

# **Xamarin Certified Mobile Professional**

### Cursusduur: 5 Dagen Cursuscode: XAMP

### Beschrijving:

In this course, you will learn to develop cross-platform mobile apps with Microsoft's Xamarin platform. It will prepare you for the exam to become Xamarin Certified Mobile Professional. Xamarin's development environment will be introduced. You will learn how to setup a Xamarin.iOS, Xamarin.Android and Xamarin.Forms app. Furthermore, you learn how to connect your app using a REST API. Finally, you will learn how to prepare your app for publishing through the respective stores.

## Doelgroep:

C#/.NET developers that are interested in mobile app development. Developers that are already using Xamarin, but want to get certified as well.Junior developers or graduates who want to learn developing Native Mobile Apps using the Xamarin platform. Web developers who use Microsoft Visual Studio in an individual-based or team-based, small-sized to large development environment who want to learn developing Native Mobile Apps using the Xamarin platform. Native iOS and Android App developers who want to learn developing Native Mobile Apps using the Xamarin platform.

#### **Doelstelling:**

- TXWX101 Getting Started with Xamarin
- TXWA101 Introduction to Xamarin.Android
- TXWA102 Activities and Intents
- TXWI101 Introduction to Xamarin.iOS
- TXWI102 Introduction to the Xamarin Designer for iOS
- TXWX110 Introduction to Cross-Platform Mobile Development
- TXWX150 Consuming REST-based Web Services

- TXWX160 Working with SQLite and Mobile Data
- TXWX220 Preparing for Publishing
- TXWX120 Introduction to Xamarin.Forms
- TXWX130 XAML in Xamarin.Forms
- TXWX140 Resources and Styles in Xamarin.Forms
- TXWX135 Layout in Xamarin.Forms

#### Vereiste kennis en vaardigheden:

- Basic understanding of the the .NET Framework
- Familiarity with the C# language
- Knowledge of or experience with the Native Android and iOS SDK's are a big plus

## Cursusinhoud:

TXWX101 - Getting Started with Xamarin

- What is Xamarin?
- How does Xamarin.Forms differ from Xamarin.Android and Xamarin.iOS?
- What code can I share across my apps?
- Can I develop on Windows and macOS?

This course answers these questions and more. By the end of the course, you will be able to choose the Xamarin approach that is right for you. You will also set up your development machine and run an app on Windows, the iOS simulator, and an Android emulator.

TXWA101 - Introduction to Xamarin.Android

The first step in becoming a Xamarin.Android developer is getting an app up and running. This course takes you through the entire development process. You will create a new project in Visual Studio, code the user interface and behavior for an Activity, build the project, and test it on an Android emulator. You'll also see how to keep your development environment up-to-date as new Android versions are released.

TXWA102 - Activities and Intents

Most apps contain multiple pages. The most common way to implement this in Android is using one Activity for each page and stack navigation to transition between pages. This course shows you how to code the core patterns that make Activities work together. You will see how to start Activities, pass arguments, and retrieve results. You will also see how to launch standard Android Activities such as the camera or the web browser.

TXWI101 - Introduction to Xamarin.iOS

The first step in becoming a Xamarin.iOS developer is getting an app up and running. This course takes you through the entire development process. You will create a new project in Visual Studio, code the user interface and behavior, build the project, and test it on an iPhone simulator. As you build your app, you will learn several iOS design patterns such as Model-View-Controller, protocols, and delegates.

TXWI102 - Introduction to the Xamarin Designer for iOS

It is challenging to create a UI that looks good and works well on multiple devices with different screen sizes and different pixel densities. IOS handles this using the concept of constraints. Instead of giving fixed sizes and positions, you specify relationships such as "align these two views vertically" or "stretch this view to fit all the available space". This course first shows you how to use constraints to layout the views on a single screen. It then broadens the discussion to show you how to use segues to link together multiple pages in your app.

TXWX110 - Introduction to Cross-Platform Mobile Development

One advantage of Xamarin over the traditional platform-specific approach is the level of code-sharing you can achieve across Windows, iOS, and Android. In this class, we will explore ways to structure your shared code using Portable Class Libraries, .NET Standard libraries, and Shared Asset Projects. We will look at the pros and cons of each approach and see how to access platform-specific features in each model.

TXWX150 - Consuming REST-based Web Services

Users expect to access their information any time from any location using any device. This leads most app developers to store data in the cloud and retrieve it as needed from client devices. REST-based web services are the dominant strategy for this type of device-to-server communication. In this course, you will see how to consume REST-based web services with HttpClient using both the managed networking stack and the platform-specific handlers that boost performance. You will also learn some common strategies for dealing with the unique challenges that mobile devices face when communicating over the network.

TXWX160 - Working with SQLite and Mobile Data

Many apps need to store data locally on the device so it is available even when network access is unreliable. User preferences, data files, and relational data can all fall into this category. This course starts with a survey of the local-storage options available to you in your Xamarin applications. It then concentrates on storing relational data using TXWX120 - Introduction to Xamarin.Forms

Xamarin.Forms lets you define a single UI that you share across all your supported platforms. This maximizes your ability to share code: you can share your UI and your business logic. In this course, you will create a new Xamarin.Forms application and define your shared UI in code. You will also see how to access platform-specific features such as the phone dialer or camera that do not have a shared-programming model integrated into Xamarin.Forms.

TXWX130 - XAML in Xamarin.Forms

Xamarin.Forms lets you define your UI using the eXtensible Application Markup Language (XAML). This gives you a clean separation of UI and behavior and makes it easy to utilize a design expert and design tools. This course shows you how to define your UI in XAML. You will create pages and add controls, all in markup. You will also see how to access UI elements from code so you can subscribe to UI events and update UI properties as your data changes.

TXWX140 - Resources and Styles in Xamarin.Forms

Using the same fonts and colors across your entire UI creates a consistent look-and-feel. Xamarin.Forms provides a way to define these values in one place and look them up everywhere they are used; this guarantees consistency across your app and makes updates simple. This course shows you how to define and apply a Resource both in code and in XAML. It also shows you how to group multiple settings into a Style so you can apply them all at once.

TXWX135 - Layout in Xamarin.Forms

Xamarin.Forms apps run on a wide range of devices with varying screen sizes and pixel densities. It is challenging to create a UI that looks good and behaves correctly in all cases. Xamarin.Forms helps solve this problem by providing flexible layout containers that can calculate the size and position of your UI controls automatically; they even recalculate if the user rotates the device or changes the size of the app's window. This course contains in-depth coverage of StackLayout and Grid, the two most popular layout a SQLite database. By the end of the course, you will have seen how to identify the proper location for your database file and how to insert, update, retrieve, and delete data efficiently using asynchronous I/O calls.

TXWX220 - Preparing for Publishing

The goal for most developers is to get their apps into the various stores and then onto customer devices. There are many steps between the time your app is code-complete and when it is ready for submission the stores. This course shows you how to prepare for publishing regardless of which platforms you support or the store you intend to use. It includes advice for making your app look good, instructions on using the linker to reduce the size of your app, and some guidance on selecting a store.

containers in Xamarin.Forms. It also shows you how to add scrolling when your UI is too large for the available screen area.

## Extra informatie:

This course uses Microsoft Visual Studio community edition. It incorporates material from Xamarin University's classes.

Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444

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