

Test Case No.	Test Case Description	Test Steps	Expected Results
For Tablet / Desktop			
1	Loading of website	1. Go to the URL: https://sg-museums.netlify.app/	1a. Website should load without crashing. 1b. Leaflet map, search console and map button elements should be rendered properly on website.
2A	About us > Open	Pre-requisite(s): None 1. On the search console (top-left corner of website), click on the Museums@SG logo button	1. An offcanvas displaying information about Museums@SG should slide in from the left side of the website.
2B	About us > Close	Pre-requisite(s): Test Step 2A 1. Click on anywhere outside the offcanvas or click on the 'X' button at the top-right corner of the offcanvas	1. Offcanvas should slide out of the left side of the website and disappear from view.
3A	Search bar > Museum query (Empty query without prior searches)	Pre-requisite(s): No prior search queries or interaction with map markers. 1a. On the search console, click on the input field of the search bar. 1b. Hit the 'Enter' key on the keyboard or click on the search button (magnifying glass icon)	1a. Console drawer should expand (if in the collapsed state). 1b. The 'Museum', 'Weather', and 'Nearby' tabs should display the message "There is no result to show."
3B	Search bar > Museum query (Matching search query)	Pre-requisite(s): None 1a. On the search console, click on the input field of the search bar. 1b. Enter 'National Museum of Singapore' or any museum names in Singapore in the search input field (case-insensitive). 1c. Hit the 'Enter' key on the keyboard or click on the search button (magnifying glass icon)	1a. Console drawer should expand (if in the collapsed state). 1b. The 'Museum' tab should display the museum information. 1c. The 'Weather' tab should display the current weather and 2-hour weather forecast of the museum's location. 1d. The 'Nearby' tab should display a form allowing users to select the type of amenities and search radius. 2. Map should zoom to the museum marker and a popup should appear above the marker.
3C	Search bar > Museum query (Not-matching search query)	Pre-requisite(s): None 1a. On the search console, click on the input field of the search bar. 1b. Enter 'something' or any random text that is not a museum name in Singapore in the search input field (case-insensitive). 1c. Hit the 'Enter' key on the keyboard or click on the search button (magnifying glass icon)	1a. Console drawer should expand (if in the collapsed state). 1b. The 'Museum', 'Weather', and 'Nearby' tabs should display the message "No matches for <search query> found.", where <search query> is the input entered by the user.
3D	Search bar > Museum query (Empty query with prior searches)	Pre-requisite(s): Test step 3B or 3C 1a. On the search console, click on the input field of the search bar. 1b. Clear the search input field. 1c. Hit the 'Enter' key on the keyboard or click on the search button (magnifying glass icon)	1a. Console drawer should expand (if in the collapsed state). 1b. The 'Museum', 'Weather', and 'Nearby' tabs should still display the previous search result (No change in the display of the 3 tabs).

4A	Autocomplete suggestion	<p>Pre-requisite(s): None</p> <p>1a. On the search console, click on the input field of the search bar.</p> <p>1b. Start typing 'National Museum of Singapore' or any substring that appears in a museum name in Singapore in the search input field (case-insensitive).</p>	<p>1a. An autocomplete suggestion dropdown list should appear, displaying a list of museum names based on the input typed.</p> <p>(Note: If the string typed in do not match any substrings of the museum names in the dataset, the autocomplete suggestion list will not appear)</p>
4B	Autocomplete suggestion > Autofill feature	<p>Pre-requisite(s): Test step 4A</p> <p>1. Click on any museum name in the autocomplete suggestion dropdown list.</p>	<p>1. The search input field would be automatically filled with the selected museum name.</p>
5	Nearby amenities feature	<p>Pre-requisite(s): Test step 3B</p> <p>1a. If the console drawer is in the collapsed state, click on the toggle console drawer button (indicated by a down arrow) to expand the console drawer.</p> <p>1b. Click on the 'Nearby' tab in the console drawer.</p> <p>1c. Fill in the form by selecting any number of amenities to display and the search radius.</p>	<p>Case 1: No amenities found within search radius</p> <p>1a. A message saying 'There are no results found.' should be displayed at the bottom of the form.</p> <p>1b. On the map, a green circle with the current searched museum result as the center should be rendered on the map (if search radius is selected).</p> <p>1c. There should be no amenities markers being rendered on the map.</p> <p>Case 2: Amenities found within search radius</p> <p>1a. There should be no message saying 'There are no results found.' at the bottom of the form.</p> <p>1b. On the map, a green circle with the current searched museum result as the center should be rendered on the map (if search radius is selected).</p> <p>1c. Amenities markers matching the selected category in the form should be rendered within the green circle.</p>
6A	Navigation	<p>Pre-requisite(s): None</p> <p>1. On the search console, click on the navigation button (indicated by the blue directions icon).</p>	<p>1a. The console drawer should expand (if it is in the collapsed state).</p> <p>1b. The navigation form should be displayed in the console drawer.</p>
6B	Navigation > No start point and/or destination selected	<p>Pre-requisite(s): Test step 6A</p> <p>1. Click on 'Get Route' button.</p>	<p>1a. An error message stating 'Please select a start point.' should be displayed below the input field for start point if no start point was selected.</p> <p>1b. An error message stating 'Please select a destination.' should be displayed below the input field for destination if no destination was selected.</p>

