

# Protect Your Consumer Brand with Secure Mobile Retail Apps.

Comprehensive Mobile App Security and Mobile Fraud Prevention for Android and iOS Apps.

## CHALLENGE

With the world shifting to mobile, retail apps are increasingly under attack from hackers and are falling prey to bots that enable malicious groups to hoard products and scrape consumer information. This poses a serious threat to the mobile shopping experience, damages the reputation of retail brands and hurts sales.

According to Statista, 2021 worldwide mobile retail revenues are expected to be well over \$3.5B, tripling in just 5 years. And according to LexisNexis Risk Solutions, fraud costs the average retailer 1.86% of their total revenue, with mobile fraud growing 133% faster than all other forms of fraud. If you add the cost of a breach, weak mobile app security and mobile fraud **cost the global mobile retail economy well over \$100M per year.**

## SOLUTION - APPDOME MOBILETRUST™

Appdome's MobileTRUST provides a simple and comprehensive solution to protect mobile apps and prevent mobile fraud.

MobileTRUST allows developers to outpace Fraudsters with response and prevention and to complete mobile app security and fraud prevention projects in minutes, with no code or development required.

With Appdome, developers can stop attacks in their tracks and prevent fraud rather than chase false positives.

Additionally, developers can build the right responses to threats directly in their mobile retail apps and stay ahead of evolving fraudsters by understand actual attacks, not potential threats.

## SOLUTION HIGHLIGHTS

Appdome's MobileTRUST offers the following protections for retail apps:

- Shielding and hardening apps against debuggers, tampering and reverse-engineering attacks (RASP);
- Obfuscating all code, including app logic, flow, strip debug symbols, non-native files and 3rd party SDKs;
- Encrypting mobile app data at rest with AES-256;
- Preventing apps from running on jailbroken or rooted devices;
- MitM prevention using secure SSL/TLS connections;
- Bot protection using mobile client certificates for watermarking secured apps;
- Ensuring mobile privacy with keylogger prevention.
- Blocking sophisticated hacking attempts using Frida toolkits, root hiding tools like Magisk Manager, advanced debugging techniques and code injections;
- Blocking automated click bots like Instabot and Sneak-erbots;
- Blocking app overlay attacks used for sophisticated session hijacking, credential theft and account take-overs.

## BENEFITS

With Appdome, mobile commerce and retail companies are able to get ahead of the cheating, piracy and hacking threats. Appdome's anti-cheating solution blocks fraudsters from using tools to bypass monetization in mobile apps and games. Anti-piracy blocks attempts to create fake or modified versions of their mobile retail apps and anti-hacking blocks the tools to hack, reverse engineer and instrument apps.

## APPDOME MOBILETRUST

Retail companies should secure their mobile apps with the following solution:

**ONEShield™ App Hardening** – Comprehensive mobile app shielding and hardening solution that prevents dynamic analysis, tampering, modifying, debugging or interfering with the app's workflows as well as blocks emulators and simulators.

**TOTALCode™ Obfuscation** – Complete code obfuscating solution that prevents static analysis, obfuscates the entire binary, native code and non-native code/libraries, SDKs and frameworks in the app, protects control flows and strips debug information in the app.

**TOTALData™ Encryption** – AES-256 Data-at-Rest Encryption for all data stored by the mobile app, in the app sandbox, SD Card and file system, as well as encryption for app preferences, app secrets, XML and other strings, resources and DEX files (Java classes).

**OS Security Integrity** – Prevents the app from running on rooted and jailbroken environments, blocks root and jailbreak tools, and stops hacking and cheat engines that rely on root and jailbreak.

**MiTM Protection** – Protects all mobile data in transit from network-based attacks with active MitM detection and prevention, including forged certificates, malicious redirection or proxies as well as adds secure certificate pinning and client certificates (for bot prevention). Dozens of enforcement options are available.

**Mobile Privacy and Data Loss Prevention** – Protects mobile end users' data and prevents data loss by preventing malicious keyloggers, restricting screensharing, screenshots and recording.

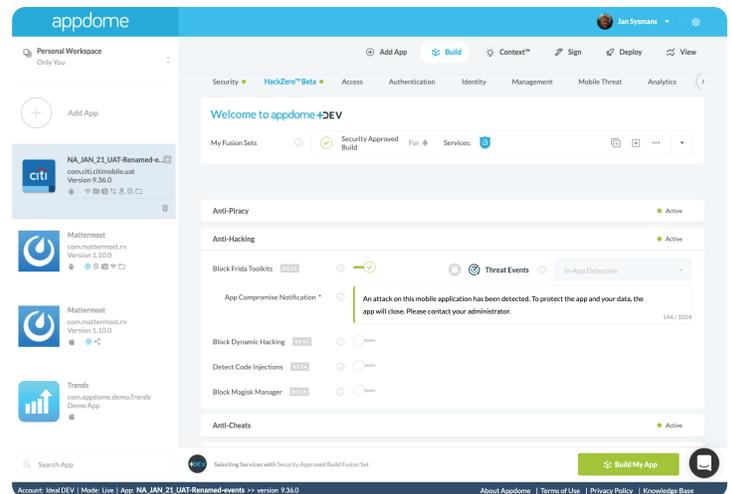
**HackZero™** – Key to stopping Mobile Fraud. Detects and blocks hacking tools like Frida, root hiding tools like Magisk, click bots like Instabot/Sneakerbots and blocks app overlay attacks.

## GUARANTEED OUTCOME AT A FIXED COST

Appdome MobileTRUST is a zero-development, fixed cost solution, which offers developers and DevSecOps teams a guaranteed mobile security outcome.

App makers enjoying the following benefits with Appdome:

- A Certified Secure solution that protects the people and businesses that rely on the mobile retail app to complete their purchases.
- Protecting all user data everywhere that it's stored in the app, as well as in memory, and in transit (between the app and the backend servers).
- Preventing hackers from using debuggers, static and dynamic analysis and other forms of reverse engineering to learn how their mobile retail app services function.
- Securing the retail app without impacting release cycles (Fast time to market) or increasing their budget (lowest budget impact).
- CI/CD integration into build systems like Jenkins, GitLab, Travis and others and ensure that the apps are protected build-by-build, release-by-release.



## ABOUT APPDOME

Appdome's mission is to protect the mobile economy and the people who use mobile apps in their lives and at work. Appdome's industry defining no-code mobile security and solutions platform uses a patented, artificial-intelligence coding technology to power a self-serve, user-friendly service that anyone can use to build new mobile security, mobile threat, mobile fraud and enterprise authentication, access, UEM/MDM/MAM and more into any Android and iOS app instantly. There are over 25,000 unique combinations of mobile features, kits, vendors, standards, SDKs and APIs available on Appdome. Over 200+ leading financial, healthcare, government, and m-commerce providers use Appdome to consistently deliver richer and safer mobile experiences to millions of mobile end users, eliminating complex development and accelerating mobile app lifecycles.