No.	Component	User Action	Precondition	Expected Results	Steps
1	User Interface	Updating Stations by Location	Start app.	All stations available in selected state are shown and updated in "Select station" drop down menu.	Open app. Click "Add station". Click "Select state" drop down menu. Select "Victoria" Click "Select station" drop down menu. All available stations in Victoria should be displayed. Repeat steps 4 onward, replacing Victoria with States = {NSW, TAS, WA, SA, NT, QLD, ANT}
2	User Interface	Viewing max temperature graph	Delete appstate.json. "Antarctica - Casey" added to favorites. Connected to internet.	A plot of max temp over time should be displayed.	Open app Select "Casey" from the favorites list Click "View Chart" on the top panel Untick the 9am, 3pm and min checkboxes A plot of the historical max temp data should be plotted
3	User Interface	Window position state saved	Delete appstate.json.	The window position of the previous session is saved and restored upon next use.	Open app Move app window to lower right of screen Close app Open app The window position should be restored to the same position as the previous session
4	User Interface	Window state saved	Delete appstate.json. "Antarctica - Casey" favorite added. Connected to internet.	The opened chart state is saved and restored upon next use.	Open app Click Casey under favorites stations. The top panel should now display Casey. Click "View Chart" Close app Open app The chart of Casey should be displayed.
5	User Interface	Viewing daily 9am graph	Delete appstate.json. "Antarctica - Casey" added to favorites. Connected to internet.	A plot of daily 9am temperatures should be plotted over time.	Open app Select "Casey" from the favorites list Click "View Chart" on the top panel Untick the 3pm, min and max checkboxes A plot of the historical 9AM temperatures should be displayed
6	User Interface	Viewing daily 3pm graph	Delete appstate.json. "Antarctica - Casey" added to favorites. Connected to internet.	A plot of daily 9am temperatures should be plotted over time.	Open app Select "Casey" from the favorites list Click "View Chart" on the top panel Untick the 9am, min and max checkboxes A plot of the historical 3PM temperatures should be displayed

7	User Interface	Viewing min temperature graph	Delete appstate.json. "Antarctica - Casey" added to favorites. Connected to internet.	A plot of max temp over time should be displayed.	Open app Select "Casey" from the favorites list Click "View Chart" on the top panel Untick the 9am, 3pm and max checkboxes A plot of the historical min temp data should be plotted
8	User Interface	Graph data updates on favourite switch	Delete appstate.json. "Antarctica - Casey" added to favorites. "Antarctica - Davis" added to favourites. Connected to internet.	Graph will contain data for "Antarctica - Davis".	Launch application Select "View Weather History" Select weather station Davis Graph data for "Antarctica - Davis" should now be displayed
9	User Interface	Chart data updates on favourite switch	Delete appstate.json. "Antarctica - Casey" added to favorites. "Antarctica - Davis" added to favourites. Connected to internet.	Chart will contain data for "Antarctica - Davis".	Launch application Select "View Chart" Select weather station Davis Chart data for "Antarctica - Davis" should now be displayed
10	User Interface	Zooming into chart	Delete appstate.json. "Antarctica - Casey" favorite added. Connected to internet.	The displayed chart switches from historical to latest.	Open app Click station Casey from favorites list Click view chart Drag the slider on the right hand side all the way to the left The chart should switch to latest readings
11	User Interface	Switching forecast sources	Delete appstate.json. "Victoria - Ballarat" favorite added. Connected to internet.	The forecast source should switch to OpenWeatherMap.	Open app Click Ballarat in favorites list The forecast from ForecastIO should be shown Click the OpenWeatherMap button on the forecast header The OpenWeatherMap 5 day forecast chart should be shown
12	Unintended file modification	App functions after unintended external file modification	Delete appstate.json. "Antarctica - Casey" favorite added.	The app should run as normal.	Open app Close app Open appstate.json in text editor Change all "0" characters to "9" and save the file Open app The app should function as normal

13	Unintended file modification	favorites.json modification	Delete appstate.json. "Antarctica - Casey" favorite added. "Victoria - Albury" favorite added.	The app should automatically delete invalid favorites.	Open app Close app Open "favorites.json" in text editor Replace Victoria with Victorian Save the file Open app "Victoria - Albury" favorite should no longer be visible under favorite stations
14	Data	Caching station data	Delete cache folder. Delete favorites.json. Delete appstate.json. Connected to internet.	System should cache downloaded station data for offline viewing. Station data should still be viewable without internet connection.	Open app Click "Add Station" Click dropdown for "Select State" and select "Victoria" Click dropdown for "Select Station" and select "Ballarat" Click "Add to My Favorites" Wait until the main screen displays the temperature for "Ballarat" Close the app Disconnect from the internet Open the app. The app should be displaying "Ballarat" weather station data
15	Data	Loading station URLs	Delete cache folder. Delete favorites.json. Delete appstate.json.	User opens app and expects all available states and stations listed.	Open app Click "Add station". The "Select State" drop down should display "Antarctica". The "Select Station" drop down should display "Casey"
16	Data	Removing favorites	Delete cache folder. Delete favorites.json. Delete appstate.json.	Ballarat favorite should be removed.	Open app Click "Add Station" Click dropdown for "Select State" and select "Victoria" Click dropdown for "Select Station" and select "Ballarat" Click "Add to My Favorites" Click "Remove from Favorites" on the top panel
17	Data	Asserting no duplicate favourites	Delete cache folder. Delete favorites.json. Delete appstate.json.	Only one instance of a station is to be in "Favourite Stations" after adding a station to favourites twice.	Open app. Click "Add station". Click "Select state" drop down menu. Select "Victoria" Click "Select station" drop down menu. Select "Albury". Click "Add to My Favorites" Repeat from step 2 to 6. An error message indicating no duplcates should be displayed.