Link of the video:

Link of the Android Project:

Link of the .APK File:

## Black Box Testing

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Step No. | Test Case | Test Data | Expected Result | Actual Result | Status | Comments | Video Time  mins. |
| 1 | App Opens without shutting down | Open the app. | App opens to the first tab | App opens to the first tab | pass |  | 0.02 |
| 2 | App Starts to download and process data from Web API once opened via Progress bar | Open the app | App opens to the first tab and starts downloading data, shown by Progress bar | App opens to the first tab and starts downloading data, shown by Progress bar | pass | First tab (current incidents) is pulling data from the GCU text document due to CONVID-19 in the video but uploaded has the correct Traffic Scotland URL. | 0.02 |
| 3 | App Finishes Download and displays a collapsed list | Open the app | App finishes the download/ processing and displays list with a toast to show it done | App finishes the download/ processing and displays list with a toast to show it done | pass |  | 0.07 |
| 4 | Click on the List Item and it should expand | Click on List Item | List Item Expands to show more detail | List Item Expands to show more detail | pass |  | 0.08 |
| 5 | Click on the button to refresh data | Click on refresh button | Progress bar appears and disappears once done; it should show the updated list with toast to indicate its done | Progress bar appears and disappears once done; it should show the updated list with toast to indicate its done | pass | Not possible to test if the data is changed/ updated. | 0.12 |
| 6 | Swipe down refreshes the data. | Swipe down in the indicated area | Refresh symbol and progress bar appears and updates the data with a toast to indicate its done | Refresh symbol and progress bar appears and updates the data with a toast to indicate its done | pass |  | 0.18 |
| 7 | Switching tabs | Click on a different tab | Shows a different layout of the Roadworks/ Planned roadworks /  Plan your Journey | Shows a different layout of the Roadworks/ Planned roadworks /  Plan your Journey | pass |  | 0.23 |
| 8 | Search road | Typing (M90 J1 to J3) into the edit box | Filters and finds the query | Filters and finds the query | pass |  | 0.42 |
| 9 | List Item Colour | Scrolling to find a List Item with a different colour | Green = same day  Orange = 1-day duration  Red = 3-day duration | Green = same day  Orange = 1-day duration  Red = 3-day duration | pass |  | 1.11 |
| 10 | Plan your Journey (Does not Work) | Enter both locations into the edit boxes and click enter | Displays a polyline between these two locations on the roads | Does nothing | Fail | Doesn’t work without the google direction API billing. See Frag4 code for more info. | 1.33 |
| 11 | Floating Action button shows a dark mode of the app | Press the Black colour eye button | Shows a dark mode version of the app | Shows a dark mode version of the app | pass |  | 2.3 |
| 12 | Dark mode functionality | Test conditions 1 – 10 | Yields the same results | Yields the same results | pass |  | 2.4 |
| 13 | Landscape Layout | Enable Landscape and change orientation | Layout changes from portrait to landscape. | Layout changes from portrait to landscape. | pass |  | 3.19 |
| 14 | Landscape functionality | Test conditions 1 – 10 minus the swipe down | Yields the same results | Yields the same results | pass | Swipe down space was removed to make room for the list view. | 3.20 |
| 15 | Dark Mode Landscape Functionality | Test the swap between tabs. (to ensure it does not crash) | Did not crash and displayed both in landscape and in dark mode | Did not crash and displayed both in landscape and in dark mode | pass | Tested this way as both worked singularly | 4.38 |