



APPLICATION SECURITY@NAB

Gamified security training: The key to scalable developer growth

National Australia Bank is one of the top four financial institutions in Australia, and one of the largest in terms of market capitalisation, annual revenue and customer base. Naturally, NAB is privy to multitudes of highly sensitive information and data, making business continuity and the avoidance of any system breaches critically important in protecting their customers. Ensuring platform security is vital to day-to-day operations.

Chris Howes is the Application Security Manager for NAB. With his team on the front lines helping secure the intricate platforms that customers trust, he sets about ensuring that all developers can upskill and thrive in an optimum environment, learning and retaining vital secure coding techniques.

LET THE GAMES BEGIN.

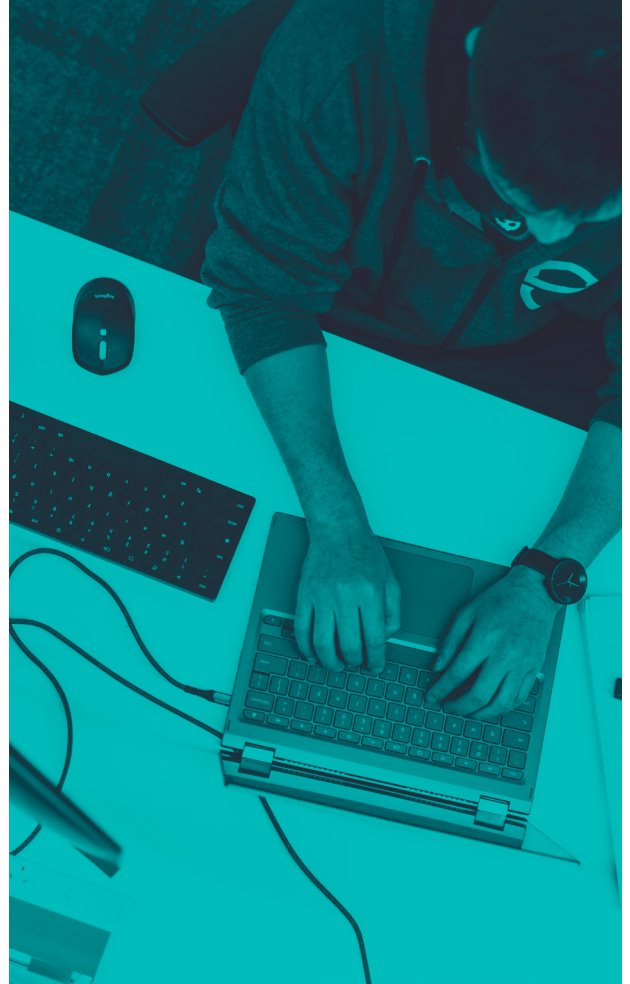
THE CHALLENGE

It might be a common buzzword in cybersecurity departments, but there really is an ever-pressing need for organisations to “shift left”. The earlier that testing and bug-fixing can begin in software development, the more robust and agile a team can operate, with the outcome being better (and more secure) software.

The challenge, however, is rallying developers to operate with security front-of-mind. When there are multiple deliverables on the line and developers are stretched for time, enabling each member of the development team with the skills and knowledge to detect and fix vulnerabilities while writing code is a key goal for Chris and the Application Security team at NAB.

Chris and his team sought to make shifting left a priority, ensuring that everyone was on the same page when it came to security training at the developer level. It required careful end-to-end implementation, executive approval and buy-in, and a training program that could engage, excite and fit in to an already-stretched workload.

“We are going through a period of growth. Every time I look, we’ve grown again in the development space. Dealing with that scalability prompted us to look at ways that we could manage it, ways that we could scale without simply adding more security resources. Security resources are relatively scarce, so finding ways that we can deal with those scalability issues was a top priority,” Chris said.



THE IMPLEMENTATION

Chris had engaged development teams with more traditional classroom-style training in the past, but found it was limited in key areas. Namely, the requirement for developers to commit to structured face-to-face training time (thus pulling them away from vital projects) and the rigidity of this type of education preventing agile scaling.

He turned to the Secure Code Warrior platform, which allowed teams to learn at their own pace, online, and in a gamified setting that aided retention of new security concepts, as well as knowledge testing with real-world scenarios they would face in the job. It was easier to roll it out to new starters and fit it around current projects.

