

Test Case	Description	Steps	Expected Result(s)
1. Choosing the initial layer			
1.	Choice of layer from the landing page: <ul style="list-style-type: none"> <li>Attractions with free entry</li> <li>Attractions with paid entry</li> </ul>	1. Click on <i>*Attractions with FREE entry</i> upon reaching the landing page  <i>* either attractions with free entry or paid entry can be selected -&gt; expected result will differ</i>	1. User will be directed to the main page with the map and navbar  At the navbar: <ul style="list-style-type: none"> <li>It will show “Attractions with FREE Entry” to denote the current layer</li> <li>Toggle button will have a white background and in the ‘on’ state;</li> </ul> On the map: <ul style="list-style-type: none"> <li>Layer control will have a ‘free’ icon to denote the currently layer</li> <li>Filled with markers and marker clusters that have attractions with free entry</li> </ul> Sidebar nav will display only attractions with free entry
2. Viewing the attractions on the offcanvas toggle			
2.	View all the attractions with free entry	1. Click on the navbar icon “SGgoWhere”	1. An offcanvas will toggle from the left side, showing all the attractions with free entry grouped into 5 different tabs: <ul style="list-style-type: none"> <li>- Arts</li> <li>- Nature</li> <li>- Culture &amp; History</li> <li>- Architecture &amp; Landscapes</li> </ul>

			- Recreation
3. Interacting with the left offcanvas			
3a.	View the respective attractions on the map	1. Click 'view on map' from the offcanvas toggle	1. User will be directed to the respective marker on the map, zoomed in and popup opened
3b.	View the respective websites of the attractions	1. Click 'visit website' from the offcanvas toggle	1. User will be redirected to the respective websites in a new tab 2. If no link was provided from the geojson, user will be redirected to an error page instead
4. Interacting with the map, markers and popups			
HIDE OR SHOW LAYERS			
4a	Hide certain layers on the map	1. Hover mouse (desktop) or click (mobile) on the 'free' icon at the top right corner of the map 2. Click on the layers you want to hide (e.g. *arts) <i>* layers can differ depending on preference</i>	1. Arts markers should be hidden on the map
SEARCH NEARBY			
4b.	Search for amenities nearby	1. Click on marker	1. A 'return to search' button will appear at the bottom right

	(within 1km) the attraction of interest	<p>to open popup if not already opened</p> <ol style="list-style-type: none"> <li>Click on 'search nearby' on the popup</li> <li>When offcanvas toggles from left, input in search term (e.g. 'food')</li> <li>Press the search icon</li> </ol>	<p>of the map to allow for toggling of the offcanvas search</p> <ol style="list-style-type: none"> <li>If no search term is keyed in, there will be an error message below the search box</li> <li>If the search term is valid: <ul style="list-style-type: none"> <li>A loader will appear in the offcanvas to indicate that it is retrieving results</li> <li>A circle with radius of 1km will be drawn around the marker of interest</li> </ul> </li> <li>If results are available: <ul style="list-style-type: none"> <li>Search results will be displayed in the offcanvas and marked on the map</li> </ul> </li> <li>If no results are found, 'no results found' will be displayed in the offcanvas instead</li> </ol>
4b1.	View the amenity of interest	<ol style="list-style-type: none"> <li>Click on the amenity of interest from the offcanvas</li> </ol>	<ol style="list-style-type: none"> <li>Popup will be opened on the map</li> </ol>
4b2.	Obtain directions to amenity of interest from attraction of interest	<ol style="list-style-type: none"> <li>Click on 'get directions' from the popup opened from 4a1</li> </ol>	<ol style="list-style-type: none"> <li>Polyline will be drawn on the map to show the route</li> <li>Routing control will also appear on the right side for step-by-step navigation</li> </ol>
4b3.	View the respective websites of the amenities returned	<ol style="list-style-type: none"> <li>Click on 'visit website'</li> </ol>	<ol style="list-style-type: none"> <li>User will be redirected to the respective websites in a new tab</li> <li>If no link was provided from the foursquare search, user will be redirected to an error page instead</li> </ol>

4b4.	Reset search	1. Click on the arrow icon in offcanvas search	1. Search results and markers will be cleared from the offcanvas and map
GET DIRECTIONS			
4c.	Obtain directions to the attraction interest from the current location	1. Click on 'get directions' from the popup opened from 3a	1. Polyline will be drawn on the map to show the route from current location (default) to attraction of interest <ul style="list-style-type: none"> <li>- Users can choose to input a location of their choice as well</li> <li>- If location access is not granted, the default latitude and longitude is set to the center of Singapore (based on this site: <a href="https://latitude.to/articles-by-country/sg/singapore/92287/the-central">https://latitude.to/articles-by-country/sg/singapore/92287/the-central</a>)</li> </ul> 2. Routing control will also appear on the right side for step-by-step navigation
GET WEATHER FORECAST			
4d.	View the 2-hour weather forecast for various locations in Singapore	1. Click on the weather button on the top right of the map 2. Click on the weather icon near your place of interest	1. Weather icons will appear on the map at various regions 2. 5 main weather icons: <ul style="list-style-type: none"> <li>- Sunny (fair)</li> <li>- Cloudy</li> <li>- Partly cloudy</li> <li>- Rain</li> <li>- Thunderstorms</li> </ul> 3. Popup will show the location and weather forecast for that location of interest
5. Interacting with the navbar			

5a.	Change the current layer of attractions	1. Click on the toggle button on the navbar	<p>At the navbar:</p> <ul style="list-style-type: none"> <li>It will show “Attractions with PAID Entry” to denote the current layer</li> <li>Toggle button will have a red background and in the ‘off’ state;</li> </ul> <p>On the map:</p> <ul style="list-style-type: none"> <li>Layer control will have a money icon to denote the currently layer</li> <li>Filled with markers and marker clusters that have attractions with paid entry</li> </ul> <p>Sidebar nav will display only attractions with paid entry</p>
5b.	Navigate to the contact us page	1. Click on the ‘Contact Us’ button on the navbar	1. User will be directed to the contact us page with a form to fill and ‘return to main page’ button
6. Form submission and validation			
6a.	Filling in and submitting the form	1. Fill in the details 2. Submit the form	<p>1. If all fields are filled in accurately, the innerHTML of the form will change to a thank you text</p> <p>2. If user fails to fill in the form accurately, the fields where the responses are invalid will have an error message showing</p> <p><b>Invalid conditions:</b></p> <ul style="list-style-type: none"> <li>First Name: <b>no input</b></li> <li>Last Name: <b>no input</b></li> <li>Residency: <b>no radio button selected</b></li> <li>Email: <b>does not include ‘@’ and ‘.com’</b></li> </ul>

			<ul style="list-style-type: none"> <li>• Message: <b>no input</b></li> </ul>
6b.	Return to main page	1. Click the 'return to main page' button	1. User will be redirected to the main page with the map