Table 1

Test Case	Criteria	Procedure
1.1	All links must on the website must connect to the correct location.	1. Open github pages live link in browser for the Game of Life website. 2. Click on all navigation links, footer elements, buttons and home logo. 3. Repeat process in each page for each link.
2.1	All images and elements on website must load correctly and quickly.	1. Open github pages live link in browser for the Game of Life website.. 2. Click on each of the navigation links. 3. Observe the response time.
3.1	All fallback fonts must work visually should the first choice fonts be unavailable.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Right click on website and select ‘Inspect’. 3. Select the font and remove primary font and replace with fallback font.
4.1	All elements on the website must be responsive, resizing for different screen sizes and maintaining their integrity with no overlapping.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Right click on website and select ‘Inspect’. 3. Click on the divider between the site and the toolbar on the right hand side of screen. 4. Drag the screen so that it reduces to mobile size (min300px) and then expand the screen to its maximum. 5. Repeat on each page of the website.
5.1	All external links direct to the correct website.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Click on the social media icons in the footer and ensure they direct to the correct website in a new tab
6.1	The website loads correctly and functions in Chrome, Internet Explorer, Safari and Firefox.	1. Open GitHub pages live link in Chrome browser for the Game of Life website. 2. Right click on website and select ‘Inspect’. 3. Click on the divider between the site and the toolbar on the right hand side of screen. 4. Drag the screen so that it reduces to mobile size (min300px) and then expand the screen to its maximum. 5. Repeat on each page of the website.
6.2	The website loads correctly and functions in Chrome, Internet Explorer, Safari and Firefox.	1. Open GitHub pages live link in Internet Explorer browser for the Game of Life website. 2. Right click on website and select ‘Inspect’. 3. Click on the divider between the site and the toolbar on the right hand side of screen. 4. Drag the screen so that it reduces to mobile size (min300px) and then expand the screen to its maximum. 5. Repeat on each page of the website.
6.3	The website loads correctly and functions in Chrome, Internet Explorer, Safari and Firefox.	1. Open GitHub pages live link in Safari browser for the Game of Life website. 2. Right click on website and select ‘Inspect’. 3. Click on the divider between the site and the toolbar on the right hand side of screen. 4. Drag the screen so that it reduces to mobile size (min300px) and then expand the screen to its maximum. 5. Repeat on each page of the website.
6.4	The website loads correctly and functions in Chrome, Internet Explorer, Safari and Firefox.	1. Open GitHub pages live link in Firefox browser for the Game of Life website. 2. Right click on website and select ‘Inspect’. 3. Click on the divider between the site and the toolbar on the right hand side of screen. 4. Drag the screen so that it reduces to mobile size (min300px) and then expand the screen to its maximum. 5. Repeat on each page of the website.

Test Case	Criteria	Procedure
7.1	The website performs as required as outlined in User Stories for External users and the site owner. - 1. As an external user I want to easily interactive with the game.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Interact with the canvas, click on each of the buttons and sliders. 3. Ensure each button and slider offers the correct response as well as ‘popover’ hint text to aid users.
8.2	The website performs as required as outlined in User Stories for External users and the site owner. - 2. As an external user I want to be able to start and stop the game easily.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Draw on the canvas. 3. Click on the “Play” button. 4. Click on the “Play” button again.
8.3	The website performs as required as outlined in User Stories for External users and the site owner. - 3. As an external user I want instructions on how to game works.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Location ‘Information’ icon on the main screen. 3. Click on the icon. 4. Scroll through the instructions. 5. Close the instructions.
9.0	Clicking the clear button resets the generation counter and clears the canvas	1. Open GitHub pages live link in browser for the Game of Life website. 2. Draw on the canvas. 3. Click on the “Clear” button.
9.1	Clicking the “Seed” button fills the canvas with random cells	1. Open GitHub pages live link in browser for the Game of Life website. 2. Click the “Seed” button 3. Click the “Play” button
9.2	Clicking the “Play” button when the canvas is empty should create an alert saying “Please draw inside the circle or click 'Seed' button before hitting 'Start' ”	1. Open GitHub pages live link in browser for the Game of Life website. 2. Click the “Play” button. 3. When the alert pops up click ‘ok’ to dismiss it.
9.3	The Zoom slider changes the size of the canvas and the cells within.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Draw on the canvas. 3. Slide the “Zoom” slider left and right.
9.4	The Speed slider changes the speed of the simulation	1. Open GitHub pages live link in browser for Game of Life website. 2. Draw on the canvas and press “Play”. 3. Slide the “Speed” slider left and right. 4. Observe the simulation speed.
9.5	The colour selector changes the colour of the canvas cells when drawing or when the simulation is running	1. Open GitHub pages live link in browser for the Game of Life website. 2. Select a colour from the colour selector. 3. Draw on the canvas. 4. Observe the colour change. 5. Press “Play”. 6. Change the colour while the simulation is running.
9.6	Pressing a combination of controls will not cause an unusual resulting behaviour.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Press “Play”, Close alert, “Play" 3. Press “Clear”, then “Play”. 4. Press “Seed”, “Play”, “Clear”. 5. Press “Clear” , “Seed”, “Play”. 6. Press “Rainbow”, close alert, then “Play”. 7. Press “Rainbow”, close alert, then “seed”. 8. Draw on canvas press play then pause, adjust speed slider. 9. Draw on canvas press play then pause,, adjust zoom sliders.
10.1	The simulation follows the 4 rules in the “Game of Life” 1. Any live cell with fewer than two live neighbours dies.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Select 1 cell and one neighbouring cell. 3. Click “Play”.
10.2	The simulation follows the 4 rules in the “Game of Life” 2. Any live cell with two or three live neighbours lives on to the next generation.	1. Open GitHub pages live link in browser for the Game of Life website. 2. Select 1 cell and 2 neighbouring cells. 3. Click “Play”. 4. Select 1 cell and 3 neighbouring cells.

