Test Report

Device: Emulator Pixel 2, Android 12

Over information about executed tests	Amount	Passed	Failed
Manual Tests	7	5	2
Automated Tests	13	12	1

Home view automated tests passed in 88%, discovered issue about results not being distinct was raised with number #2 in bug report.

9 tests	1 failures	35.334s duration		88% successful

Failed tests **Tests**

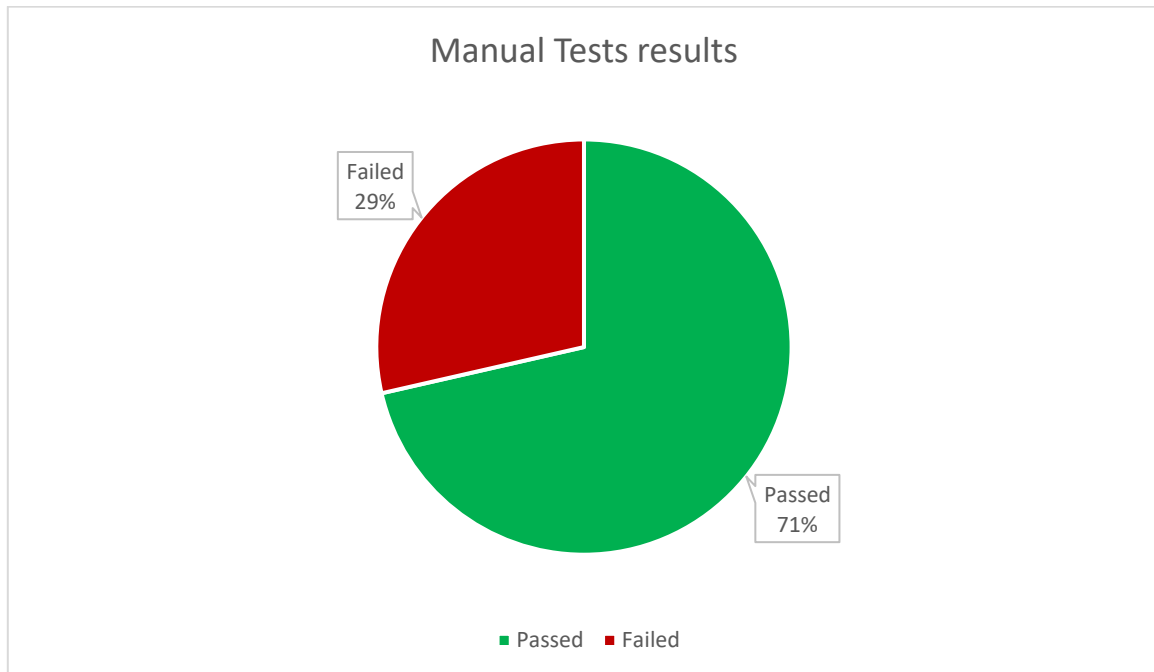| Test	Pixel_2_API_31(AVD) - 12
verifyCityIsSearchable	passed (3.853s)
verifyHomeLayout	passed (2.673s)
verifyHomeViewAfterGoingBackFromBackground	passed (5.058s)
verifyHomeViewAfterWakeUp	passed (4.101s)
verifyIfListIsScrollable	passed (5.039s)
verifyNavigationToTheMapView	passed (4.438s)
verifyPageTitle	passed (2.983s)
verifyPartiallySearch	passed (3.263s)
verifySearchResultsAreDistinct	failed (3.926s)

Map view automated tests has passed in 100%

4 tests	0 failures	19.838s duration		100% successful

Tests

Test	Pixel_2_API_31(AVD) - 12
checkIfPinPointIsDisplayed	passed (3.656s)
verifyIfGoogleMapsImagesAreDisplayedAndClickable	passed (4.140s)
verifyMapViewAfterGoingBackFromBackground	passed (6.772s)
verifyUserIsAbleToNavigateBackAndForthFromTheMap	passed (5.270s)

Manual tests success rate is 71% with 1 discovered issue reported with number #1 in bug report and 1 duplicated issue reported with number #2 in bug report.

Test Case Name	Status
Verify list is empty for incorrect search	Passed
Verify if cities list is sorted	Passed
Verifies if cities list is distinct	Failed
Verify is user is able to interact with map	Passed
Verify search results are adjustable	Passed
Verify search results are sorted	Passed
Verify city with country is searchable	Failed

Risks

The search engine and the Linear list with cities cause issues that impact the main functionality of the app, which is searching for a city. Duplicated or missing results for correct search phrase makes the app not functional.

The list of cities should be divided not only by country but also a region, which could limit the results to the correct one.

Instead of the single search bar, a better option would be a search bar for City and search bar/select for Country, which could avoid misunderstanding what should be / could be pasted in the search input.

Summary

Core features according to instructions given by readme were automated, in testing, I've decided to focus on searching city as it's the main functionality.

I've also created basic tests for interacting with the map, such as checking if the map pinpoint is displayed and other map buttons, as the goal of this app is to check the location of the city on the map.

Due to a lack of detailed acceptance criteria, I assumed some of the requirements, e.g. those cities in the list should be distinct, which I reported as a bug, but it could be just an improvement to distinguish results not only by country but also by region.

Due to a lack of specifics about allowed search criteria, I've decided to automate only a few options, like using partial city name, city name with country, and search existing city.

Tests were run on pixel 2 with Android 7 as that was the original target of the app and on Pixel 2 with android 11 and android 12. Results were the same with slightly better performance in favor on newer versions.