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Sign up

Kotlin Multiplatform training

3 days (21 hours)

Presentation

Learn how to share common code across multiple platforms such as Android, iOS, web or desktop with our Kotlin Multiplatform (KMP) training.

This highly flexible technology will enable you to write platform-specific code, while sharing business logic. As a result, the functionality and performance of each platform will be collected, delivering a better user experience and higher-performance applications.

Kotlin Multiplatform uses a modular architecture where [common code](#) is written in different shared modules. This means that a maximum amount of code can be reused, while maintaining the possibility of optimizing and customizing the application for each target platform.

Like all our training courses, this one will use the latest features of the [Kotlin Multiplatform 0.8](#) tool.

Objectives

- Setting up a development environment for Android and iOS
- Creating and structuring a Kotlin Multiplatform project
- Manage cross-platform application testing and debugging

Target audience

- **Mobile application developers**
- Web developers

Prerequisites

- Basic knowledge of Kotlin
- Experience in mobile/software development
- A good understanding of Kotlin and its concepts

OUR KOTLIN MULTIPLATFORM TRAINING PROGRAM

INTRODUCTION TO KMP

- Why choose Kotlin Multiplatform?
- Overview of supported platforms
- Cross-platform code sharing
- KMP use cases
 - Android and iOS applications
 - Cross-platform libraries
 - Office applications

DEVELOPMENT ENVIRONMENT CONFIGURATION

- Installation of necessary tools (IDE, SDK)
- Initial configuration for Android and iOS
- Managing cross-platform projects using Gradle
- Configuring the Fleet development environment

CREATE YOUR FIRST MULTIPLATFORM APPLICATION

- Creating a new Kotlin Multiplatform project
- Multiplatform project structure and key components
- Development of a shared business logic
- Implement a basic user interface on different platforms
- Compiling and running the application on Android and iOS

USE OF MULTIPLATFORM COMPOSITES

- Introducing Compose Multiplatform
- Creating dynamic user interfaces with Compose
- State management and navigation in a Compose Multiplatform application
- Customize and adapt the UI for different platforms
- Case studies in UI development with Compose Multiplatform

DEPENDENCY AND MODULE MANAGEMENT

- Dependency management in a multi-platform environment

- Design and integration of shared modules
- Cross-platform libraries
- Cross-platform code sharing

TESTING AND DEBUGGING

- Test configuration for shared code
- Unit testing for cross-platform logic
- Use of emulators and simulators for interface testing
- Debugging cross-platform applications on different platforms

PUBLISHING AND MAINTENANCE

- Preparing applications for publication on Google Play and App Store
- Cross-platform application versioning and updating
- Post-deployment application monitoring and maintenance
- Collect and analyze user feedback

INTEGRATION INTO EXISTING PROJECTS

- Strategies for integrating Kotlin Multiplatform into existing projects
- Managing the cohabitation of native and cross-platform code
- Refactoring an application to Kotlin Multiplatform

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.