CHRIS SAYS OF HIS STRATEGY:

“Helping uplift developers, bringing them up to speed on secure coding technics - means that mistakes in the code that would have traditionally been found when we did a penetration test, are found early in the software development cycle. It really saves time, allows us to enact change faster, and deliver value and reliability to our customers at a more rapid rate.”

The progressive Executive Management Team at NAB were immediately on-board with gamified learning, understanding the time-saving benefits of both the training and overall up-skilling of the team. Chris’ chief concern was getting buy-in from senior leaders within the development team. Their use of (and subsequent endorsement) of the system was paramount to sustaining its momentum and success. To ensure a painless implementation process, he rolled out the training platform in conjunction with an internal application security advocate program:

“Rather than throwing it over the fence and hoping for the best, we launched Secure Code Warrior alongside an internal application security advocates program. We trained up several of our advocates in the platform - showing them the ropes and how to make the most of the platform. In turn, they trained their squads and championed its advantages. Having advocates in the team was very beneficial to the success of the roll-out.”

THE RESULT

It was a priority for Chris to ensure that both developers and security teams worked more closely together, with a security-first mindset, as well as being equipped to not just identify but fix vulnerabilities from the beginning of the coding process. Secure Code Warrior's training platform made up-skilling a fun, engaging process that improved inter-team relationships and got everyone on the same page. NAB anticipates seeing a reduction in costly penetration testing exercises and strain on the team that carries them out as a result.

The user support for the program was immense, with an overwhelmingly positive, 95%+ approval rating for gamified training and tournaments. By giving developers the tools and knowledge to succeed, this not only improved confidence but helped to unlock agility and innovation within the business:

"Moving to the left and enabling a cultural shift allows us to move faster, delivering impactful secure change to our customers more rapidly. It has enabled the business to innovate at the pace that the industry demands."

Far from being 'just a game', or simply a more pleasant way for department managers to burn through compliance training, Secure Code Warrior offers a high-retention, engaging solution that turns security novices into security champions quickly, which is essential in minimising the risk of a large-scale breach.



METRICS

Total points scored:

688,017

Time spent training:

178.5 hours

Approval rating for gamified training and tournaments:

95%+

RESULTS

- ✓ Executives on board and seeing the benefits
- ✓ Building positive security culture and keeping it front-of-mind
- ✓ Development team upskilled and engaged
- ✓ Introduction of ambassador program

CHRIS' ADVICE FOR SUCCESS

"Don't just throw this platform at your team and hope they use it. Put the effort in to really empower them and build confidence. We found the internal ambassador program worked really well for this, as well as ensuring the training and tournaments remained fun. There's always the risk, or the temptation to make it solely compliance-driven, but keeping it approachable and engaging is vital to success."



FAST FACTS

- ✓ In addition to gamified learning, NAB is also using Secure Code Warrior as a skill-testing tool in recruitment.
- ✓ They are in the process of rolling the program out to 1500+ developers within their organisation.
- ✓ They have developed a key set of internal metrics allowing them to measure the success of the program in minimising risk and reducing costs over time.

Warrior Wisdom



The importance of **internal communication** cannot be emphasised enough: Ensure key stakeholders, participants and team leaders know exactly what is happening, the key benefits of the training and projected outcomes.



Be sure there are **adequate support measures** for any questions and troubleshooting, especially during the tournament.



Make it fun! Training doesn't have to be boring, and a gamified platform like Secure Code Warrior is the perfect opportunity to turn such an important task into a memorable event. You will be rewarded with high engagement when you go the extra mile to include prizes, certificates and even a theme – the possibilities are endless.



In addition to upskilling the development team, you will uncover a powerful player in your midst: the **Security Champion**. This individual will be discovered within the platform, and is vital to leading the organisation with a security mindset, as well as the skills to keep high-risk threats at bay.

ABOUT SECURE CODE WARRIOR

Secure Code Warrior is the developer-chosen solution for growing powerful secure coding skills. By making security a positive and engaging experience, our human-led approach uncovers the secure developer inside every coder, helping development teams ship quality code faster.

Through inspiring a global community of security-conscious developers to embrace a preventative secure coding approach, our mission is to pioneer a people-first solution to security upskilling, stamping out poor coding patterns for good.



info@securecodewarrior.com

securecodewarrior.com

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