

QR Code Mobile Application test report

1.Introduction:

App Description	QR code Scanner and Generator
Supports	Android Phone and tablets
Language supported	English
Supported Platforms	Android Oreo version 8.0 and above

2.Purpose:

This Test Report provides the summary of the results of test performed as outlined within document. It shows to the best extent the testing environment and test results.

3.Environment:

JAVA Environment :

```
22 dependencies {
23     def lifecycle_version = "2.0.0"
24     implementation "androidx.lifecycle:lifecycle-extensions:$lifecycle_version"
25     implementation fileTree(dir: 'libs', include: ['*.jar'])
26     implementation 'androidx.appcompat:appcompat:1.0.0'
27     implementation 'androidx.constraintlayout:constraintlayout:1.1.3'
28     implementation 'com.google.android.material:material:1.0.0'
29     implementation 'androidx.recyclerview:recyclerview:1.0.0'
30     testImplementation 'junit:junit:4.12'
31     androidTestImplementation 'androidx.test.ext:junit:1.1.0'
32     androidTestImplementation 'androidx.test.espresso:espresso-core:3.1.1'
33     implementation 'com.google.zxing:core:3.2.1'
34     implementation 'me.dm7.barcodescanner:zxing:1.9'
35     implementation 'androidx.navigation:navigation-runtime:2.1.0'
36     implementation 'com.google.android.material:material:1.0.0-rc01'
37 }
38
```

Espresso is a library that has been provided by Google to do unit tests and integration when the Android application is built. And the espresso library will automatically be included in the android project that was built when the project was first created. In this version we use espresso version 3.1.1.

Android devices used for test:

Resolution	Device Model	Processor	OS Version	RAM	Storage	Test Result
1080x1920	Huawei P9	1.8GHz octa-core	Nougat (7.0)	3GB	32GB	Passed
1440x2960	Samsung Galaxy S8+	2.35GHz + 1.9GHz	Pie (9.0)	4GB	64GB	Passed

4.Unit Tests:

As for this test, smallest program units are working in a proper way . Detailed comments are given in Doxygen Documentation report.

5.Intergration Tests:

We have used Big Bang method for this Test. All fragments of the program assembled and application was build without errors and working as expected. As for results comments are detailed in Doxygen Documentation report.

```
2020-01-18 09:53:05.682 1033-1071/? I/Bluetooth_framework: BluetoothManagerService:Message: 401
2020-01-18 09:53:06.746 27878-27878/com.example.qr_code I/art: at void android.app.ActivityThread$H.handleMessage(android.os.Message) (ActivityThread.java:1567)
2020-01-18 09:53:06.746 27878-27878/com.example.qr_code I/art: at void android.os.Handler.dispatchMessage(android.os.Message) (Handler.java:102)
2020-01-18 09:53:06.746 27878-27878/com.example.qr_code I/art: at void android.app.ActivityThread$H.handleMessage(android.os.Message) (ActivityThread.java:1567)
2020-01-18 09:53:06.746 27878-27878/com.example.qr_code I/art: at void android.os.Handler.dispatchMessage(android.os.Message) (Handler.java:102)
2020-01-18 09:53:08.684 1033-1071/? I/Bluetooth_framework: BluetoothManagerService:Message: 401
2020-01-18 09:53:11.688 1033-1071/? I/Bluetooth_framework: BluetoothManagerService:Message: 401
2020-01-18 09:53:12.868 495-1923/? I/AwareLog: HiberManagerService::sendMessageToHiberTask successful
2020-01-18 09:53:13.430 495-1923/? I/AwareLog: HiberManagerService::sendMessageToHiberTask successful
all successfully finished in 1 s 931 ms.
restart successful without requiring a re-install.
Bluetooth_framework: BluetoothManagerService:Message: 401
```

6.System Tests:

As for results to system tests, We have test the application with different device to be sure about the compatibility of the devices that are not directly related to the costumer requirements.

The summary of the test results are listed in last section “Test Results”(Section 9).


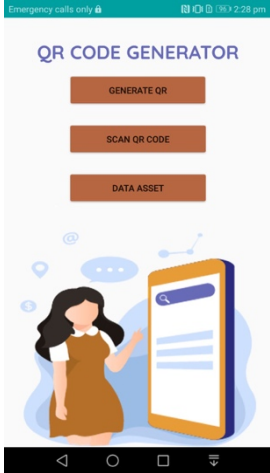
7. User Acceptance Tests:

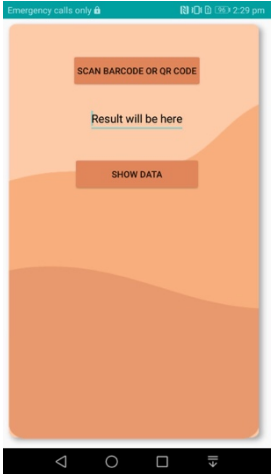
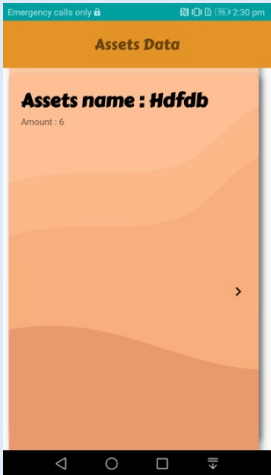
This process involved using 2 devices as real users, in real-world scenarios. The test has been conducted within the team. Results are listed in last section (Section 9).

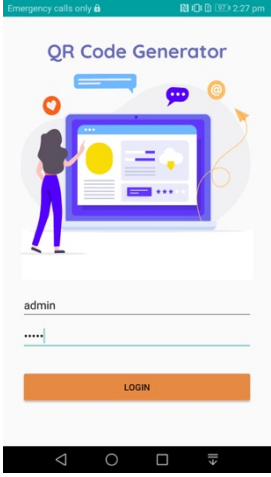
8. Implementation Tests:

As for test results to this protocol, we have tried to test the application in different scenarios possible. With our type of application, we will be having standard environment with clients ideal operating system as specified in beginning of the project.

9. Test Results:

TEST	SCREENSHOT	RESULTS
Functionality		
Installation the app	-	Passed
Check test app icon		Passed
Check the app size	-	Passed
Check app rotation	-	Fixed Oriented Layout
User Interface		
All graphic elements, text and animations with high resolution	-	Passed
Main Menu interface		Passed
Ability to return to previous screen	-	Passed

Scroll / Swipe	-	Passed
Proper device operability		
Device operability after launching app	-	Passed
Generate QR Code	-	Passed
Scan QR code		Passed
Data Base		Passed

Login user name and password		Passed
Check hint functionality		
Hints functionality	-	Passed
Loading Processes		
Loading all screens correctly	-	Passed
All screen open smoothly and as expected	-	Passed
Loading time as expected	-	Passed
Suspend Events		
App works after leaving phone on sleep mode	-	Passed
Correct functionality after phone sleep mode	-	Passed
Correct functionality if during app take the call	-	Passed
Removing the APP		
Removal of app	-	Passed
Possibility to install after removing	-	Passed
Security		
Unauthorized login	-	Passed