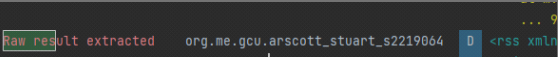

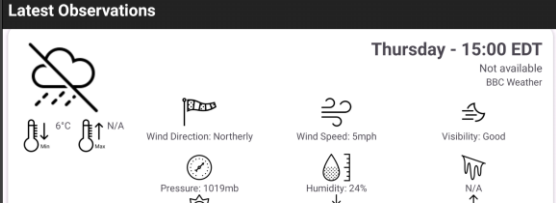

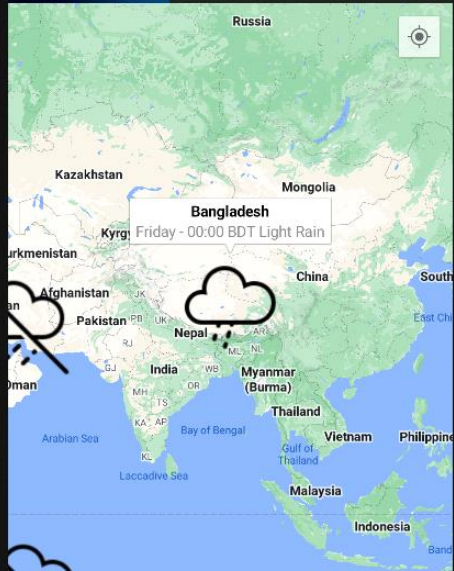

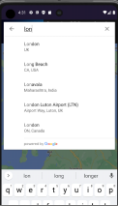
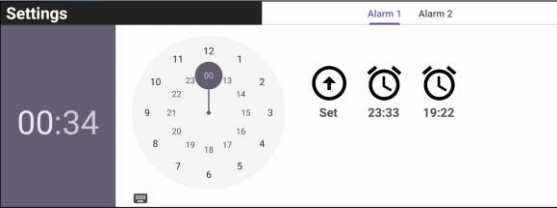
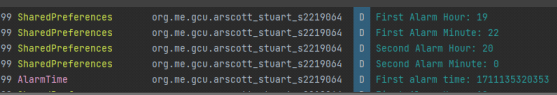
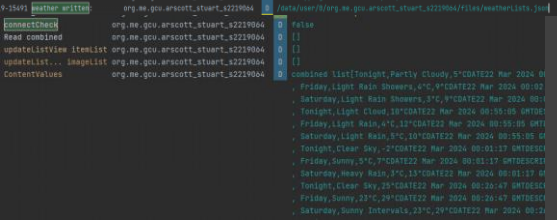


