected	Restart Button	Check if Restart button places below the main grid and score labels	Created grid via main frame	1. Open Window	(Nil)	Displays restart button under other widgets	Succeeded expected result		Pass
3		Expected	Button Grid System	Check if all 9 buttons are placed onto main frame	Created grid via main frame -> game frame	1. Open Window	(Nil)	Displays a grid of 3x3 buttons	Succeeded expected result		Pass
4		Expected, Boundary	Button Grid System	Check if all 9 buttons created automatically onto main frame	Created grid via main frame -> game frame	1. Open Window	(Nil)	Displays a grid of 3x3 buttons	Displayed buttons overlapping one another in an incorrect numerical order		Fail
5		Expected	Button Grid System	Check if buttons label to their corresponding id	Buttons are in a 3x3 grid	1. Open Window	- Pressed any button	Changes button text to button id	Instead changes text to tkinter button id not number id		Fail
6		Expected	Button Grid System	Check if button pressed prints button id, column id and row id	Buttons are in a 3x3 grid	1. Open Window	- Pressed any button	Prints in terminal the correct position and numeration of button id	Inccorectly states the column id		Fail
7		Expected	Button Grid System	Check once button is pressed it changes to the x symbol	Buttons are in a 3x3 grid	1. Open Window	- Pressed any button	Changes text UI to the 'x' character	Changed text appearance to 'x'		Pass
8		Expected	Button Grid System	Check if button pressed changes the state of the button to be deactivated	Buttons are in a 3x3 grid	1. Open Window	- Pressed any button	Changes the state of the button to become deactivated	Succeeded expected result		Pass
9		Expected	Game Win Condition	Check once a lane of 3 'x's print out a win statement	Player of x has created a lane of 3 corresponding	1. Open Window 2. Press buttons in the grid to make a row of 3	- Pressed 3 buttons in a row	Prints win condition in terminal	Succeeded expected result		Pass
10		Expected	Game Win Condition	Check if 'o's print out win statement when in a row of 3	Player of o has created a lane of 3 corresponding	1. Open Window 2. Press buttons in the grid to make a row of 3	- Pressed 3 buttons in a row	Prints win condition for o in terminal	Failed to print out win condition		Fail
11		Expected	Score Label Update	Check if label inherits new tkinter int variable	Initiate programme	1. Open Window	(Nil)	Score label changes to number 0 to indicate current score	Failed to make number 0 and instead read PY_VAR7		Fail
12		Expected, Boundary	Score Label Update	Check if either 'x' or 'o' connect 3 in any direction in the game grid therefore changing the score	Either play has a row of three corresponding shape	1. Open Window 2. Press buttons in the grid to make a row of 3	- Pressed any button	Changes the score label corresponding	Failed to change display		Fail

13	Expected, Boundary	Game Restart Condition	Check if game_frame deletes all button widgets then replaces them	Press restart button	1. Open Window 2. Press Restart Button	- Pressed restart button	Makes a 3x3 grid of new widgets	Instead created many sets of 3x3 grids overlapping causing programme to crash	Fail
14	Expected, Boundary	Game Restart Condition	Check if game makes a new refreshed game for players to play on	Press restart button	1. Open Window 2. Press Restart Button	- Pressed restart button	Makes a 3x3 grid of new widgets	Instead overlapped previous games on top of each other recording previous game information	Fail
15	Expected	Game Restart Condition	Check if game restarts when a player wins	Player has created a 3 in a row line of 'x's or 'o's	1. Open Window 2. Play Game till a player has won	- Press 3x3 buttons in grid	Grid will reset to what it was prior to the game starting	Successfully displayed result	Pass
16	Expected	Aesthics - Game Buttons	Check that button in the 3x3 grid labels are replaced with empty squares rather than numbers	Initiate programme	1. Open Window	(Nil)	Buttons change text to the character ' '	Successfully displayed result	Pass
17	Expected, Boundary	Tie Game Condition	Check that once there are no possible choices for the player to do, the game automatically resets	Game has no more possible moves available	1. Open Window 2. Play Game till a player cant make a move	- Press 3x3 buttons in grid	Game resets automatically changing the button tiles appropriately	Fails to execute game restart when no available spaces are left	Fail
18	Expected, Boundary	Tie Game Condition	Check that tie score counter label updates when there are no available options left for players	Game has no more possible moves available	1. Open Window 2. Play Game till a player cant make a move	- Press 3x3 buttons in grid	Tie score label adds one to the point counter	Successfully Displayed result	Pass