	Description	Steps	Expected Result
Mailing list sign-up validation			
	Not entering first/last name	1. Fill in only the email field of the form 2. Click 'Join our mailing list'.	Below the first and last name fields, an error message should appear prompting users to enter their name under each relevant field.
	Entering invalid email	1. Fill in first and last name fields on the form (e.g "John" and "Doe") 2. Leave email field empty or enter an invalid email address (e.g. johndoe2gmail.com) 3. Click 'Join our mailing list'.	Below the email field, an error message should appear prompting users to enter a valid email address.
	Successful form submission	4. Fill in first and last name fields on the form (e.g "John" and "Doe") 5. Leave email field empty or enter an invalid email address (e.g. johndoe@gmail.com) 6. Click 'Join our mailing list'.	The form should be replaced by text saying "Thanks for joining us!".
Charts filtering			
	Show filters	1. Click any 'Show filters' button	A form should pop up over the relevant chart with options for filtering the chart data. The 'Show filters' button should now read 'Hide filters'.
	Hide filters	1. Click any 'Show filters' button 2. After it changes to 'Hide filters', click on the 'Hide filters' button.	The filter form should no longer be displayed over the relevant chart. The 'Hide filters' button should now read 'Show filters'.

	Entering min/max year out of range of data	1. Click on any 'Show filters button'. 2. Enter '2000' into the minimum year field and/or '2030' into the maximum year field. 3. If additional options for filtering are present choose any filter. 4. Click 'Filter data'	The form should turn pink and play a shaking animation briefly. An alert should appear under the filter fields with a message that reads "Year range must be between 2003-2020."
	Entering year range with min/max year in opposite field	1. Click on any 'Show filters button'. 2. Enter '2015' into the minimum year field and '2010' into the maximum year field. 3. If additional options for filtering are present choose any filter. 4. Click 'Filter data'	The form should turn pink and play a shaking animation briefly. An alert should appear under the filter fields with a message that reads "Year range must be from minimum to maximum."
	Not selecting a filter category	1. If on computer, shrink viewer width to <768px 2. Click on the chart tab 'Summary' 3. Click 'Show filters' 4. Click 'Filter data'	The form should turn pink and play a shaking animation briefly. An alert should appear under the filter fields with a message that reads "Please select a filter for the data".
	Successful data filtering (Demographics charts)	1. Click on 'Show filters' for 'Demographic Profile of Drug Abusers in Singapore'. 2. Enter '2010' into the minimum year field and '2015' into the maximum year field. 3. Choose 'Drug' under 'Filter by'. 4. Click 'Filter data'	The filter form should no longer be displayed over the chart. The 'Hide filters' button should now read 'Show filters'. The 'Demographic Profile of Drug Abusers in Singapore' should change year range to 2010-2015 and show different data series for different drugs of abuse. The chart for 'Demographic Profile Breakdown over Year Range' should also update accordingly to display divisions by drugs of abuse. The colours of the data series on both charts should match.

	Successful data filtering (Drug Rehabilitation Centre charts)	1. Click on 'Show filters' for 'Demographic Profile of DRC inmates'. 2. Enter '2010' into the minimum year field and '2020' into the maximum year field. 3. Choose 'Education' under 'Filter by'. 4. Click 'Filter data'	The filter form should no longer be displayed over the chart. The 'Hide filters' button should now read 'Show filters'. The 'Demographic Profile of DRC inmates' should change year range to 2010-2020 and show different data series for different education statuses The charts for Drug Rehabilitation Center Overview' and 'DRC Releases by Gender' should also change to year range 2010-2020'. If filters are shown for the latter two charts, the year range displayed in the form should match the year range being displayed in the chart.
Charts mobile responsiveness			
	Resizing viewer (large to small)	1. Resize viewer from >768px to <768px	The charts should change to mobile layout (one displays at a time within viewer, navigation tabs appear over the chart container)
	Resizing viewer (small to large)	1. Resize viewer from <768px to >768px	Navigation tabs over the chart container should disappear. Charts should change layout (e.g. two-three charts can be seen within viewer at one time)
	Switching chart tabs	1. Viewer width must be <768px 2. Click on the chart tab 'Summary'	'Demographic Profile of Drug Abusers in Singapore' chart should animate sliding up to 'disappear' and 'Demographic Profile Breakdown over Year Range' chart should animate appearance by sliding down into the chart container. 'Drug abuser demographics' tab should change colour to red; 'Summary' tab should change colour to grey.