

ANDROID STATIC ANALYSIS REPORT

app_icon

OTP (1.0)

File Name:	OTP-Rev4.apk
Package Name:	com.example.otp
Scan Date:	Feb. 1, 2025, 6:42 a.m.
App Security Score:	78/100 (LOW RISK)
Grade:	A
Trackers Detection:	1/432

FINDINGS SEVERITY

ॠ HIGH	▲ MEDIUM	i INFO	✓ SECURE	◎ HOTSPOT
0	3	1	2	0

FILE INFORMATION

File Name: OTP-Rev4.apk

Size: 9.18MB

MD5: c49992cb521ea5973c2ada4589b24a3b

SHA1: 07c06abb056c8bf8e1b2d90f6628d4cecc8b890a

SHA256: 0e354235af10a73f8dce0fb5611dbba84e962c2ac8a888fd1852e8fbca4420d7

i APP INFORMATION

App Name: OTP

Package Name: com.example.otp

Main Activity: com.example.otp.MainActivity

Target SDK: 34 Min SDK: 29 Max SDK:

Android Version Name: 1.0

EXE APP COMPONENTS

Activities: 8
Services: 5
Receivers: 2
Providers: 2

Exported Activities: O
Exported Services: O
Exported Receivers: O
Exported Providers: O



Binary is signed v1 signature: False v2 signature: True v3 signature: False v4 signature: False

X.509 Subject: CN=I Gede Surya Rahayuda, OU=Program Studi Informatika, O=Universitas Udayana, L=Badung, ST=Bali

Signature Algorithm: rsassa_pkcs1v15 Valid From: 2025-02-01 06:38:59+00:00 Valid To: 2050-01-26 06:38:59+00:00

Issuer: CN=I Gede Surya Rahayuda, OU=Program Studi Informatika, O=Universitas Udayana, L=Badung, ST=Bali

Serial Number: 0x1 Hash Algorithm: sha256

md5: a54228c5396d9605991c202d4b6a01bd

sha1: 1c081d8dd9aedf71d0a4e02a9f47aea189ea6842

sha256: 99d37dcf01bd8b8f0ff2916e8a0003318d0be932b5c5e3cf4d453f7588814c66

sha512: c919f500ffea63917440f60e37cba6c0e2aa7371b6b2bb637f1402907c338638025574f2761b8299c34979c96aaf15e7e911526ad705a9963ea69201591c7200

PublicKey Algorithm: rsa

Bit Size: 2048

Fingerprint: dbbecb33380c76a28544ac7bcc07eaad0494ceb073b6f378190b372e188bd8bb

Found 1 unique certificates

E APPLICATION PERMISSIONS

PERMISSION	STATUS	INFO	DESCRIPTION
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.
android.permission.WAKE_LOCK	normal	prevent phone from sleeping	Allows an application to prevent the phone from going to sleep.
com.google.android.finsky.permission.BIND_GET_INSTALL_REFERRER_SERVICE	normal	permission defined by google	A custom permission defined by Google.
com.google.android.gms.permission.AD_ID	normal	application shows advertisements	This app uses a Google advertising ID and can possibly serve advertisements.
android.permission.ACCESS_ADSERVICES_ATTRIBUTION	normal	allow applications to access advertising service attribution	This enables the app to retrieve information related to advertising attribution, which can be used for targeted advertising purposes. App can gather data about how users interact with ads, such as clicks or impressions, to measure the effectiveness of advertising campaigns.
android.permission.ACCESS_ADSERVICES_AD_ID	normal	allow app to access the device's advertising ID.	This ID is a unique, user-resettable identifier provided by Google's advertising services, allowing apps to track user behavior for advertising purposes while maintaining user privacy.

PERMISSION	STATUS	INFO	DESCRIPTION
com.google.android.providers.gsf.permission.READ_GSERVICES	unknown	Unknown permission	Unknown permission from android reference
com.example.otp.DYNAMIC_RECEIVER_NOT_EXPORTED_PERMISSION	unknown	Unknown permission	Unknown permission from android reference

M APKID ANALYSIS

FILE	DETAILS		
	FINDINGS	DETAILS	
	yara_issue	yara issue - dex file recognized by apkid but not yara module	
classes.dex	Anti-VM Code	Build.FINGERPRINT check Build.MANUFACTURER check Build.BRAND check Build.DEVICE check Build.BOARD check Build.TAGS check	
	Compiler	unknown (please file detection issue!)	



