



Delivering On A Customer Commitment To Keep Cheaters Out Of The Game



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— Jinesh Parekh, Partner

[Idyllic Software](#) has been delivering Ruby on Rails, ReactNative and NodeJS consulting projects to their customers since 2010. In particular, they develop awesome websites and mobile apps for their customers across a wide range of sectors including leisure, transportation, and healthcare.

The Challenge

Some years ago the Idyllic team came up with the idea of building a gaming app. With their expertise in creating engaging mobile apps, they concluded that they were well positioned to develop something that would gain a significant user base and revenue.

The app they came up with is called 747 and it's a real money, skill based betting app. It is a 2 person game where both players are served the same math question simultaneously. Simply put, the player who answers correctly first wins the pot. Players are selected randomly. The fun of the game, and the attraction of playing, is based on being able to solve the puzzle and answer faster than another human being, your opponent in this case.

However, the challenge that kept the Idyllic team awake at night was that the questions could be captured and solved programmatically in a fraction of the time needed by humans. Widespread exploitation of this threat by cheaters could easily spoil the user experience completely and consequently trash the revenue potential for the company. In fact, early releases of the app attracted cheaters very quickly so Idyllic recognized that this was much more than a theoretical risk.

Jinesh Parekh, Partner, explains more:

“Since users win and lose real money in the 747 game, it was vital that players could not cheat. In fact we made a commitment to our customers that there would be zero tolerance of cheaters. The next step was to figure out how to make good on that promise!”

The very real prospect of genuine players losing money to the cheaters is a reputational nightmare and risked the game being dead on arrival. It was imperative that something was done, and done quickly.

How Approov Mobile Security Helped

The Idyllic team thought like a hacker to quantify and mitigate the specific threat they had identified. They soon realized that the app could be reverse engineered relatively easily to reveal the API key, and that the API protocol could be established by examining the traffic patterns from/to the app. Once a cheater knew what legitimate API traffic looked like and could provide valid access credentials, a script could be created to read the math question, compute the answer and deliver it almost instantaneously.

It was clear that the way to keep cheaters out of the platform was to ensure that only answers coming from genuine instances of the 747 mobile app running in a trusted environment would be accepted. This caused the team to search for a security approach that enabled their exposed API endpoints to be able to verify that incoming requests were truly coming from genuine app instances. They found Approov.

They initially looked at app hardening/shielding solutions but they concluded that these approaches were not appropriate; they were considered too technically invasive and costly for this use case. Also, app hardening/shielding approaches may do an excellent job of protecting mobile apps but they do not protect the APIs that service the apps, and this was the issue that Idyllic was trying to address.

Jinesh picks up the story:

"We just wanted to stop the cheaters and when we looked at Approov we immediately felt we had found what we were looking for. It was simple to integrate and deploy, solved the precise problem we were worried about, and came with an awesome support team - something we recognize in our pre-sales calls. Since choosing Approov, we have really enjoyed working with the team. It's clear that they really do care about each and every customer - they won't leave you hanging once the contract is signed."

Once Approov was bedded into the 747 app, the project entered the testing phase. The Approov team was able to look at the analytics dashboards and verify that everything seemed to be set up correctly. The metrics which customers have access to once they deploy Approov are a vital guide to what is happening in the app installed base and regular monitoring of these ensures that evolving threats can be dealt with and that end user experience is optimized.

Jinesh gave us a summary of his Approov journey and gave us some insight into where Idyllic is going next:

"Once we had deployed Approov, game play increased by more than 3x! It was amazing to see players engaging so enthusiastically once they knew that automated cheaters had been outlawed. We will soon be launching the app in the US."



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