Test Case	Description	Steps	Expected Result(s)
1. Choosin	g the initial layer		
1.	Choice of layer from the landing page:  • Attractions with free entry • Attractions with paid entry	1. Click on *Attractions with FREE entry upon reaching the landing page  * either attractions with free entry or paid entry can be selected -> expected result will differ	<ol> <li>User will be directed to the main page with the map and navbar</li> <li>At the navbar:         <ul> <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> </li> <li>On the map:         <ul> <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> </li> <li>Sidebar nav will display only attractions with free entry</li> </ol>
2. Viewing	the attractions on the offcanvas t	oggle	
2.	View all the attractions with free entry	Click on the navbar icon "SGgoWhere"	An offcanvas will toggle from the left side, showing all the attractions with free entry grouped into 5 different tabs:     - Arts     - Nature     - Culture & History     - Architecture & Landscapes

			- Recreation
3. Intera	acting with the left offcanvas		
3a.	View the respective attractions on the map	Click 'view on map' from the offcanvas toggle	User will be directed to the respective marker on the map, zoomed in and popup opened
3b.	View the respective websites of the attractions	Click 'visit     website' from the     offcanvas toggle	<ol> <li>User will be redirected to the respective websites in a new tab</li> <li>If no link was provided from the geojson, user will be redirected to an error page instead</li> </ol>
4. Intera	acting with the map, markers and pop	oups	
HIDE OI	R 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)  * layers can differ depending on preference	Arts markers should be hidden on the map
SEARCI	H NEARBY		
4b.	Search for amenities nearby	Click on marker	1. A 'return to search' button will appear at the bottom right

	(within 1km) the attraction of interest	to open popup if not already opened  2. Click on 'search nearby' on the popup  3. When offcanvas toggles from left, input in search term (e.g. 'food')  4. Press the search icon	<ul> <li>of the map to allow for toggling of the offcanvas search</li> <li>2. If no search term in keyed in, there will be an error message below the search box</li> <li>3. If the search term is valid: <ul> <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>4. If results are available: <ul> <li>Search results will be displayed in the offcanvas and marked on the map</li> </ul> </li> <li>5. If no results are found, 'no results found' will be displayed in the offcanvas instead</li> </ul>
4b1.	View the amenity of interest	Click on the amenity of interest from the offcanvas	Popup will be opened on the map
4b2.	Obtain directions to amenity of interest from attraction of interest	Click on 'get     directions' from     the popup     opened from 4a1	Polyline will be drawn on the map to show the route     Routing control will also appear on the right side for step-by-step navigation
4b3.	View the respective websites of the amenities returned	Click on 'visit website'	<ul> <li>3. User will be redirected to the respective websites in a new tab</li> <li>4. If no link was provided from the foursquare search, user will be redirected to an error page instead</li> </ul>

4b4.	Reset search	Click on the     arrow icon in     offcanvas search	Search results and markers will be cleared from the offcanvas and map
GET DIF	RECTIONS		
4c.	Obtain directions to the attraction interest from the current location	Click on 'get     directions' from     the popup     opened from 3a	Polyline will be drawn on the map to show the route     Routing control will also appear on the right side for step-by-step navigation
GET WE	EATHER 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	Weather icons will appear on the map at various regions     5 main weather icons:         - Sunny (fair)         - Cloudy         - Partly cloudy         - Rain         - Thunderstorms     Popup will show the location and weather forecast for that location of interest
5. Intera	cting with the navbar		
5a.	Change the current layer of attractions	Click on the toggle button on the navbar	At the navbar:  It will show "Attractions with PAID Entry" to denote the current layer  Toggle button will have a red background and in the 'off' state;  On the map:

5b.	Navigate to the contact us	Click on the	<ul> <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> <li>Sidebar nav will display only attractions with paid entry</li> <li>User will be directed to the contact us page with a form</li> </ul>
	page	'Contact Us' button on the navbar	to fill and 'return to main page' button
6. Form	submission and validation		
6a.	Filling in and submitting the form	Fill in the details     Submit the form	<ol> <li>If all fields are filled in accurately, the innerHTML of the form will change to a thank you text</li> <li>If user fails to fill in the form accurately, the fields where the responses are invalid will have an error message showing</li> <li>Invalid conditions:         <ul> <li>First Name: no input</li> <li>Last Name: no input</li> <li>Residency: no radio button selected</li> <li>Email: does not include '@' and '.com'</li> <li>Message: no input</li> </ul> </li> </ol>
6b.	Return to main page	Click the 'return to main page'     button	User will be redirected to the main page with the map