6C	Navigation > Set start point or destination	<p>Method 1: Via marker Pre-requisite(s): None</p> <p>1a. Click on any marker on the map. 1b. On the marker popup, click on either 'Set as start point' or 'Set as destination' button.</p> <p>Method 2: Via 'Museum' tab Pre-requisite(s): Test step 3B</p> <p>1a. In the console drawer, click on the 'Museum' tab. 1b. Click on either 'Set as start point' or 'Set as destination' button.</p>	<p>1a. The console drawer should expand (if it is in the collapsed state).</p> <p>1b. The navigation form should be displayed in the console drawer.</p> <p>1c. The location name should appear under either 'Start' or 'Destination' input field of the navigation form depending on selection in test step 6C.</p>
6D	Navigation > Handling same start point and destination	<p>Pre-requisite(s): Test step 6C</p> <p>1. On either the marker popup or 'Museum' tab, click on 'Set as start point' button.</p> <p>2a. If using Method 2 (via the 'Museum' tab), click on the search button to get to the 'Museum' tab. 2b. Alternatively, click on the search field input and hit 'Enter' on the keyboard.</p> <p>3. Click on 'Set as destination' button. 4. Click on 'Get Route' button of the navigation form.</p>	<p>1. An error message stating 'Please select a destination that is different from start point.' should be displayed below the input field for destination in the navigation form.</p>
6E	Navigation > Displaying polyline route	<p>Pre-requisite(s): Test step 6C</p> <p>1. On either the marker popup or 'Museum' tab, click on 'Set as start point'.</p> <p>2a. On the search bar, search for another museum (Eg. "Former Ford Factory") that is different from the current selection. (Note: You may make use of the autocomplete suggestion feature for this step) 2b. Alternatively, click on another marker on the map which will trigger a marker popup.</p> <p>3. Similar to step 1, click on the 'Set as destination' on either the marker popup or 'Museum' tab.</p> <p>4. Select any transport mode radio button in the navigation form.</p> <p>5. Click on 'Get Route' button in the navigation form.</p>	<p>1. A polyline route should be rendered on the map. (Note: Depending on the distance between the two selected locations, it may take a short moment to calculate and generate the polyline route)</p>
7	Geolocation feature	<p>Pre-requisite(s): None</p> <p>1. On the bottom-right corner of the website, click on the geolocate button (indicated by a target icon).</p>	<p>1. A marker should be rendered on the map where the user's current location is and the map will fly to the marker. (Note: The marker will only be rendered if the user settings allow the website to access the location)</p>
8A	Help Form > Open	<p>Pre-requisite(s): None</p> <p>1. On the bottom-right corner of the website, click on the help button (indicated by a question mark icon).</p>	<p>1. A help form should slide in from the bottom.</p>

8B	Help Form > Invalid inputs	<p>Pre-requisite(s): Test step 8A</p> <p>1. Without entering any inputs, click on 'Submit' button.</p>	<p>1a. An error message stating 'Only alphabets, apostrophes (') and dashes(-) are allowed' should be displayed below the name input field.</p> <p>1b. An error message stating 'Invalid email address' should be displayed below the email input field.</p> <p>1c. An error message stating 'Please enter description' should be displayed below the description input field.</p>
8C	Help Form > Valid inputs	<p>Pre-requisite(s): Test step 8A or 8B</p> <p>1. Key in all the fields in the help form and click on 'Submit' button.</p>	<p>1. There should not be any error messages being displayed if the input fields are of the correct format.</p>
8D	Help Form > Close	<p>Pre-requisite(s): Test step 8A or 8B or 8C</p> <p>1. Click on the 'X' button located on the top-right corner of the help form.</p>	<p>1. The help form should close.</p>
For Mobile	<p>Note: Test steps are the same as that for tablets and desktop. (Please note that instead of 'Museum', 'Weather', and 'Nearby' tabs, the texts of the tabs are replaced by their respective icons)</p>		