CW1 Test doc	Stuart_Arscott_S2219064	https://github.com/Stuart1389/MobileCw	https://github.com/Stuart1389/Arscott_Stuart_S2219064	<a href="https://caledonianac-my.sharepoint.com/:v:/g/personal/sarsco300_caledonian_ac_uk/ETGvgIb9DHxAs4Ci95VaiHkB04s7IbR4BhCEJYeuqM7jyA?e=6pcfjl&amp;nav=eyJyZWZlcnJhbEluZm8iOmsicmVmZXJyYWxBcHAiOiJTdHJlYW1XZWJBcHAiLCJyZWZlcnJhbFZpZXciOiJTaGFyZURpYWxvZy1MaW5rliwicmVmZXJyYWxBcHBQbGF0Zm9ybSI6IldlYiIsInJlZmVycmFsTW9kZSI6InZpZXcifX0%3D">https://caledonianac-my.sharepoint.com/:v:/g/personal/sarsco300_caledonian_ac_uk/ETGvgIb9DHxAs4Ci95VaiHkB04s7IbR4BhCEJYeuqM7jyA?e=6pcfjl&amp;nav=eyJyZWZlcnJhbEluZm8iOmsicmVmZXJyYWxBcHAiOiJTdHJlYW1XZWJBcHAiLCJyZWZlcnJhbFZpZXciOiJTaGFyZURpYWxvZy1MaW5rliwicmVmZXJyYWxBcHBQbGF0Zm9ybSI6IldlYiIsInJlZmVycmFsTW9kZSI6InZpZXcifX0%3D</a>		
Type	What's being tested	Test carried out	Expected results	Actual results	Logcats	Images
Permissions	Ask user for permissions	Start app	User should be prompted for permissions	User correctly prompted		
Permissions	Permission denied	Start app, deny permissions	App should continue to function, if user opens map, move to user position button shouldn't be available since no location perms	App continues to function, move to location gone on map view		
Permissions	Permission granted	Start app, accept permissions	Move to user device button should be available, user shouldn't be prompted again when opening app	expected		
Data accuracy	3 day forecast at https://weather-broker-cdn.api.bbc.co.uk/en/forecast/rss/3day/ extraction is successful and accurate	start app, see logcat. Download raw rss feed using URL manually and compare	Logcat should show same data as when manually read from URL	Data was all consistent with manually read RSS feeds.	Logcat too big to show here.	
Data accuracy	Latest observations at https://weather-broker-cdn.api.bbc.co.uk/en/observation/rss/ extraction is successful and accurate	start app, see logcat. Download raw rss feed using URL manually and compare	Logcat should show same data as when manually read from URL	Data was all consistent with manually read RSS feeds.	Same as above ^	
Parsing	3 day forecast, parsing correctly extracts information from correct tags, passes to weatherItem class and successfully concatenates into a single string	Start app, inspect logcat	Data extracted using parser is consistent with raw data from rss feed inspected manually	Inspected all, no problems.	example logcat from Oman: 2024-03-21 20:58:00.685 18821-18992 Finish parse item: org.me.gcu.arscott_stuart_s2219064 D Tonight,Clear Sky,25°CDATE21 Mar 2024 20:57:42 GMTDESCRIPTIONWind Direction: Westerly, Wind Speed: 5mph, Visibility: Good, Pressure: 1010mb, Humidity: 77%, UV Risk: 0, Pollution: -- , Sunset: 18:18 GST	
Parsing	Latest observation is correctly parsed and concatenates into a string in weatherItem class	Start app, check logcat	Data extracted using parser is consistent with raw data from rss feed inspected manually	Expected.	example logcat from Glasgow: 2024-03-21 21:04:05.570 19076-19151 Finish parse item: org.me.gcu.arscott_stuart_s2219064 D Thursday - 20:00 GMT, Not available, 10°C DATE21 Mar 2024 20:00:00 GMTDESCRIPTIONWind Direction: West South Westerly, Wind Speed: 18mph, Humidity: 76%, Pressure: 1013mb, Steady, Visibility: Moderate	

