

# OWASP Mobile Security Project

# OWASP MOBILE APPLICATION SECURITY GUIDE

## BY OWASP MOBILE SECURITY TEAM

#### **CLIENT SIDE CHECKS**

Vulnerability Name	Applicable Platform	Compliant ? Yes/No/N A	Classification
Application is Vulnerable to Reverse Engineering Attack/Lack of Code	All		Static Checks
Account Lockout not Implemented	All		Dynamic Checks
Application is Vulnerable to XSS	All		Static + Dynamic Chec
Authentication bypassed	All		Dynamic Checks
Hard coded sensitive information in Application Code (including Crypt	All		Static Checks
Malicious File Upload	All		Dynamic Checks
Session Fixation	All		Dynamic Checks
Application does not Verify MSISDN	WAP		Unknown
Privilege Escalation	All		Dynamic Checks
SQL Injection	All		Static + Dynamic Chec
Attacker can bypass Second Level Authentication	All		Dynamic Checks
Application is vulnerable to LDAP Injection	All		Dynamic Checks
Application is vulnerable to OS Command Injection	All		Dynamic Checks
iOS snapshot/backgrounding Vulnerability	iOS		Dynamic Checks
Debug is set to TRUE	Android		Static Checks
Application makes use of Weak Cryptography	All		Static Checks
Cleartext information under SSL Tunnel	All		Dynamic Checks
	Application is Vulnerable to Reverse Engineering Attack/Lack of Code Account Lockout not Implemented Application is Vulnerable to XSS Authentication bypassed Hard coded sensitive information in Application Code (including Crypt Malicious File Upload Session Fixation Application does not Verify MSISDN Privilege Escalation SQL Injection Attacker can bypass Second Level Authentication Application is vulnerable to LDAP Injection Application is vulnerable to OS Command Injection iOS snapshot/backgrounding Vulnerability Debug is set to TRUE Application makes use of Weak Cryptography	Application is Vulnerable to Reverse Engineering Attack/Lack of Code All Account Lockout not Implemented All Application is Vulnerable to XSS All Authentication bypassed All Hard coded sensitive information in Application Code (including Crypt All Malicious File Upload All Session Fixation All Application does not Verify MSISDN WAP Privilege Escalation All SQL Injection All Attacker can bypass Second Level Authentication All Application is vulnerable to LDAP Injection All Application is vulnerable to OS Command Injection All iOS snapshot/backgrounding Vulnerability iOS Debug is set to TRUE Android Application makes use of Weak Cryptography All	Application is Vulnerable to Reverse Engineering Attack/Lack of Code All Account Lockout not Implemented All Application is Vulnerable to XSS All All Application bypassed All All Application bypassed All All Application Engineering Attack (including Crypt All All Session Fixation All Application does not Verify MSISDN WAP Privilege Escalation All All Application All Attacker can bypass Second Level Authentication All Application is vulnerable to LDAP Injection All Application is vulnerable to OS Command Injection All iOS snapshot/backgrounding Vulnerability iOS Debug is set to TRUE Android Application makes use of Weak Cryptography All

## OWASP Mobile Checklist Final 2016

18	Client Side Validation can be bypassed	All	Dynamic Checks
19	Invalid SSL Certificate	All	Static Checks
20	Sensitive Information is sent as Clear Text over network/Lack of Data	All	Dynamic Checks
21	CAPTCHA is not implemented on Public Pages/Login Pages	All	Dynamic Checks
22	Improper or NO implementation of Change Password Page	All	Dynamic Checks
23	Application does not have Logout Functionality	All	Dynamic Checks
24	Sensitive information in Application Log Files	All	Dynamic Checks
25	Sensitive information sent as a querystring parameter	All	Dynamic Checks
26	URL Modification	All	Dynamic Checks
27	Sensitive information in Memory Dump	All	Dynamic Checks
28	Weak Password Policy	All	Dynamic Checks
29	Autocomplete is not set to OFF	All	Static Checks
30	Application is accessible on Rooted or Jail Broken Device	All	Dynamic Checks
31	Back-and-Refresh attack	All	Dynamic Checks
32	Directory Browsing	All	Static + Dynamic Chec
33	Usage of Persistent Cookies	All	Dynamic Checks
34	Open URL Redirects are possible	All	Dynamic Checks
35	Improper exception Handling: In code	All	Static Checks
36	Insecure Application Permissions	All	Static Checks
37	Application build contains Obsolete Files	All	Static Checks
38	Certificate Chain is not Validated	All	Static + Dynamic Chec
39	Last Login information is not displayed	All	Dynamic Checks
40	Private IP Disclosure	All	Static Checks
	UI Impersonation through RMS file modification [1]	JAVA	Dynamic Checks
42	UI Impersonation through JAR file modification	Android	Dynamic Checks
43	Operation on a resource after expiration or release	All	Dynamic Checks
44	No Certificate Pinning	All	Dynamic Checks
45	Cached Cookies or information not cleaned after application removal/	All	Dynamic Checks
46	ASLR Not Used	iOS	Static Checks