ACTIVITY	INTENT
com.google.firebase.auth.internal.GenericIdpActivity	Schemes: genericidp://, Hosts: firebase.auth, Paths: /,
com.google.firebase.auth.internal.RecaptchaActivity	Schemes: recaptcha://, Hosts: firebase.auth, Paths: /,

△ NETWORK SECURITY

NO	SCOPE	SEVERITY	DESCRIPTION

CERTIFICATE ANALYSIS

HIGH: 0 | WARNING: 0 | INFO: 1

TITLE	SEVERITY	DESCRIPTION
Signed Application	info	Application is signed with a code signing certificate

Q MANIFEST ANALYSIS

HIGH: 0 | WARNING: 0 | INFO: 0 | SUPPRESSED: 0

NO	ICCLIE	CEVEDITY.	DESCRIPTION
NO	ISSUE	SEVERITY	DESCRIPTION

</> CODE ANALYSIS

HIGH: 0 | WARNING: 1 | INFO: 1 | SECURE: 1 | SUPPRESSED: 0

NO	ISSUE	SEVERITY	STANDARDS	FILES
1	The App uses an insecure Random Number Generator.	warning	CWE: CWE-330: Use of Insufficiently Random Values OWASP Top 10: M5: Insufficient Cryptography OWASP MASVS: MSTG-CRYPTO-6	U/a.java U/b.java U/c.java V/a.java
2	The App logs information. Sensitive information should never be logged.	info	CWE: CWE-532: Insertion of Sensitive Information into Log File OWASP MASVS: MSTG-STORAGE-3	E/f.java E/z.java com/example/otp/MainActivity.ja va d/b.java g/b.java v/f.java
3	This App may have root detection capabilities.	secure	OWASP MASVS: MSTG-RESILIENCE-1	E/f.java

■ NIAP ANALYSIS v1.3

NO	IDENTIFIER	REQUIREMENT	FEATURE	DESCRIPTION
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FIREBASE DATABASES ANALYSIS

TITLE	SEVERITY	DESCRIPTION
Firebase Remote Config disabled	secure	Firebase Remote Config is disabled for https://firebaseremoteconfig.googleapis.com/v1/projects/1083717578381/namespaces/firebase:fetch? key=AlzaSyBDcvcXltXkdAc1teKFCStlfx1iABb8flY. This is indicated by the response: {'state': 'NO_TEMPLATE'}

***: ::** ABUSED PERMISSIONS

TYPE	MATCHES	PERMISSIONS
Malware Permissions	3/25	android.permission.INTERNET, android.permission.ACCESS_NETWORK_STATE, android.permission.WAKE_LOCK
Other Common Permissions	2/44	com.google.android.finsky.permission.BIND_GET_INSTALL_REFERRER_SERVICE, com.google.android.gms.permission.AD_ID

Malware Permissions:

Top permissions that are widely abused by known malware.

Other Common Permissions:

Permissions that are commonly abused by known malware.



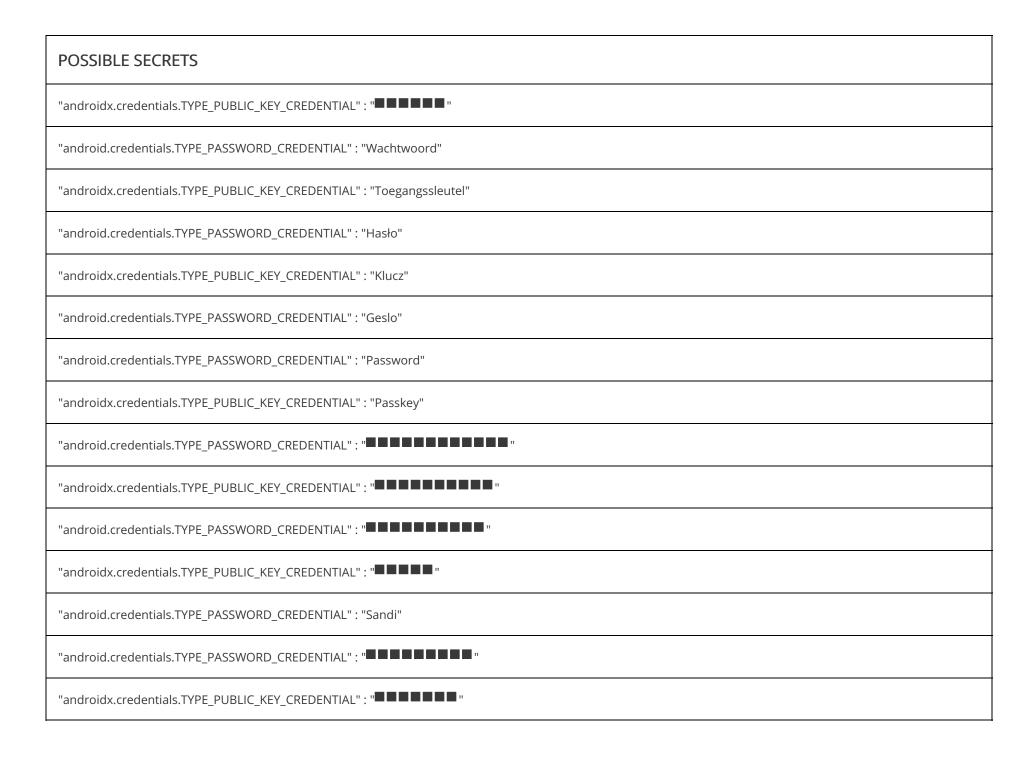
TRACKER	CATEGORIES	URL
Google Firebase Analytics	Analytics	https://reports.exodus-privacy.eu.org/trackers/49

