	pass	✓	release with bug / issue	✓	no release till fix	✗

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
1	Data	Title screen	chrome		Safari	firefox		edge		opera	
Acceptance id		**Specification / Accetpance criteria**	**pass**	**pass**	**pass**	**pass**	**pass**	**pass**	**pass**	**pass**	**pass**
	1	The software starts with an image of Earth followed by a title screen	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
2	Feature	Options menu (main menu)	chrome		Safari	firefox		edge		opera	
Acceptance id		**Specification / Accetpance criteria**	**pass**	**pass**	**pass**	**pass**	**pass**	**pass**	**pass**	**pass**	**pass**
	1	The software starts with an image of Earth followed by a title screen	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2	The options menu has a 'View instructions' option	✓	✓	✓	✓	✓	✓	✓	✓	✓
	3	The options menu has a 'Start the questionnaire' option	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4	The options menu has an 'Exit software' option	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5	The options menu has an 'Administer data' option	✓	✓	✓	✓	✓	✓	✓	✓	✓
	6	When logged in the options menu has a 'log out' option	✓	✓	✓	✓	✓	✓	✓	✓	✓
	7	User input is validated checking that the input is within range and retry is possible	✓	✓	✓	✓	✓	✓	✓	✓	✓
	8	User input is validated checking that the input is present and retry is possible	✓	✓	✓	✓	✓	✓	✓	✓	✓
	9	User input is validated and will enable a retry if alphabetical and other non valid characters are entered	✓	✓	✓	✓	✓	✓	✓	✓	✓
	10	In the main menu when the user is logged in, the fact that the user is logged in is shown at the top of the main menu along with their unique random user code	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
3	Feature	Instructions	chrome		Safari	firefox		edge		opera	
	Acceptance id	Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
	1	The instructions page gives an overview of the purpose of the software	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2	The instructions page tells the user what actions to perform to receive a carbon score	✓	✓	✓	✓	✓	✓	✓	✓	✓
	3	The instructions page gives an overview of the relevance of carbon dioxide in the atmosphere	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4	The instructions page tells the user what data can be stored and why	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5	The instructions page serves to reassure the user that personal data other than the users question answers and carbon score are not stored	✓	✓	✓	✓	✓	✓	✓	✓	✓
	6	The instructions page informs the user that they can delete their data if they so wish	✓	✓	✓	✓	✓	✓	✓	✓	✓
	7	The instructions page informs the user how they can enter an option	✓	✓	✓	✓	✓	✓	✓	✓	✓
	8	The instructions page has a menu option to go to the questionnaire	✓	✓	✓	✓	✓	✓	✓	✓	✓
	9	The instructions page has a menu option to go to the main menu	✓	✓	✓	✓	✓	✓	✓	✓	✓
	10	User input is validated checking that the input is within range and retry is possible	✓	✓	✓	✓	✓	✓	✓	✓	✓
	11	User input is validated checking that the input is present and retry is possible	✓	✓	✓	✓	✓	✓	✓	✓	✓
	12	User input is validated and will enable a retry if alphabetical and other non valid characters are entered	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
4	Feature	Carbon questionnaire	chrome		Safari	firefox		edge		opera	
	Acceptance id	Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
	1	The carbon quesitonnaire is read into the sotware from an external API accessed spreadsheet on starting the software	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2	The questionnaire asks the user if they have a user id to load previous session data (User ids are 5 character alphanumeric random code)	✓	✓	✓	✓	✓	✓	✓	✓	✓
	3	The user id is validated and gives an option to retry or go straight to the questionnaire if the user id isn't recognised	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4	The user id is validated and informs the user if the id entered is longer than 5 characters	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5	The user id is validated and informs the user if the id entered contains non valid characters	✓	✓	✓	✓	✓	✓	✓	✓	✓
	6	The questionnaire questions are displayed to the user sequentially	✓	✓	✓	✓	✓	✓	✓	✓	✓
