

Leading APAC Religious Lifestyle App Prevents Repackaging Attack Using DexGuard



APAC-based technology company prevents the reverse engineering and modding of their popular app with Guardsquare.

The Company

Founded in 2009, this APAC-based technology company has grown from a mobile app development company to the leading mobile app creator of Muslim lifestyle-related apps. With close to 150 million downloads, their award-winning flagship application has helped the global Muslim community to practice their religion more conveniently regardless of their location. Over the years, they have added more features and capabilities transforming it into an entire ecosystem of digital services for Muslims. The company has grown from 4 employees in 2017 all the way to 90+ employees in 2022.

COMPANY DETAILS

- Industry**
Consumer Application - Lifestyle/Reference
- Privately / Publicly Owned**
Private
- Employees**
51 - 200
- Customer Since**
2019
- Challenges**
 - Cloning and repackaging
 - Reverse engineering and modding
 - Cracked premium version
- Solutions**
 - ProGuard | DexGuard



"Our team got very excited when they learned about the long list of code protection techniques DexGuard offers. It's a big upgrade from ProGuard and exactly what we needed."

— Head of Engineering, APAC-Based Technology Company

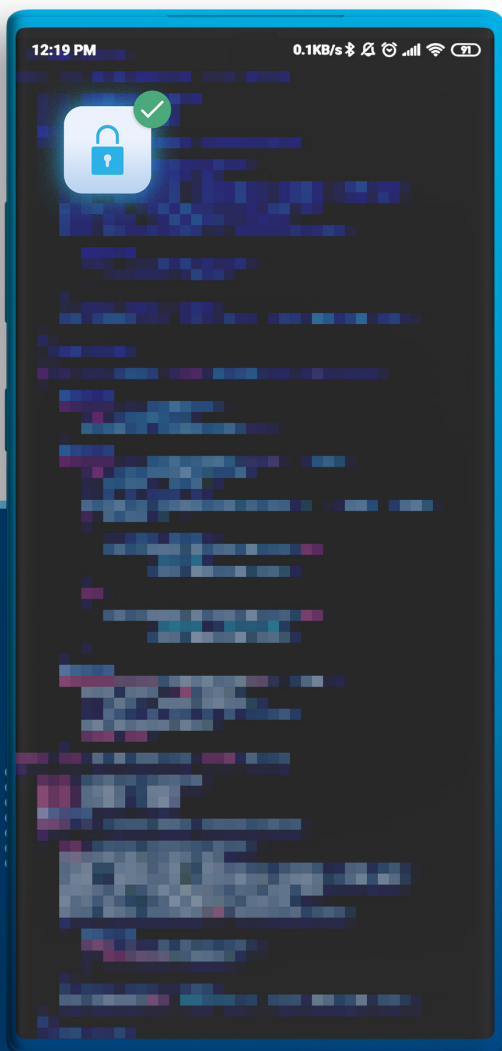
The Challenge

As the popularity of their app grew across South-East Asian countries, threat actors started to take notice and capitalized on it by reverse engineering, modding, and repackaging the apps before distributing them on pirate stores and illegitimate chat rooms.

These versions allow illegitimate users to bypass the app's paywall and access the premium features for free. This is problematic as it interferes with the company's monetization strategy and hurts its user base and bottom line. The company needed to quickly find a solution that could fully protect its Android app against static and dynamic analysis, without impacting its app performance.

"We used to have an internal watchtower to keep track of these cracks and copycats. Every week or two, our team found at least two to three copies that look, feel, and behave exactly like our app."

— **Head of Engineering**, APAC-Based Technology Company



The Solution

The company has been leveraging Guardsquare's open-source Android code optimizer, ProGuard, and quickly decided to migrate to leveraging DexGuard's advanced functionality to solve its challenges. The more comprehensive obfuscation techniques DexGuard provides is exactly what they were looking for to prevent attackers from reverse engineering sections of the app and creating modified versions.

DexGuard provides all the functionality of ProGuard with the addition of multiple polymorphic obfuscation and encryption techniques to the app's code, providing multiple-layer of protection against tampering and reverse engineering attempts. Additionally, DexGuard also integrates Runtime Application Self-Protection (RASP) mechanisms, effectively keeping the application safe from static and dynamic analysis & attacks.

The Result

The company quickly and seamlessly transitioned to using DexGuard within a few weeks and was able to fully address the reverse engineering and repackaging problem. The implementation of DexGuard has enabled them to shift their focus away from worrying about copycats to improving the features and functionality of their application. Furthermore, they were also impressed with the support they received from the Guardsquare team.

Next, they look forward to exploring the use of [ThreatCast](#), Guardsquare's real-time monitoring solution to gather more insights into the threats their apps are facing and further improve their app's resilience.

"As an engineer myself, I am incredibly impressed with DexGuard's product quality. This, accompanied with the great documentation and excellent support provided by the Guardsquare team, have made our collaboration enjoyable and successful."

— **Head of Engineering**, APAC-Based Technology Company

PROTECT

TEST

MONITOR

Want to know **how Guardsquare can protect your app** from being cloned?

Request a Demo

Developer friendly **mobile app sec** tools that:



Guardsquare offers the most complete approach to mobile application security on the market. Built on the open source **ProGuard®** technology, Guardsquare’s software integrates seamlessly across the development cycle. From app security testing to code hardening to real-time visibility into the threat landscape, Guardsquare solutions provide enhanced mobile application security from early in the development process through publication.

More than 850 customers worldwide across all major industries rely on Guardsquare to help them identify security risks and protect their mobile applications against reverse engineering and tampering.