HARDCODED SECRETS

POSSIBLE SECRETS
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Password"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
"google_api_key" : "AlzaSyBDcvcXltXkdAc1teKFCStlfx1iABb8flY"
"google_crash_reporting_api_key" : "AlzaSyBDcvcXltXkdAc1teKFCStlfx1iABb8flY"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Contrasenya"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Adgangskode"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Adgangsnøgle"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "گذرواژه"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "گذر کلید"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "DDDDD"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "DDDD"

POSSIBLE SECRETS
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "პაროლი"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "■■■■■■"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "■■■■■"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Passord"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Tilgangsnøkkel"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Пароль"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Passwort"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "■■■■■"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "■■■■-■■"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Wagwoord"

POSSIBLE SECRETS
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Wagwoordsleutel"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Парола"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : " " " " " " " " " " " " " " " " " "
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Salasana"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Avainkoodi"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "■■■■■"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Лозинка"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Heslo"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Пароль"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Contrasinal"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "



POSSIBLE SECRETS
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "□□□□"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "□□□"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "ລະຫັດຜ່ານ"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "ກະແຈຜ່ານ"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Parolă"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Fjalëkalimi"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Zaporka"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "■■■■■"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "■■■■■"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Лозинка"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Lozinka"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Şifre"

POSSIBLE SECRETS
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "■■■■■"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Lozinka"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Heslo"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Contraseña"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Aðgangsorð"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Aðgangslykill"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Parool"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Pääsuvõti"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Password"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Slaptažodis"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Pasahitza"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Sarbide-gakoa"

POSSIBLE SECRETS "android.credentials.TYPE_PASSWORD_CREDENTIAL" : " "androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : " "android.credentials.TYPE_PASSWORD_CREDENTIAL": "Jelszó" "androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL": "Azonosítókulcs" "android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Пароль" "android.credentials.TYPE PASSWORD CREDENTIAL": "Iphasiwedi" "android.credentials.TYPE_PASSWORD_CREDENTIAL": "Parole" "android.credentials.TYPE_PASSWORD_CREDENTIAL": "Lösenord" "androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL": "Nyckel" "android.credentials.TYPE_PASSWORD_CREDENTIAL" : "סיסמה" "android.credentials.TYPE PASSWORD CREDENTIAL": "Nenosiri" "android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Գաղտևաբառ" "androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL": "Ulugwpwn" "android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Сырсөз" "android.credentials.TYPE PASSWORD CREDENTIAL" : "

POSSIBLE SECRETS
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : " DD D D D D D D D D D D D D D D D D
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Parol"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Parol"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Kod"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Password"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "□□"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "□□"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "□□"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "□□□□"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Senha"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Contraseña"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Palavra-passe"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "□□"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "□□□□"

POSSIBLE SECRETS
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Senha"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Password"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Password"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Password"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
"android.credentials.TYPE_PASSWORD_CREDENTIAL" : "Password"
"androidx.credentials.TYPE_PUBLIC_KEY_CREDENTIAL" : "Passkey"
115792089210356248762697446949407573530086143415290314195533631308867097853951
051953eb9618e1c9a1f929a21a0b68540eea2da725b99b315f3b8b489918ef109e156193951ec7e937b1652c0bd3bb1bf073573df883d2c34f1ef451fd46b503f00
39402006196394479212279040100143613805079739270465446667946905279627659399113263569398956308152294913554433653942643
bae8e37fc83441b16034566b
5ac635d8aa3a93e7b3ebbd55769886bc651d06b0cc53b0f63bce3c3e27d2604b
11839296a789a3bc0045c8a5fb42c7d1bd998f54449579b446817afbd17273e662c97ee72995ef42640c550b9013fad0761353c7086a272c24088be94769fd16650

