# .NET MAUI

## Chapter 1: Introduction to .NET MAUI

* .NET MAUI What is .NET MAUI Evolution from Xamarin Forms
* .NET MAUI Architecture and Platform Support Android, iOS, macOS and Windows
* .NET MAUI Installing .NET MAUI and Visual Studio Setup
* .NET MAUI Project Structure and Multi Targeting
* First .NET MAUI App Walkthrough

## Chapter 2: XAML UI Design

* Understanding XAML Basics in .NET MAUI
* .NET MAUI Layout Controls StackLayout, Grid
* .NET MAUI Layout Controls FlexLayout, AbsoluteLayout
* .NET MAUI Views Label, Entry
* .NET MAUI Views Button, Editor
* .NET MAUI Views Picker, Switch
* .NET MAUI Views Stepper, Slider
* .NET MAUI Working with Controls Across Platforms
* .NET MAUI Responsive UI and Device Adaptability

## Chapter 3: Navigation and Pages

* .NET MAUI Page Types ContentPage, NavigationPage
* .NET MAUI Page Types TabbedPage, FlyoutPage
* Shell Navigation in .NET MAUI
* .NET MAUI Navigating with Parameters
* .NET MAUI Hierarchical and Modal Navigation
* .NET MAUI Deep Linking and URI based Navigation

## Chapter 4: MVVM and Data Binding

* Understanding MVVM in .NET MAUI
* .NET MAUI Implementing INotifyPropertyChanged
* .NET MAUI Two Way, One Way Time Binding
* .NET MAUI One Time Binding
* .NET MAUI Using Commands and Command Parameters
* .NET MAUI Using CommunityToolkit MVVM for Simplified Binding

## Chapter 5: Working with Data and Services

* .NET MAUI Calling REST APIs with HttpClient and Refit
* .NET MAUI JSON Deserialization with System Text Json and Newtonsoft Json
* .NET MAUI Creating and Using Models and DTOs
* .NET MAUI Data Caching and Offline Storage Techniques
* .NET MAUI Local Storage with Preferences, SecureStorage, and SQLite

## Chapter 6: Dependency Injection and Platform Services

* .NET MAUI Understanding Dependency Injection in MAUI
* .NET MAUI Registering Services in MauiProgram.cs
* .NET MAUI Creating and Consuming Platform Specific Services
* .NET MAUI Using DependencyService and IPlatformService
* Using .NET MAUI Essentials APIs Battery, Connectivity, Geolocation

## Chapter 7: Custom Controls and Styling

* .NET MAUI Customizing Controls with Control Templates
* .NET MAUI Creating Reusable Views and Control Templates
* .NET MAUI Custom Renderers vs Handlers
* .NET MAUI Platform Specific Styling Light,Dark Theme
* .NET MAUI Visual State Manager and Dynamic Styles

## Chapter 8: ListView, CollectionView and Data Presentation

* .NET MAUI CollectionView vs ListView
* .NET MAUI Creating Data Templates
* .NET MAUI Grouping, Filtering, Sorting Items
* .NET MAUI Pull to Refresh and Infinite Scrolling
* .NET MAUI UI Virtualization and Performance Tuning

## Chapter 9: Gestures, Animations and Media

* .NET MAUI Gesture Recognizers Tap, Pinch, Pan, Swipe
* .NET MAUI Built in Animations FadeTo, TranslateTo, RotateTo
* Using Lottie Animations in .NET MAUI
* .NET MAUI Working with Audio and Video using MediaElement
* .NET MAUI Creating Interactive Experiences with Touch and Motion Sensors

## Chapter 10: File Handling and Notifications

* .NET MAUI Accessing Files and Folders Cross Platform
* .NET MAUI Saving and Reading Files
* .NET MAUI Local Notifications Android and iOS
* .NET MAUI Permissions Management

## Chapter 11: Packaging and Deployment

* .NET MAUI Building for Android, iOS, Windows, macOS
* .NET MAUI Generating APK, AAB, IPA files
* .NET MAUI Code Signing and Certificates
* .NET MAUI Publishing to Play Store and App Store

## Chapter 12: Advance integration

* .NET MAUI Firebase database and API
* .NET MAUI Google map
* .NET MAUI Push Notifications