Test Section	Gameplay functional tests

This test section lists functional tests of the gameplay against the expected outcomes of all actions

Application Section	Game - the tests below are those against actions that are taken within the game

SCENARIOS TESTED:

Scenario 1	Medium
Scenario 2	Very Hard
Scenario 3	Custom game - 3x3, 4 colours, no timer
Scenario 4	Custom game - 3x3, 6 colours, 10 seconds timer
Scenario 5	Custom game - 4x4, 5 colours, 5 seconds timer

Test ID	Test Description	Expected result?	Scenario tested	Result	Comments
Viewing Pattern					
1		Blank grid displayed.	1	N/A	
			2	N/A	
			3	Pass	
			4	N/A	
			5	N/A	
2	Go' button clicked	Palette reflecting chosen number of colours displayed below grid with no colours selected	1	N/A	
			2	N/A	
			3	Pass	
			4	N/A	
			5	N/A	
3		Submit button displayed below palette.	1	N/A	
			2	N/A	
			3	Pass	
			4	N/A	
			5	N/A	
4		Blank grid displayed.	1	Pass	
			2	Pass	
			3	N/A	
			4	Pass	
			5	Pass	
5	View timer completes countdown	Palette reflecting chosen number of colours displayed below grid with no colours selected	1	Pass	
			2	Pass	
			3	N/A	
			4	Pass	
			5	Pass	
6		Submit button displayed below palette.	1	Pass	
			2	Pass	
			3	N/A	
			4	Pass	
			5	Pass	
7	Main menu button selected during timer	Main menu (landing page) shown	1	Pass	
			2	Pass	
			3	N/A	
			4	Pass	
			5	Pass	
8	Main menu button selected before go button	1) Main menu (landing page) shown	1	N/A	
			2	N/A	
			3	Pass	
			4	N/A	
			5	N/A	
Filling in Grid					
9	Click on grid square without selecting colour	Grid square should remain clear	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
10		Alert message appears with appropriate message	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
11	Select 1st colour from palette	Black border appears around clicked or tapped colour	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
12		Pick colour selection noise plays	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
13		Black border appears around clicked or tapped colour.	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
14	Select subsequent colour from palette	Black border from previous selected colour disappears.	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
15		Pick colour selection noise plays.	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
16	Click on a blank grid square	Clicked grid square changes to a square now filled with the selected colour	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
17		Add colour noise plays	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
18	Click on multiple blank grid squares	Clicked grid squares now filled with the selected colour	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
19		Add colour noise plays	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
20	Click on a coloured grid square whilst a different colour selected	Clicked grid square changes to a square now filled with the selected colour	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
21		Add colour noise plays	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
22	Main menu button selected before submit button	Main menu (landing page) shown	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
			1	Pass	

#	Action	Expected Result	Run	Status	Notes
23	Click the submit button before all grid squares coloured	Game should not progress	2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
24		Alert message appears with appropriate message	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
25		Message displays below grid with appropriate text for not matching patterns, time taken and 'next round' button	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
26		Result and time taken shown in results column on left	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
27	Click the submit button when all grid squares coloured and do not match pattern	Result and time taken shown in modal	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	pass	
28		View computer pattern text appears with switch button above grid	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
29		Loss (no match) sound plays	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
30		Message displays below grid with appropriate text for matching patterns, time taken and 'next round' button	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
31		Result and time taken shown in results column on left	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
32	Click the submit button when all grid squares coloured match pattern	Result and time taken shown in modal	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
33		View computer pattern text appears with switch button above grid	1	Pass	
			2	Pass	
			3	pass	
			4	Pass	
			5	Pass	
34		Win (match achieved) sound plays	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	

Viewing result/end of round

#	Action	Expected Result	Run	Status	Notes
35	Click the Compare (switch) button below 'View computer pattern' text	The computer grid pattern is shown and the text above 'switch' button changes to 'View your pattern'	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
36	Click the Compare (switch) button (again) below 'View your pattern' text	The player grid pattern shown and the text above 'switch' button changes to 'View computer pattern'	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	pass	
37	Main menu button selected before continuing to next round	Main menu (landing page) shown	1	Pass	
			2	Pass	
			3	pass	
			4	pass	
			5	Pass	
38	Click button in message to progress to next round	New Pattern displayed with countdown timer or Go button	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	

End of game

#	Action	Expected Result	Run	Status	Notes
39		Message displays below grid with appropriate text for not matching/matching patterns and time taken.	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
40	5th round of game completed	Additional text showing how many out of 5 rounds matched	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
41		Continue button displayed	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
42	Click the continue button (custom game)	Score achieved message displayed with score achieved. No opportunity to save score.	1	N/A	
			2	N/A	
			3	Pass	
			4	Pass	
			5	Pass	
43		'Play again' and 'Main menu' buttons shown.	1	N/A	
			2	N/A	
			3	Pass	
			4	Pass	
			5	Pass	
44	Click the continue button (set difficulty - new high score achieved)	Appropriate new high score achieved message displayed with score achieved.	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
45		Opportunity to enter name to save score	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
46		Save button NOT enabled.	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
47		'Play again' and 'Main menu' buttons shown.	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	