Parsing	Weather type (e.g. sunny, light rain,etc) is correctly extracted from string and placed into list	Start app, check logcat	Weather type is correctly extracted, placed in list and remains in correct index position to be used in conjunction with weatherItem string.	Expected. Init list (init list is combined with rest list in view model as part of the requirement to load some data initially), rest list and obs list were inspected. Example logcat of rest list >	2024-03-21 22:21:13.288 10685-10775 Check list Model restListImage org.me.gcu.arscott_stuart_s2219064 D [light_rain, light_rain, light_rain_showers, clear_sky, sunny, heavy_rain, clear_sky, sunny, sunny_intervals, partly_cloudy, thundery_showers, light_rain_showers, mist, drizzle, sunny, light_rain, light_rain, light_rain_showers, clear_sky, sunny, heavy_rain, clear_sky, sunny, sunny_intervals, partly_cloudy, thundery_showers, light_rain_showers, mist, drizzle, sunny]
View model	All lists are correctly passed to view model automatically after parsing is complete	Start app, check logcat	Lists created in view model will be correctly populated with data obtained from model class.	Logcat from initList after initParse is complete can be seen on the right. Also checked logcats for combined and obs lists after their respective parsing was finished aswell as their accompanying image lists.	2024-03-21 22:28:31.212 10870-10961 ViewModel initlist org.me.gcu.arscott_stuart_s2219064 D [Tonight,Light Rain Showers,5°C DATE21 Mar 2024 22:01:25 GMT DESCRIPTIONWind Direction: Westerly, Wind Speed: 20mph, Visibility: Good, Pressure: 1013mb, Humidity: 83%, UV Risk: 1, Pollution: Low, Sunset: 18:34 GMT  Friday,Light Rain Showers,4°C,8°C DATE21 Mar 2024 22:01:25 GMT DESCRIPTIONWind Direction: Westerly, Wind Speed: 22mph, Visibility: Moderate, Pressure: 1011mb, Humidity: 74%, UV Risk: 2, Pollution: Low, Sunrise: 06:13 GMT, Sunset: 18:36 GMT  Saturday,Light Rain,3°C,9°C DATE21 Mar 2024 22:01:25 GMT DESCRIPTIONWind Direction: Westerly, Wind Speed: 19mph, Visibility: Good, Pressure: 1004mb, Humidity: 77%, UV Risk: 2, Pollution: Low, Sunrise: 06:10 GMT, Sunset: 18:38 GMT
View model	Init list is correctly placed in combined list after init parse is complete and rest list is correctly added to combined list after its finished parsing to display all available data to the user.	Start app, check logcat	Combined list will contain data from both init list and rest list in correct index places.	Combined list and accompanying image list contained expected data.	Too big to show all logcats. See image. Checked combined list and combined list image logs. Also changed to log.debug instead of log.error after test.
Main activity	Main activity displays all widgets correctly in portrait mode on start including bottom nav bar, fragment container, and headers (text view with name, number, bbc, etc)	Start app, examine screen on startup.	All widgets should be correctly displayed in appropriate places.	Expected.	

Main activity landscape	Check widgets are correctly displayed on rotate.	Start app, rotate, examine screen.	Widgets should move to better accommodate screen real-estate. Bottom nav bar moves to top.	Expected.	
Mainweather	Listview is correctly populated using lists from view model automatically on startup, this includes initial list being loaded first followed by the combined list containing rest list.	Start app, scroll through list view to bottom and inspect.	Listview should contain weather basic data only, the data should be displayed in the correct order and under the correct heading which should be displayed on location change. Icons and text should be laid out correctly.	Expected.	
Mainweather landscape	Data remains consistent on screen rotation, and layout correctly changes.	Start app, rotate to landscape and scroll through grid view. Check logcat to make sure data isn't being reprocessed.	Listview should switch to a grid view to better accommodate screen space. Data shouldn't be processed again, and should use data already populating lists in view model.	Expected. Irrelevant logcats on rotate, all good.	
Main weather	Buttons to show detailed 3 day forecast and latest obs.	Start app, scroll down and click obs button, go back, scroll down click detail list button. Rotate to landscape and do the same again.	On click, fragment should change to respective layout. If the user clicked the latest obs button the list should scroll down to the place they clicked on. If they clicked detail it should also bring them directly to the place they clicked on.	Expected.	
Weather latest observations	Check weather is correctly displayed, data should be used from existing lists and not reprocessed. Icons and text should be laid out appropriately.	Start app, click on latest obs icon from mainweather listview and inspect.	Header should correctly display the location along with date and time of the weather forecast. The correct data should be paired with the correct icons. The weather type icon should be correctly displayed and correspond to the text displayed in each list item.	Expected.	
Weather latest observations landscape	Check data is consistent through rotation and data isn't being reprocessed. Widgets should be moved to more appropriate locations to make better use of space.	Open latest observations page, then rotate. Check logcat.	User should remain in the latest observations page, data should also remain the same. Layout should change to landscape layout.	Expected.	Logcat too big, no indication of reprocessing. Good stuff. 

