

Training Catalogue 25/05/2020

KAÏNA-COM TRAINING CATALOGUE

Android Security











KSE010 - Android Security

Reference	KSE010	
Experience	☑ Beginner☑ Intermediate☐ Advanced	
Duration	Training Program: • 1 day	
Training Method	☐ I: i-learning, individual training (web-based training) ☐ V: v-learning, virtual class ☐ C: c-learning, classroom training KAÏNA-COM LE CARRÉ HAUSSMANN II, 6 Allée de la Connaissance 77127 Lieusaint - France	
Price	668,50 € HT	
Prerequisite	Some experience in Java development and understanding of the Android development platform. There is an advantage to having attended the "Building secure applications" course.	
Audience	Android developers, team leaders, software system engineers and system architects, who are interested to learn more about Android Security aspects.	
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KSE010 - Android Security, Continued

Objective

Android is an open source platform developed by Google for mobile development. Applications for the Android platform are developed in Java. The course overviews Android's fundamental topics and presents its security model and guidelines in coding secure Android applications.

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KSE010 - Android Security, Continued

Course Contents

Course Contents:

Table 1: KSE010 - Course Contents

Chapter	Description
-	What is Android?
Introduction	Android development
	Why deal with Android security
	Artifacts
Android Applications	Basic system tools
Applications	Installing user applications
	Battery life
Android	Android market
Challenges	Services
	External access
	Linux kernel
	Java and Native
	Dalvik VM
Android	SQLite
Architecture	Binder component framework
	Components
	Middleware
	Application layer
	Component model
	Activities
Components	Services
Components	Content providers
	Broadcasts
	Intents

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KSE010 - Android Security, Continued

Course Contents, continued

Chapter	Description
	Protect application
	Dalvik VM
Security	Reference monitor
Enforcement	Access permission logic
	Signing application
	Pros and cons
	AndroidManifest.xml
	Defining security policy
	Public and private components
	Implicit open components
	Content provider permissions
Manifest Files	Intent broadcast permissions
	Service hooks
	Protected APIs
	Pending intents
	Permission protection levels
	Permission granularity
	Summary
The End	• Q&A
	Course's Evaluation





