

## Mobile Application Security Online Masterclass

### Android Mobile Security – Understanding attackers' techniques to help you build stronger protections.

It is a given that mobile applications must be secured. The critical question is not what protections I need to implement but why and how I should use these protections.

#### Objective

The objective of this ONLINE masterclass is to transfer the right level of knowledge to the participants so that they can apply what they have learnt to mitigate the risk on their mobile application security.

The ONLINE masterclass is targeting technical people, aiming at getting them to acquire an understanding of threats and attack techniques. The participants will receive online training presentations and also be given real use case of practical exercises in key attacks and protection techniques.

All participants will receive a certificate for full completion of the masterclass.

#### Who should attend?

This masterclass is ideally suited for an audience who want to get a technical awareness of mobile applications security so that they can make decisions with educated knowledge on how to strengthen their mobile solutions.

#### Why eShard?

At eShard we are dedicated to bringing the very best cybersecurity tools to the world's security experts, empowering professionals to understand and manage the threats within any device that is connected.

Our experts have a strong background in mobile security. We are able to stress Android or iOS mobile applications using state-of-the-art attack techniques, and we provide a vulnerability assessment and recommendations about mobile security.

We deliver a high standard of technical advisory leading to a comprehensive technical report. Light reports can also be issued for the customers to share with their external partners.

Our trainer is an expert in the mobile and embedded software security domain. He has experience in Secure Element, HCE, white-box cryptography, security evaluation methodology, mobile payments and EMV security.



## Android Mobile Security Online Masterclass agenda

### Course 1

The objective of Course 1 is to provide a technical introduction to the concept of the mobile application security ecosystem and technology. The aim is that the participants will understand the context and the terms used in this domain.

#### Mobile application landscape

Introduce the ecosystem:

- Why are attackers interested in attacking mobile applications?
- What are the common threats that a mobile application is exposed to?
- Elaborate on the differences between iOS and Android:
  - Security of the platforms
  - Security of the applications
  - Key differences between iOS and Android platforms

#### Obfuscation

- What is obfuscation and why should it be applied?
- How can an attacker recover the code of an application?
- How obfuscation should be applied?
- Explain exercises for the learners to do on the online learning management platform.

### Course 2

#### Obfuscation

- Recap
- Explain Course 1 exercise results

#### Runtime security control

- Why and how attackers use dynamic analysis techniques?
- How can a popular dynamic analysis framework be detected?
- What are the limitations of such detection techniques?
- How to integrate runtime security control in the mobile application?
- Explain exercises for the learners to do on the online learning management platform.

### Course 3

#### Runtime Security Control

- Recap
- Explain Course 2 exercise results

#### Cryptography

- What is the implication of doing cryptography on a un-trusted device?
- How the attack techniques shown in this masterclass can be used to recover secret keys?
- What are the different techniques to manage this?

#### Technical challenge

This is the ONLINE masterclass closing technical challenge. It will allow the trainees to get time for exercise sessions which allows assessing the level of skills of the trainee. This session is good for the trainees as they will be able to understand their technical gaps and leverage on this to build a specific personal development program.

### Contact us

#### Contact.

jean-luc.khaou@eshard.com

+65 8180 5758

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