	7	The user can enter the answer option number that applies to them	✓	✓	✓	✓	✓	✓	✓	✓	✓
	8	The answer option entered by the user is validated and is check if it is in range	✓	✓	✓	✓	✓	✓	✓	✓	✓
	9	The answer option entered by the user is validated and is present and retry is possible	✓	✓	✓	✓	✓	✓	✓	✓	✓
	10	The answer option entered by the user is validated and will enable a retry if alphabetical and other non valid characters are entered	✓	✓	✓	✓	✓	✓	✓	✓	✓
	11	On entering a valid option the number of points that answer represents are shown	✓	✓	✓	✓	✓	✓	✓	✓	✓
	12	On entering a valid option the number of points is shown on a bar to show that number of points as a proporation of the maximum possible score for the question	✓	✓	✓	✓	✓	✓	✓	✓	✓
	13	On entering a valid option and when logged in, the number of points given in the users previous session in addition to their current sessions number of points and a second bar is displayed showing that number of points as a proporation of the maximum possible score for the question along with the date of the previous session	✓	✓	✓	✓	✓	✓	✓	✓	✓
	14	On completing all of the questions, the sum of all of the points is displayed	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
5	Data	Carbon footprint score	chrome		Safari	firefox		edge		opera	
Acceptance id		Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
1		When logged in and on completing all of the questions, the sum of all of the points of the user stored session is displayed	✓	✓	✓	✓	✓	✓	✓	✓	✓
2		On completing all of the questions, the sum of all of the points is shown on a bar to show the score as a proportion of the maximum possible score for the questionnaire	✓	✓	✓	✓	✓	✓	✓	✓	✓
3		When logged in and on completing all of the questions, the sum of all of the points of the users previous session is shown on a bar to show the score as a proportion of the maximum possible score for the questionnaire and the the date of the previous session is shown	✓	✓	✓	✓	✓	✓	✓	✓	✓
4		On selecting 'Review previous score' from the 'Administer data' menu, the sum of all of the points of the users previous session is shown on a bar to show the score as a proportion of the maximum possible score for the questionnaire and the the date of the previous session is shown but a currrent session bar and score is not shown	✓	✓	✓	✓	✓	✓	✓	✓	✓
5		If the users total score is less than or equal to 60 (the recommended maximum score) the current sesssion score bar is coloured green and if it is greater than 60 it is coloured red	✓	✓	✓	✓	✓	✓	✓	✓	✓
6		If the user is logged in and the users previous total score is less than or equal to 60 (the recommended maximum score) the previous sesssion score bar is coloured green and if it is greater than 60 it is coloured red	✓	✓	✓	✓	✓	✓	✓	✓	✓
7		On completing the questionnaire or selecting 'Review previous score' from the 'Administer data' menu some information about the score is displayed to the user	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
6	Feature	Store menu	chrome		Safari	firefox		edge		opera	
Acceptance id		Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
1		On completion of the quesionnaire and if the user is not logged in the user is asked if they would like to store their results	✓	✓	✓	✓	✓	✓	✓	✓	✓
2		The users 'y' or 'n' response to the question whether or not the user would like to store their data is validated and the user is given the opportunity to retry if the answer is neither 'y' or 'n'	✓	✓	✓	✓	✓	✓	✓	✓	✓
3		On selecting 'n' the software returns to the 'main menu'	✓	✓	✓	✓	✓	✓	✓	✓	✓
4		On selecting 'y' the software generates a random 5 character alphanumeric code and displays it to the user	✓	✓	✓	✓	✓	✓	✓	✓	✓
5		On selecting 'y' the software stores the users data along with the user id into the external spreadsheet	✓	✓	✓	✓	✓	✓	✓	✓	✓
6		Once the date is store process is complete the software returns to the main menu	✓	✓	✓	✓	✓	✓	✓	✓	✓
7		If the users data was stored then the software remains logged in on returning to the main menu	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
7	Data	Data repository	chrome		Safari	firefox		edge		opera	
Acceptance id		Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
