

Xamarin And Mobile App Development

Duration: 4 days; Instructor-led

WHAT YOU WILL LEARN

If you have all the time and money in the world, you can build an Android app and an iOS app and a Windows app in their native environment. But what if you don't have all the time in the world? How can you write an app that works everywhere without having to re-write code multiple times? This is where Xamarin comes in. In this module you'll learn how to use C# to conquer all platforms.

- Mobile development
- Architecture
- Deployment Environments
- Cross-Platform Development
- Core and Platform-Specific Projects
- Sharing Code across projects

AUDIENCE

Training target group includes people performing key activities inside the development teams. Course is targeted to developers, team leaders, testers and development managers interested in broadly understanding Xamarin framework, development platform and tools related to real world development in C# and Xamarin SDK.

PREREQUISITES

Participants of this course need to have a good understanding of C# and a notion of mobile app development.

METHODOLOGY

This program will be conducted with interactive lectures, PowerPoint presentation, discussion and practical exercise.

COURSE OBJECTIVES

Building a mobile app is never building one app. It's building an app for Android, one for Windows and one for iOS. Learning three platforms is time consuming, but the real problem is having to write the same code three times. Xamarin allows us to do this in a much more efficient way. One language to rule them all: C#, while staying true to the platform. Xamarin is based upon Mono, the open source implementation of the .NET runtime. By combining reusable C# code and platform-specific views, Xamarin is able to create cross-platform native apps with all features and the power the native platform has to offer.

COURSE OUTLINES

Module 1 - Xamarin overview

- iOS
- Android
- Forms
- Windows Universal apps
- Windows phone apps

Module 2 - Solutions Architecture – Cross Platform development

- Shared code project creation
- Portable Class libraries
- MVC design
- Service-oriented architecture
- Testing

Module 3 - Windows Universal and Windows Phone apps

- XAML
- Layout controls
- Form Controls
- Navigation Controls
- Windows Universal apps
- Windows Phone apps

Module 4 - Xamarin Android App Development

- Test, debug, and fix Xamarin.Android apps
- Set up Android development environment
- Create Android Views
- Activities, Intents
- Call Android Services
- Oauth 2

Module 5 - Xamarin iOS App Development

- Test, debug, and fix Xamarin.iOS apps
- Set up an iOS development environment
- Create iOS Views
- iOS Controls
- Table Views
- Navigation controllers

Module 6 - Cross Platform Development Using Xamarin Forms

- Controls
- Understand XAML
- Page Views
- Layout Views
- Scrollable Views



Module 7 - Navigation

- Master-Detail Views
- Tabbed Views
- Drill-Downs
- Modal Views
- Navigation patterns

Module 8 - Data Binding

- Data Binding – SQLite Database
- XAML Data Binding Syntax
- NET
- MVVM Design Pattern
- Data Access Classes

Module 9 - Access And Use Of Web Services

- Access Services
- Using Web API to build services

Module 10 - Deployment Of Cross Platform Apps

- Deploy Android Apps to Google Play Store
- Deploy iOS apps to App Store