Test Case	Criteria	Procedure
10.3	The simulation follows the 4 rules in the “Game of Life” 3. Any live cell with more than three live neighbours dies	1. Open GitHub pages live link in browser for the Game of Life website. 2. Select 1 cell and 3 neighbouring cell. 3. Click “Play”.
10.4	The simulation follows the 4 rules in the “Game of Life” 4. Any dead cell with exactly three live neighbours becomes a live cell	1. Open GitHub pages live link in browser for the Game of Life website. 2. Select 3 cells surrounding one empty cell. 3. Click “Play”.

Test Case	Expected Result	Actual result	Pass/Fail?	Comments
1.1	Clicking on each link will bring me to the correct page/loaction	Each link connects with the correct page/location	Pass	
2.1	Elements should load fast, at the right dimension and there will be no errors or missing content.	All elements on website load in an acceptable time and in full.	Pass	
3.1	Fallback font should load and will not impact the website layout or have an overly averse affect on the websites presentation.	Fallback font loads correctly and does not aversely affect the website layout or presentation.	Pass	
4.1	All elements on the screen should maintain relative position.There should be no distortion or overlapping.	All elements maintain their relative position and there is no distortion or overlapping of elements.	Pass	
5.1	Clicking Facebook should connect to Facebook and open up a new tab. The same applies for Instagram and Twitter.	Each link connects to the correct external website and opens in a new tab.	Pass	
6.1	All elements on the screen should maintain relative position.There should be no distortion or overlapping. All interactive elements should respond to the user.	All elements maintain their relative position and there is no distortion or overlapping of elements.	Pass	
6.2	All elements on the screen should maintain relative position.There should be no distortion or overlapping. All interactive elements should respond to the user.	All elements maintain their relative position and there is no distortion or overlapping of elements.	Pass	
6.3	All elements on the screen should maintain relative position.There should be no distortion or overlapping. All interactive elements should respond to the user.	All elements maintain their relative position and there is no distortion or overlapping of elements. The canvas element does not respond to touch on Safari on Mac OS or iOS	Pass	
6.4	All elements on the screen should maintain relative position.There should be no distortion or overlapping. All interactive elements should respond to the user.	All elements maintain their relative position and there is no distortion or overlapping of elements. The canvas element did not initially respond to touch on Firefox on Mac OS or iOS. This was fixed with some changes to the draw function.	Pass	

Test Case	Expected Result	Actual result	Pass/Fail?	Comments
7.1	Buttons should elicit correct response. Sliders should change the speed and magnification. Canvas should react to button click and dragging.	Buttons elicit correct response. Sliders change the speed and magnification. Canvas reacts to button click and dragging.	Pass	
8.2	The simulation should start and stop when the “Play” button is pressed.	The simulation starts and stops when the “Play” button is pressed.	Pass	
8.3	The information icon should be easily accessible from the main screen offering first time users an easy way to access information on how to interact with the screen.	The icon is clearly visible, responds to click and opens up a clearly layer out modal with the instructions on how to play the game.	Pass	
9.0	The canvas should clear and the generation counter should reset to 0.	The canvas clears and the generation counter should resets to 0.	Pass	
9.1	The “Seed” button should fill the cells randomly and when clicking the “Play” button the simulation should begin.	The “Seed” button fills the cells randomly and clicking the “Play” button sets the simulation in motion.	Pass	
9.2	The alert should pop up displaying the message “Please draw inside the circle or click 'Seed' button before hitting ‘Start”.	The alert pops up displaying the message “Please draw inside the circle or click 'Seed' button before hitting ‘Start”. Clicking ‘Ok” dismisses the message.	Pass	
9.3	The cells in the canvas should increase or decrease in size.	The cells in the canvas increase and decrease.	Pass	
9.4	The simulation should speed up or slow down.	The simulation speeds up and slows down.	Pass	
9.5	The colour for drawing on the canvas should correspond to the colour selected. The should also apply when the simulation is running.	The colour for drawing on the canvas corresponds to the colour selected. This also applies when the simulation is running.	Pass	
9.6	All buttons should maintain their original function and should not cause other buttons to function abnormally.	All button combinations worked well and no undesired results.	Pass	
10.1	The cell should die.	The cell dies	Pass	
10.2	The cell should live	The cells lives.	Pass	

Test Case	Expected Result	Actual result	Pass/Fail?	Comments
10.3	The cell should die	The cells dies	Pass	
10.4	The cell should come alive.	The cells comes alive	Pass	