ANDROID STATIC ANALYSIS REPORT

app_icon

GPSMapApp (1.0)

File Name:	app-debug.apk
Package Name:	com.example.gpsmapapp
Scan Date:	Oct. 25, 2025, 7:06 p.m.
App Security Score:	46/100 (MEDIUM RISK)
Grade:	B

FINDINGS SEVERITY

HIGH	MEDIUM	INFO	SECURE	HOTSPOT
2	5	0	1	1

FILE INFORMATION

File Name: app-debug.apk
Size: 6.72MB
MD5: 338a6ad8557784da3c67cc3d466129b1
SHA1: 4e419ef1b3f6e12716aa2563f6fe244c375214c5
SHA256: 9d562de4b8390e79e1ff5465c85e799a49c2f1f2b7ec14ebfbdc189fba1f51e5

APP INFORMATION

App Name: GPSMapApp
Package Name: com.example.gpsmapapp
Main Activity: com.example.gpsmapapp.MainActivity
Target SDK: 36
Min SDK: 26
Max SDK:
Android Version Name: 1.0
Android Version Code: 1

APP COMPONENTS

Activities: 4
Services: 0
Receivers: 1
Providers: 1
Exported Activities: 2
Exported Services: 0
Exported Receivers: 1
Exported Providers: 0

CERTIFICATE INFORMATION

```
Binary is signed
v1 signature: False
v2 signature: True
v3 signature: False
v4 signature: False
X.509 Subject: CN=Android Debug, O=Android, C=US
Signature Algorithm: rsassa_pkcs1v15
Valid From: 2025-09-02 23:10:52+00:00
Valid To: 2055-08-26 23:10:52+00:00
Issuer: CN=Android Debug, O=Android, C=US
Serial Number: 0x1
Hash Algorithm: sha256
md5: bbbf9f6096b6543578a1754347056eb8
sha1: ca00c1d92a1db8ae0f01d30ae3b3c726c358c432
sha256: 23b843457944882b3cbde583d0c59eadeb780661755626256df943a7271b4041
sha512: 58fbba3f76fd6a7c0288029d9c842b7a37f7fc891ba7f7fbbde57fb007f4a5c5eb6db93ea616106b14c8ba826c3e11207488769e390399f408fa6e7e23ec6658
PublicKey Algorithm: rsa
Bit Size: 2048
Fingerprint: 45ad9b1051bbbf5f5ac61e49fbcf64059262bad380b0c425abdd92a223f64a50
Found 1 unique certificates
```

APPLICATION PERMISSIONS

PERMISSION	STATUS	INFO	DESCRIPTION
android.permission.ACCESS_FINE_LOCATION	dangerous	fine (GPS) location	Access fine location sources, such as the Global Positioning System on the phone, where available. Malicious applications can use this to determine where you are and may consume additional battery power.
android.permission.ACCESS_COARSE_LOCATION	dangerous	coarse (network-based) location	Access coarse location sources, such as the mobile network database, to determine an approximate phone location, where available. Malicious applications can use this to determine approximately where you are.
android.permission.INTERNET	normal	full Internet access	Allows an application to create network sockets.
android.permission.ACCESS_NETWORK_STATE	normal	view network status	Allows an application to view the status of all networks.
com.example.gpsmapapp.DYNAMIC_RECEIVER_NOT_EXPORTED_PERMISSION	unknown	Unknown permission	Unknown permission from android reference

APKID ANALYSIS

<table>
<tr><th>FILE</th><th>DETAILS</th></tr>
<tr><td>classes3.dex</td><td><table><tr><th>FINDINGS</th><th>DETAILS</th></tr><tr><td>Compiler</td><td>r8</td></tr></table></td></tr>
<tr><td>classes2.dex</td><td><table><tr><th>FINDINGS</th><th>DETAILS</th></tr><tr><td>Compiler</td><td>unknown (please file detection issue!)</td></tr></table></td></tr>
<tr><td>classes4.dex</td><td><table><tr><th>FINDINGS</th><th>DETAILS</th></tr><tr><td>Compiler</td><td>r8 without marker (suspicious)</td></tr></table></td></tr>
<tr><td>classes.dex</td><td><table><tr><th>FINDINGS</th><th>DETAILS</th></tr><tr><td>Anti-VM Code</td><td>Build.FINGERPRINT check
Build.MODEL check
Build.MANUFACTURER check
Build.BRAND check</td></tr><tr><td>Compiler</td><td>r8</td></tr></table></td></tr>
</table>

🔒 NETWORK SECURITY

NO	SCOPE	SEVERITY	DESCRIPTION

CERTIFICATE ANALYSIS

HIGH: **1** | WARNING: **0** | INFO: **1**

TITLE	SEVERITY	DESCRIPTION
Signed Application	info	Application is signed with a code signing certificate
Application signed with debug certificate	high	Application signed with a debug certificate. Production application must not be shipped with a debug certificate.

MANIFEST ANALYSIS

HIGH: **1** | WARNING: **5** | INFO: **0** | SUPPRESSED: **0**

NO	ISSUE	SEVERITY	DESCRIPTION
1	App can be installed on a vulnerable Android version Android 8.0, minSdk=26]	warning	This application can be installed on an older version of android that has multiple vulnerabilities. Support an Android version => 10, API 29 to receive reasonable security updates.
2	Debug Enabled For App [android:debuggable=true]	high	Debugging was enabled on the app which makes it easier for reverse engineers to hook a debugger to it. This allows dumping a stack trace and accessing debugging helper classes.
3	Application Data can be Backed up [android:allowBackup=true]	warning	This flag allows anyone to backup your application data via adb. It allows users who have enabled USB debugging to copy application data off of the device.