## OWASP Mobile Checklist Final 2016

47	Clipboard is not disabled	All	Dynamic Checks
48	Cache smashing protection is not enabled	iOS	Static Checks
49	Android Backup Vulnerability	Android	Static Checks
50	Unencrypted Credentials in Databases (sqlite db)	All	Dynamic Checks
51	Store sensitive information outside App Sandbox (on SDCard)	All	Dynamic Checks
52	Allow Global File Permission on App Data	Android	Dynamic Checks
53	Store Encryption Key Locally/Store Sensitive Data in ClearText	All	Dynamic Checks
54	Bypass Certificate Pinning	All	Dynamic Checks
55	Third-party Data Transit on Unencrypted Channel	All	Dynamic Checks
56	Failure to Implement Trusted Issuers	Android	Static Checks
57	Allow All Hostname Verifier	Android	Static Checks
58	Ignore SSL Certificate Error	All	Static Checks
59	Weak Custom Hostname Verifier	Android	Static Checks
60	App/Web Caches Sensitive Data Leak	All	Dynamic Checks
61	Leaking Content Provider	Android	Dynamic Checks
62	Redundancy Permission Granted	Android	Static Checks
63	Use Spoof-able Values for Authenticating User (IMEI, UDID)	All	Dynamic Checks
64	Use of Insecure and/or Deprecated Algorithms	All	Static Checks
65	Local File Inclusion (might be through XSS Vulnerability)	All	Static + Dynamic Chec
66	Activity Hijacking	Android	Static Checks
67	Service Hijacking	Android	Static Checks
68	Broadcast Thief	Android	Static Checks
69	Malicious Broadcast Injection	Android	Static Checks
70	Malicious Activity/Service Launch	Android	Static Checks
71	Using Device Identifier as Session	All	Dynamic Checks
	Symbols Remnant	iOS	Static Checks
73	Lack of Check-sum Controls/Altered Detection	Android	Dynamic Checks
74	Insecure permissions on Unix domain sockets	Android	Static Checks
75	Insecure use of network sockets	Android	Static Checks

	SERVER SIDE CHECKS			
ir.	Vulnerability Name	Applicable Platform	Compliant ? Yes/No/N A	
76	Cleartext password in Response	All		Dynamic Checks
77	Direct Reference to internal resource without authentication	All		Dynamic Checks
78	Application has NO or improper Session Management/Failure to Invali	All		Dynamic Checks
79	Cross Domain Scripting Vulnerability	All		Dynamic Checks
80	Cross Origin Resource Sharing	All		Dynamic Checks
81	Improper Input Validation - Server Side	All		Dynamic Checks
82	Detailed Error page shows internal sensitive information	All		Dynamic Checks
83	Application allows HTTP Methods besides GET and POST	All		Dynamic Checks
84	Cross Site Request Forgery (CSRF)/SSRF	All		Dynamic Checks
85	Cacheable HTTPS Responses	All		Dynamic Checks
86	Path Attribute not set on a Cookie	All		Dynamic Checks
87	HttpOnly Attribute not set for a cookie	All		Dynamic Checks
88	Secure Attribute not set for a cookie	All		Dynamic Checks
89	Application is Vulnerable to Clickjacking/Tapjacking attack	All		Dynamic Checks
90	Server/OS fingerprinting is possible	All		Dynamic Checks
91	Lack of Adequate Timeout Protection	All		Dynamic Checks