POSSIBLE SECRETS
c6858e06b70404e9cd9e3ecb662395b4429c648139053fb521f828af606b4d3dbaa14b5e77efe75928fe1dc127a2ffa8de3348b3c1856a429bf97e7e31c2e5bd66
4fe342e2fe1a7f9b8ee7eb4a7c0f9e162bce33576b315ececbb6406837bf51f5
68647976601306097149819007990813932172694353001433054093944634591855431833976553942450577463332171975329639963713633211138647686124403 80340372808892707005449
a0784d7a4716f3feb4f64e7f4b39bf04
39402006196394479212279040100143613805079739270465446667948293404245721771496870329047266088258938001861606973112319
aa87ca22be8b05378eb1c71ef320ad746e1d3b628ba79b9859f741e082542a385502f25dbf55296c3a545e3872760ab7
af60eb711bd85bc1e4d3e0a462e074eea428a8
b3312fa7e23ee7e4988e056be3f82d19181d9c6efe8141120314088f5013875ac656398d8a2ed19d2a85c8edd3ec2aef
68647976601306097149819007990813932172694353001433054093944634591855431833976560521225596406614545549772963113914808580371219879997166 43812574028291115057151
36864200e0eaf5284d884a0e77d31646
ChNjb20uYW5kcm9pZC52ZW5kaW5nCiBjb20uZ29vZ2xlLmFuZHJvaWQuYXBwcy5tZWV0aW5ncwohY29tLmdvb2dsZS5hbmRyb2lkLmFwcHMubWVzc2FnaW5n
23456789abcdefghjkmnpqrstvwxyz
6b17d1f2e12c4247f8bce6e563a440f277037d812deb33a0f4a13945d898c296
3617de4a96262c6f5d9e98bf9292dc29f8f41dbd289a147ce9da3113b5f0b8c00a60b1ce1d7e819d7a431d7c90ea0e5f
115792089210356248762697446949407573529996955224135760342422259061068512044369

POSSIBLE SECRETS

808182838485868788898a8b8c8d8e8f909192939495969798999a9b9c9d9e9f

⋮≡ SCAN LOGS

Timestamp	Event	Error
2025-02-01 06:42:45	Generating Hashes	ОК
2025-02-01 06:42:45	Extracting APK	ОК
2025-02-01 06:42:45	Unzipping	OK
2025-02-01 06:42:46	Parsing APK with androguard	ОК
2025-02-01 06:42:48	Extracting APK features using aapt/aapt2	ОК
2025-02-01 06:42:48	Getting Hardcoded Certificates/Keystores	ОК

2025-02-01 06:42:53	Parsing AndroidManifest.xml	ОК
2025-02-01 06:42:53	Extracting Manifest Data	ОК
2025-02-01 06:42:53	Manifest Analysis Started	ОК
2025-02-01 06:42:53	Performing Static Analysis on: OTP (com.example.otp)	ОК
2025-02-01 06:42:53	Fetching Details from Play Store: com.example.otp	ОК
2025-02-01 06:42:53	Checking for Malware Permissions	ОК
2025-02-01 06:42:53	Fetching icon path	ОК
2025-02-01 06:42:53	Library Binary Analysis Started	OK
2025-02-01 06:42:53	Reading Code Signing Certificate	ОК
2025-02-01 06:42:54	Running APKiD 2.1.5	ОК
2025-02-01 06:42:56	Detecting Trackers	ОК

2025-02-01 06:43:01	Decompiling APK to Java with JADX	ОК
2025-02-01 06:43:44	Converting DEX to Smali	ОК
2025-02-01 06:43:44	Code Analysis Started on - java_source	ОК
2025-02-01 06:43:45	Android SBOM Analysis Completed	OK
2025-02-01 06:43:48	Android SAST Completed	ОК
2025-02-01 06:43:48	Android API Analysis Started	OK
2025-02-01 06:43:53	Android API Analysis Completed	ОК
2025-02-01 06:43:55	Android Permission Mapping Started	OK
2025-02-01 06:43:59	Android Permission Mapping Completed	OK
2025-02-01 06:44:00	Android Behaviour Analysis Started	ОК
2025-02-01 06:44:02	Android Behaviour Analysis Completed	ОК

2025-02-01 06:44:02	Extracting Emails and URLs from Source Code	ОК
2025-02-01 06:44:03	Email and URL Extraction Completed	ОК
2025-02-01 06:44:03	Extracting String data from APK	ОК
2025-02-01 06:44:04	Extracting String data from Code	OK
2025-02-01 06:44:04	Extracting String values and entropies from Code	OK
2025-02-01 06:44:07	Performing Malware check on extracted domains	ОК
2025-02-01 06:44:07	Saving to Database	ОК

Report Generated by - MobSF v4.3.0

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.

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