1		When requested by the user, the session scores and the date of the session and their user id are written to the 'co2_scores' external spreadsheet	✓	✓	✓	✓	✓	✓	✓	✓	✓
2		When logged in and on completion of the questionnaire the new sessions scores are written over the previous sessions scores	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
8	Data	Exit screen	chrome		Safari	firefox		edge		opera	
Acceptance id		Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
1		On selecting 'Exit software' on the 'main menu' an image of the globe is shown along with the text 'Exiting' at the bottom	✓	✓	✓	✓	✓	✓	✓	✓	✓
2		On completion of the exit program procedure the screen is cleared and the software is no longer running	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
9	Data	Load saved data	chrome		Safari	firefox		edge		opera	
Acceptance id		Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
	1	After validation of the user id on selecting 'Start the questionnaire' and when not logged in, the users id is looked up and the users previous session is loaded into the software	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2	After validation of the user id on accessing the 'Administer data' menu, the users id is looked up and the users previous session is loaded into the software	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
10	Data	Data deletion	chrome		Safari	firefox		edge		opera	
Acceptance id		Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
	1	On selecting 'Delete data' from the 'Administer data' menu, the row with the users user id is deleted from the external spreadsheet	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2	The user is informed when the request to delete the data has been actioned	✓	✓	✓	✓	✓	✓	✓	✓	✓
	3	When deletion has been actioned, the user is logged out	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
11	Data	Stored user menu	chrome		Safari	firefox		edge		opera	
Acceptance id		Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
	1	On selecting 'Administer data' from the 'main menu' and when not logged in, the user is asked to enter their user id if they have one or to press enter to continue which takes the user back to the main menu	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2	The user id is validated and informs the user if the id entered is longer than 5 characters	✓	✓	✓	✓	✓	✓	✓	✓	✓
	3	The user id is validated and informs the user if the id entered contains non valid characters	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4	The 'Administer data' menu gives and option to 'Review previous score'	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5	The 'Administer data' menu gives and option to 'Delete data'	✓	✓	✓	✓	✓	✓	✓	✓	✓
	6	The 'Administer data' menu gives and option to 'Return to main menu'	✓	✓	✓	✓	✓	✓	✓	✓	✓
	7	On selecting 'Return to main menu' the user is returned to the main menu	✓	✓	✓	✓	✓	✓	✓	✓	✓

id	type	feature / data requirement to satisfy user flows	Windows 10	MacOS	MacOS	Windows 10	MacOS	Windows 10	MacOS	Windows 10	MacOS
12	Data	Log out screen	chrome		Safari	firefox		edge		opera	
Acceptance id		Specification / Accetpance criteria	pass	pass	pass	pass	pass	pass	pass	pass	pass
	1	When logged in the option to 'Log out' is available on the 'main menu'	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2	On selecting 'Log out' from the main menu, the user is logged out	✓	✓	✓	✓	✓	✓	✓	✓	✓
	3	On completion of the log out process the user is informed that log out has been completed	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4	On pressing enter on the log out confirmation screen, the user is returned to the main menu	✓	✓	✓	✓	✓	✓	✓	✓	✓

Operating system	version	hardware
Windows 10 Pro	21H2 : OS build 19044.2251	Lenovo Thinkpad T420s
Browser		
Chrome	Version 107.0.5304.107 (Official Build) (64-bit)	
Firefox	106.0.5 (64-bit)	
Edge	Version 107.0.1418.52 (Official build) (64-bit)	
Opera	Version:93.0.4585.21	

Operating system	version	hardware
MacOS	macOS Big Sur 11.6.1	Mac Mini (2018)
Browser		
Chrome	108.0.5359.94 (Official Build) (x86_64)	
Safari	15.1 (16612.2.9.1.30, 16612)	
Firefox	107.0.1 (64-bit)	
Edge	106.0.1370.52 (Official build) (x86_64)	
Opera	93.0.4585.39 (x86_64)	