

String Matching Visualiser Manual Tests

Home:

Test ID	Steps	Expected Outcome	Actual Outcome
1.1	Navigate to the website.	Should see the home page open, containing the StrVis logo, 3 buttons for 3 supported algorithms, a theme toggle and an animation playing in the background.	As expected
1.2	Toggle the theme.	The theme before toggling should be dark, after light. The whole animation should reload.	As expected
1.3	Click home on navbar.	Nothing should happen.	As expected

About:

Test ID	Steps	Expected Outcome	Actual Outcome
2.1	Navigate to the about page by clicking about in the navbar.	You should see the about page containing a brief description, as well as contributors.	As expected
2.2	Click on first contributor link (Michal).	The link should navigate to a University of Glasgow website.	As expected
2.3	Return to the about page, click on the second contributor link (Gethin).	The link should navigate to a webpage about Gethin.	As expected

Navbar:

Test ID	Steps	Expected Outcome	Actual Outcome
3.1	Click on the github icon within the navbar.	The link should redirect to the project Github page (4th-year-project-string-matching-visualiser).	Repository not found, due to not being public. This should work once project is published after the dissertation deadline.

4.2	Return and click on the LinkedIn link.	The click should redirect to Michal's LinkedIn.	As expected
4.3	Whatever page you are on, put into mobile view (make width smaller).	The navbar links should all disappear, but a compass icon should appear on the right hand side. The StrVis logo should still be present.	As expected
4.4	Click the compass icon.	The mobile menu should expand containing the same links as originally: 3 supported algorithms, GitHub and LinkedIn.	As expected

Algorithm Page:

Test ID	Steps	Expected Outcome	Actual Outcome
5.1	Click on the Brute Force Algorithm link to get to the algorithm page.	You should see the algorithm page. This means you can see the algorithm animation with default values, the pseudocode and some default variable values. You should also see a question mark in the top left corner.	As expected
5.2	Click the settings icon in the bottom left corner.	A settings menu should open.	As expected
5.3	Change string and text.	Changing string and text should automatically update the animation to reflect the changes.	As expected
5.4	Toggle the show animation legend checkbox. Close the settings.	You should see the animation now contains a legend at the bottom, showing what each colour does.	As expected
5.5	Click the back arrow.	There should be no change.	As expected
5.6	Click the play arrow.	The execution should start playing. The animation should show some colours, the pseudocode change highlighted line and variables change. There should also be a command appearing right underneath the canvas explaining what is happening. The play arrow should also become a "pause" arrow. As things happen, the current step range element should also move forward.	As expected
	Change the speed.	Changing speed to the left should	As expected

		make the animation and other elements update at a much lower rate. Going to the rate should however increase the rate of execution.	
5.7	Click the pause arrow.	The execution should pause at the current step.	As expected
5.8	Click the reset button.	The animation should look the same as before clicking the play button i.e. in the initial state.	As expected
5.9	Click the forward arrow.	The animation should update to the next step, as should all other elements. The pseudocode displayer should be on the second line of the pseudocode, there should be a message denoting what is happening and one variable value will change.	As expected
5.10	Use the range element to change the current step.	All elements should update to reflect that step. As you slide the range element, steps should be shown changing.	As expected
5.11	Reset algorithm, open settings and toggle the "Smooth Animations" option. Now play the algorithm.	Now the animations should be smooth i.e. squares moving should do so gradually and colours should fade in and out.	As expected
5.12	Make the webpage smaller.	The animation size should decrease. Once past a "mobile phone" size, the pseudocode should go underneath the algorithm animation, message regarding what is happening and variable values.	As expected
5.13	Click the question mark in the top left corner.	There should be a message box right in the middle of the screen explaining the functionality of the application. It should match the styling of the rest of the application. There should be a next and skip buttons at the bottom.	As expected
5.14	Click skip tutorial.	The webpage should close the tutorial, but everything else should remain the same.	As expected
5.15	Open the tutorial again, but press next.	You should see another box appear over the pseudocode, explaining the functionality.	As expected
5.16	Click next.	You should now see the tutorial for	As expected

		algorithm animation. The page should also scroll slightly to show this correctly.	
5.17	Click next.	You should see a tutorial box above message area. The message should also change to denote this.	As expected
5.18	Click next	The tutorial box should now be above the variable component, explaining what it does. There should only be a single button now to end the tutorial.	As expected
5.19	Click end tutorial.	The tutorial box should disappear, the app should be back to the state before the tutorial was undertaken.	As expected

BM & KMP Extra Canvas:

Test ID	Steps	Expected Outcome	Actual Outcome
6.1	Navigate to BM or KMP page.	Among the animation, pseudocode, message and variable components, there should also be an additional box (just below the animation) with a title and 2 arrows.	As expected
1.2	Play the animation.	The additional box should eventually be populated with values related to the animation.	As expected
1.3	Pause animation and click on the next and previous arrows on the additional canvas.	Clicking left should move the content right, while clicking right should move it left.	As expected

Slider:

Test ID	Steps	Expected Outcome	Actual Outcome
1.1	Locate the slider in the middle of the algorithm page. If not on the algorithm page, then navigate to it. Move slider left.	The pseudocode should become wider, while animation narrower. The animation size should decrease to accommodate this.	As expected
1.2	Move slider left to the max.	At some point the slider should stop moving left, the animation should still be clearly visible.	As expected
1.3	Move slider to the right.	The animation should become	As expected

		larger, pseudocode smaller. Eventually pseudocode will disappear, but not the slider.	
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