NO	ISSUE	SEVERITY	DESCRIPTION
4	Activity (com.example.gpsmapapp.MapaLugar) is not Protected. [android:exported=true]	warning	An Activity is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device.
5	Activity (com.example.gpsmapapp.map) is not Protected. [android:exported=true]	warning	An Activity is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device.
6	Broadcast Receiver (androidx.profileinstaller.ProfileInstallReceiver) is Protected by a permission, but the protection level of the permission should be checked. Permission: android.permission.DUMP [android:exported=true]	warning	A Broadcast Receiver is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device. It is protected by a permission which is not defined in the analysed application. As a result, the protection level of the permission should be checked where it is defined. If it is set to normal or dangerous, a malicious application can request and obtain the permission and interact with the component. If it is set to signature, only applications signed with the same certificate can obtain the permission.

CODE ANALYSIS

NO	ISSUE	SEVERITY	STANDARDS	FILES

NIAP ANALYSIS v1.3

NO	IDENTIFIER	REQUIREMENT	FEATURE	DESCRIPTION

ABUSED PERMISSIONS

TYPE	MATCHES	PERMISSIONS
Malware Permissions	4/25	android.permission.ACCESS_FINE_LOCATION, android.permission.ACCESS_COARSE_LOCATION, android.permission.INTERNET, android.permission.ACCESS_NETWORK_STATE
Other Common Permissions	0/44	

Malware Permissions:

Top permissions that are widely abused by known malware.

Other Common Permissions:

Permissions that are commonly abused by known malware.

OFAC SANCTIONED COUNTRIES

This app may communicate with the following OFAC sanctioned list of countries.

DOMAIN	COUNTRY/REGION

DOMAIN MALWARE CHECK

DOMAIN	STATUS	GEOLOCATION

DOMAIN	STATUS	GEOLOCATION
i.imgur.com	ok	**IP:** 151.101.52.193 **Country:** United States of America **Region:** California **City:** San Francisco **Latitude:** 37.775700 **Longitude:** -122.395203 **View:** Google Map

HARDCODED SECRETS

POSSIBLE SECRETS
"google_maps_key" : "AIzaSyCLHZsXTzy6kqIdSKtD-8xwT6fTT174KII"

SCAN LOGS

Timestamp	Event	Error
2025-10-25 19:06:18	Generating Hashes	OK
2025-10-25 19:06:18	Extracting APK	OK

2025-10-25 19:06:18	Unzipping	OK
2025-10-25 19:06:19	Parsing APK with androguard	OK
2025-10-25 19:06:19	Extracting APK features using aapt/aapt2	OK
2025-10-25 19:06:19	Getting Hardcoded Certificates/Keystores	OK
2025-10-25 19:06:21	Parsing AndroidManifest.xml	OK
2025-10-25 19:06:21	Extracting Manifest Data	OK
2025-10-25 19:06:21	Manifest Analysis Started	OK
2025-10-25 19:06:21	Performing Static Analysis on: GPSMapApp (com.example.gpsmapapp)	OK
2025-10-25 19:06:21	Fetching Details from Play Store: com.example.gpsmapapp	OK
2025-10-25 19:06:22	Checking for Malware Permissions	OK
2025-10-25 19:06:22	Fetching icon path	OK

2025-10-25 19:06:22	Library Binary Analysis Started	OK
2025-10-25 19:06:22	Reading Code Signing Certificate	OK
2025-10-25 19:06:22	Running APKiD 3.0.0	OK
2025-10-25 19:06:25	Detecting Trackers	OK
2025-10-25 19:06:26	Decompiling APK to Java with JADX	OK
2025-10-25 19:06:44	Converting DEX to Smali	OK
2025-10-25 19:06:44	Code Analysis Started on - java_source	OK
2025-10-25 19:06:45	Android SBOM Analysis Completed	OK
2025-10-25 19:06:50	Android SAST Completed	OK
2025-10-25 19:06:50	Android API Analysis Started	OK
2025-10-25 19:06:53	Android API Analysis Completed	OK

2025-10-25 19:06:53	Android Permission Mapping Started	OK
2025-10-25 19:06:57	Android Permission Mapping Completed	OK
2025-10-25 19:06:57	Android Behaviour Analysis Started	OK
2025-10-25 19:07:01	Android Behaviour Analysis Completed	OK
2025-10-25 19:07:01	Extracting Emails and URLs from Source Code	OK
2025-10-25 19:07:01	Email and URL Extraction Completed	OK
2025-10-25 19:07:01	Extracting String data from APK	OK
2025-10-25 19:07:01	Extracting String data from Code	OK
2025-10-25 19:07:01	Extracting String values and entropies from Code	OK
2025-10-25 19:07:02	Performing Malware check on extracted domains	OK
2025-10-25 19:07:03	Saving to Database	OK

Report Generated by - MobSF v4.4.3

Mobile Security Framework (MobSF) is an automated, all-in-one mobile application (Android/iOS/Windows) pen-testing, malware analysis and security assessment framework capable of performing static and dynamic analysis.