48	Enter name to save score	Save button enabled	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
49	Click save button	Save button and text are removed (disappear)	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
50		Message 'Score saved.' shows. With 'Play again?' and 'Main menu' button displayed below.	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
51	Enter name and hit enter	Save button and text are removed (disappear)	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
52		Message 'Score saved.' shows. With 'Play again?' and 'Main menu' button displayed below.	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
53	Check High Score page	High score should display within the chosen difficulty in position 1, 2 or 3	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
54	Click the continue button (set difficulty - no new high achieved)	Appropriate NO new high score achieved message displayed with score achieved.	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
55		'Play again' and 'Main menu' buttons shown.	1	Pass	
			2	Pass	
			3	N/A	
			4	N/A	
			5	N/A	
56	Click play again from high score message	New game should start straight away with same difficulty or custom game settings	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
57		Results column should clear of last games results	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
58		Results modal should clear of last games results	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
59		No colour selected	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
60	Click Main menu from high score message	Main menu (landing page) shown	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
Between rounds/games check.					
61	During game (between rounds)	Results and time taken from previous rounds of current game persist in display of results column on left.	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
62		Results and time taken from previous rounds of current game persist in display shown in modal.	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
63		Final Colour selection from previous round does not persist	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
64		Results and time taken from previous game are not displayed in results column on left.	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
65		Results and time taken from previous game are not displayed in modal.	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
66		Final Colour selection from previous game does not persist	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
	Between Games		1	Pass	Screen grab of console logs in the below cells each show console logs concerned with the score. The top five entries show the last round of previous game showing the final game score. The next five show the first round of the next game showing an updated game score. Proof that score is reset. the score for minutes is 0 — script.js:888 the score for time taken is 52.47 — script.js:889 the current match score is 60 — script.js:890 the current round score is 112.47 — script.js:891 the game score is 227 — script.js:892 the score for minutes is 0 — script.js:888 the score for time taken is 43.379999999999995 — script.js:889 the current match score is 0 — script.js:890 the current round score is 0 — script.js:891 the game score is 0 — script.js:892
			2	Pass	the score for minutes is 0 — script.js:888 the score for time taken is 49.59 — script.js:889 the current match score is 60 — script.js:890 the current round score is 109.59 — script.js:891 the game score is 323.82 — script.js:892 the score for minutes is 0 — script.js:888 the score for time taken is 43.769999999999996 — script.js:889 the current match score is 60 — script.js:890 the current round score is 103.77 — script.js:891 the game score is 103.77 — script.js:892

67		Score is reset		3	Pass	the score for minutes is 0 script.js:888 the score for time taken is 55.14 script.js:889 the current match score is 0 script.js:890 the current round score is 0 script.js:891 the game score is 113.44 script.js:892 the score for minutes is 0 script.js:888 the score for time taken is 47.78 script.js:889 the current match score is 0 script.js:890 the current round score is 0 script.js:891 the game score is 0 script.js:892
				4	Pass	the score for minutes is 0 script.js:888 the score for time taken is 42.32 script.js:889 the current match score is 60 script.js:890 the current round score is 102.32 script.js:891 the game score is 429.15000000000003 script.js:892 the score for minutes is 0 script.js:888 the score for time taken is 54.03 script.js:889 the current match score is 0 script.js:890 the current round score is 0 script.js:891 the game score is 0 script.js:892
				5	Pass	the score for minutes is 0 script.js:888 the score for time taken is 42.85 script.js:889 the current match score is 60 script.js:890 the current round score is 102.85 script.js:891 the game score is 311.76 script.js:892 the score for minutes is 0 script.js:888 the score for time taken is 10.399999999999999 script.js:889 the current match score is 60 script.js:890 the current round score is 70.4 script.js:891 the game score is 70.4 script.js:892

Check of message presentation based on whether more or less than a minute was taken within a round.

68	End of round message displaying correctly if time under a minute	Message should convey correct information, be contained within message box and all content justified center	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
69	End of round message displaying correctly if time over a minute	Message should convey correct information, be contained within message box and all content justified center	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	
70	End of game message displaying correctly if time under a minute	Message should convey correct information, be contained within message box and all content justified center	1	Pass	
			2	Pass	
			3	Pass	
			4	pass	
			5	Pass	
71	End of game message displaying correctly if time over a minute	Message should convey correct information, be contained within message box and all content justified center	1	Pass	
			2	Pass	
			3	Pass	
			4	Pass	
			5	Pass	

test history
test 1 - 17/4/2021: first test.