Weather detailed	Check weather is correctly displayed, data should be used from existing lists and not reprocessed. Icons and text should be laid out appropriately. Click through locations.	Start app, click on detailed icon from mainweather listview and inspect.	Clicking through locations should loop back to the start to comply with one of the requirements. Data should be consistent with the other views and displayed correctly. Text should be paired with the correct icons.	Clicking through list both ways works as expected and loops back to the start. Data is consistent and everything is displayed correctly.	
Weather detailed portrait	Check data is consistent through rotation and data isn't being reprocessed. Widgets should be moved to more appropriate locations to make better use of space.	Open detailed weather page, then rotate. Check logcat.	User should remain in the same page, data should remain consistent through rotation. Layout should change to landscape layout. Arrow buttons should continue to work.	Expected.	No indication of reprocessing.
Map view	Checking map is displayed correctly and works as expected.	Start app, open map view from main activity nav bar. Test map controls and click on each icon.	Map and map controls should be displayed correctly. Icons should be placed at the coords of each location on start with corresponding weather type icons. Clicking on a weather icon should display basic info about the latest observations of that location. Zoom controls should function and if the user has granted location perms, clicking on the move to my location icon should move the camera to device location.	Expected.	
Map view landscape	Check map is displayed correctly in landscape mode.	Open map from nav bar then rotate. Test all controls and click on each icon.	Map controls should work in landscape model, map should continue to work as expected.	Expected.	
Map view autocomplete fragment	Ensure user can search for a place using autocomplete	Open map, click autocomplete fragment, select a place. Repeat. Switch to landscape and do same again.	When user types, suggestions for places show up. Clicking on a suggestion should select it and bring the user to that place using coords.	Expected.	Place: Glasgow, ChIJ685WIFYViEgRHIHvBbiD5nE LatLng lat/Ing: (55.86167039999999,-4.2583345) 

Settings view	Check widgets are displayed correctly, user should be able to schedule updates using clock. Popup on set alarm. Tabs should change alarm.	Wipe phone data, start app, open settings menu, inspect icons and displayed text. Change time using clock and click set icon.	default update times should be 8am and 8pm, this should be displayed next to corresponding alarm icon. If the user clicks set alarm the corresponding alarm text should update to the new time, a popup should come up telling user to restart for changes to take place. Alarm tabs should correctly control whether the first or second scheduled update is being set.	Expected.	
Settings view landscape	Ensure functionality remains in landscape mode.	Open settings page, rotate phone.	Tabs should merge with header to give clock more room, alarm icons should be moved in line with clock. User should remain in settings page. Changing alarm schedule should continue to work.	Expected.	
Alarm prefs	Ensure alarm is updated correctly after restarting and persists through restart.	Set alarm in settings page. Restart app. Check alarm in logs. Close app completely. Start app, check logs.	Logcat should show correct alarms.	Expected.	2024-03-22 00:28:06.353 11499-11499 SharedPreferences org.me.gcu.arscott_stuart_s2219064 D First Alarm Hour: 19 2024-03-22 00:28:06.353 11499-11499 SharedPreferences org.me.gcu.arscott_stuart_s2219064 D First Alarm Minute: 22 2024-03-22 00:28:06.353 11499-11499 SharedPreferences org.me.gcu.arscott_stuart_s2219064 D Second Alarm Hour: 20 2024-03-22 00:28:06.353 11499-11499 SharedPreferences org.me.gcu.arscott_stuart_s2219064 D Second Alarm Minute: 0 2024-03-22 00:28:06.353 11499-11499 AlarmTime org.me.gcu.arscott_stuart_s2219064 D First alarm time: 1711135320353 
Write to file	After parsing is finished, the contents of the lists should be written to a file to be used if the user has no internet.	Start app with internet and check logs.	Logcat should show file being written to.	Expected.	2024-03-22 00:56:11.212 15419-15491 weather written: org.me.gcu.arscott_stuart_s2219064 D /data/user/0/org.me.gcu.arscott_stuart_s2219064/files/weatherLists.json 
Connection check	App should check user connection and act accordingly.	Start app with no internet, check logcat and go through each view.	App should test connection with google server, if it can't reach the server then it should read from file, populate lists and then update data in the app.	After timing out the app successfully read from file, all views were populated correctly.	2024-03-23 15:12:51.727 16142-16228 connectCheck org.me.gcu.arscott_stuart_s2219064 D false 