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YOUR COURSE, YOUR WAY - MORE EFFECTIVE IT TRAINING

Xamarin for C# Developers

Duration: 5 days

Overview:

C# is one of the most popular development languages in the world but we write the majority of mobile apps in Java, Swift or Objective-C.

Now using Xamarin, we can now write apps, which run on Android and iOS devices natively using C#. This way, C# allows us to target billions of extra devices using the language we all love. The experiences, which users get from Xamarin-base apps, are fully native and offer the full functionality of the platform they target.

We can now build architecture with this cross-platform functionality in mind and construct it so that most of our code can be re-used in Windows Phone, iOS and Android apps.

In this course, you'll learn about the Xamarin environment. You'll learn about cross-platform development, Xamarin.Android and Xamarin.iOS. All this using the knowledge you already have: C#!

Prerequisites:

Delegates should have experience developing applications or websites using C#; the course assumes you are familiar with the C# language. XAML knowledge is useful but is not essential

Topics:

1 - C# Review

Value and Reference Types under the hood

Classes, Encapsulation and Properties

Inheritance and Polymorphism

Interfaces and Decoupling

Dependency Injection

Inversion of Control

Generics

Delegates

Anonymous Delegates and Lambdas

Tasks and async

Useful Design Patterns

2 - Xamarin Introduction

5 - Lists, Tabs and Fragments in android

Built in and Custom Row Layouts
Working with Fragments
Using fragments declaratively and programmatically
The FragmentManager
Fragment Lifecycle
State Management
Tabs and the Action Bar
6 - Additional android Issues
Activity Lifecycle
State Management
Rotation and managing alternate layouts
Drawables and resolution
7 - Cross Platform Code Sharing
Why Code Share
Code sharing Options
Shared Projects
Portable Class Libraries
Ramping up code reuse across platforms
Cross Platform Data Access
Abstracting device specificity
Dependency Injection
Inversion of Control Containers
MVVM Pattern
MVVM Light
MVVMCross
8 - Getting Started With iOS Development in Xamarin
iOS Development in Xamarin
Solutions, Projects and Files
Intro to Storyboards, Scenes and Segues
MVC and View Controllers
Linking Scenes to View Controllers
Working with Multiple View Controllers
Modal Display

ListViews and ListAdapters

Custom ListAdapters

Navigation Controllers
Transferring Data between Scenes
Loading Storyboards from Code
9 - Designing an iOS Layout
Xamarin iOS Designer Intro
Designing a View
Using Auto Layout
Working with Constraints
Understanding and Exploiting Size Classes
iOS UI Controls
Unwind Segues
10 - Working with Table Views
Table Views
Types of Table View
Building a Table View
Static Table Views
Dynamic Table Views
Table View Controllers
Table View Cells
Headers and Footers
Editing Cells
Collection Views
11 - Controlling iOS Navigation and Storage
Manual Storyboards
Navigation Controllers
Tab Bar Controllers
Modal View Controllers
Split View Controllers
Settings and plists
Working with files
User Defaults Database
12 - App Deployment for android and iOS
Preparing and app for deployment
Configuration

Building
Deploying to the app store
13 - Xamarin.Forms
What are Xamarin Forms
Getting started withâ€
How it works
Basic elements
Pages
Layouts
Sizing and Positioning
Views
Hooking up to Code
Alerts
Navigation
14 - Forms, ListViews and Data Binding with Xamarin.Forms
Data Binding Overview
Page Binding
Change Notification
Field Binding
Field to Field Binding
Displaying Lists with the ListView
Making life easier with Resources and Styles

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