



MFE-IT

Reference: 2B/EN/MN

MAUI .NET Training Course

Develop Mobile and Desktop Applications with C#

Duration: 4 Days | Hours: 28 h

Remote · Sessions guaranteed from 1 registrant · 60% hands-on practice

DESCRIPTION

With .NET MAUI (Multi-platform App UI), Microsoft offers a modern solution for developing mobile, desktop and tablet applications from a single code base in C#. The successor to Xamarin.Forms, MAUI allows you to create modern, responsive and native interfaces for Android, iOS, Windows and macOS, while benefiting from the full .NET ecosystem: MVVM, dependency injection, HTTP clients, local databases and more.

This MAUI .NET training course guides you through the complete process of building an application with .NET MAUI, from the interface to navigation, including state management, API calls, local persistence and cross-platform compilation.

LEARNING OBJECTIVES

By the end of this training course, participants will be able to:

- Understand how .NET MAUI works and its architecture
- Create modern interfaces in XAML and C#
- Implement navigation, state management and the MVVM pattern
- Use .NET services for API calls, local storage and notifications
- Manage cross-platform specifics (Android, iOS, Windows, macOS)
- Compile and publish an app to app stores or for internal distribution

PREREQUISITES

- Solid knowledge of C# and the .NET ecosystem
- Previous experience with WPF, WinForms, Xamarin or Blazor is a plus
- Proficiency with Visual Studio or CLI development environments

Because each participant is unique, a personalised interview is systematically organised in advance with our expert to design a training programme perfectly aligned with their objectives, level and professional challenges.

TARGET AUDIENCE

C#, full-stack and mobile developers, or .NET teams wishing to consolidate their cross-platform development resources.

DETAILED PROGRAMME

The training alternates between theoretical input and hands-on practice (approximately 60% of the time). Modules are built around practical exercises based on real-world business use cases.

Module 1 – Introduction to MAUI and Development Environment

- Installation, Visual Studio and .NET SDK
- MAUI project structure and conventions
- Simulators and target platform configuration

Module 2 – Creating Interfaces with XAML and C#

- Pages and layouts: StackLayout, Grid, FlexLayout
- Components: Entry, Button, ListView, CollectionView
- Styles, resources and theming

Module 3 – Navigation and State Management

- NavigationPage and Shell navigation
- Data transfer between pages
- ObservableCollection and INotifyPropertyChanged

Module 4 – MVVM Architecture and Data Binding

- View, ViewModel and Model separation
- Bindings, Commands and converters
- Dependency injection and service registration

Module 5 – API Calls and Persistence

- HttpClient and JSON serialisation
- Local SQLite database access
- Preferences and offline-first management

Module 6 – Cross-Platform Features

- Platform detection and conditional code
- Native services, permissions and sensors
- Responsive design across form factors

Module 7 – Compilation, Testing and Deployment

- Build generation for Android, iOS and Windows
- Code signing and distribution profiles
- Publication to app stores or internal channels

Module 8 – Final Project: Complete .NET MAUI Application

- Multi-page application with navigation and MVVM
- REST API integration and SQLite persistence
- Responsive design and production hardening

TEACHING METHODS

Format and Delivery

The training is delivered remotely via an interactive virtual classroom. It can also be delivered on-site, with content customised to match the needs of your professional project. The theory/practice split is approximately 40%/60%.

MFE-IT Ultra-Personalised Format

Each session accommodates between 1 and 3 participants, ensuring highly individualised support. A preliminary interview allows us to tailor the content to each participant's profile. Inter-company sessions are guaranteed from just 1 registrant (except in cases of force majeure).

Skills Assessment

Throughout the training, the trainer assesses participant progress through multiple-choice questions, role-playing exercises and hands-on work. At the end, a certificate of achievement is issued to each participant.

Post-Training Support

For one month following the training, each participant can contact MFE-IT trainers with questions about implementing acquired knowledge. A response is provided by email or telephone within 48 working hours.

Accessibility

MFE-IT is committed to welcoming people with disabilities. Contact: contact@mfe-it.com.

PRACTICAL INFORMATION

Trainer Resources

- Structured demonstrations aligned with the detailed programme
- Exercise briefs and solutions throughout the training
- A ready-to-use technical environment for practical workshops
- Trainer validation of acquired knowledge at the end of each workshop
- Digital reference documents

Certification and Validation

At the end of the training, a certificate is sent by email specifying the objectives, nature, duration and assessment results. A completion certificate can also be provided on request.

Benefits for Participants

- Train from your workplace or home, with no travel required
- Benefit from an expert trainer-consultant on the subject
- Enjoy an ultra-personalised format (1 to 3 participants)
- Continue training even in the event of unforeseen circumstances

Benefits for the Organisation

- Optimise the training budget by reducing travel and accommodation costs
- Offer quality training to all employees, regardless of location
- Reduce absence time linked to travel
- Support team upskilling in all contexts