



Week 1: Introduction to .NET

- Overview of .NET and its benefits
- .NET architecture and components
- Getting started with .NET development

Week 2: C# Programming Basics

- Introduction to C# programming language
- Writing basic C# programs
- Variables, data types, and operators in C#

Week 3: Object-Oriented Programming in C#

- Understanding object-oriented programming concepts
- Creating classes and objects in C#
- Inheritance, polymorphism, and encapsulation in C#

Week 4: .NET Framework Class Library

- Overview of the .NET Framework Class Library
- Using built-in classes and methods in .NET
- Creating custom classes and methods in .NET

Week 5: Windows Forms Applications

- Introduction to Windows Forms Applications

- Creating a basic Windows Forms Application
- Adding controls and event handlers to a Windows Forms Application

Week 6: User Input and Output in Windows Forms Applications

- Creating user interfaces with Windows Forms controls
- Handling user input and output in Windows Forms Applications
- Creating custom controls in Windows Forms Applications

Week 7: Data Access with ADO.NET

- Overview of ADO.NET
- Connecting to databases with ADO.NET
- Querying and updating data with ADO.NET

Week 8: Data Binding in Windows Forms Applications

- Understanding data binding in Windows Forms Applications
- Binding data to Windows Forms controls
- Using data-bound controls in Windows Forms Applications

Week 9: Advanced Windows Forms Techniques

- Using advanced Windows Forms controls
- Creating custom dialogs and forms
- Creating wizards and multi-page applications in Windows Forms

Week 10: ASP.NET Web Forms

- Introduction to ASP.NET Web Forms
- Creating a basic ASP.NET Web Forms application
- Adding controls and event handlers to an ASP.NET Web Forms application

Week 11: Web Forms Validation and Security

- Validating user input in Web Forms
- Securing Web Forms applications
- Handling errors and exceptions in Web Forms applications

Week 12: ASP.NET Web Forms Data Access

- Overview of data access in ASP.NET Web Forms
- Using the GridView and DetailsView controls for data display
- Using the FormView control for data entry

Week 13: ASP.NET Web Forms Navigation and Master Pages

- Creating navigation menus in ASP.NET Web Forms
- Using Master Pages for consistent design
- Creating and using themes in ASP.NET Web Forms

Week 14: Introduction to ASP.NET MVC

- Overview of ASP.NET MVC
- MVC architecture and components
- Getting started with ASP.NET MVC development

Week 15: Controllers and Actions in ASP.NET MVC

- Understanding Controllers and Actions in ASP.NET MVC
- Creating Controllers and Actions in ASP.NET MVC
- Passing data between Controllers and Views in ASP.NET MVC

Week 16: Views and Layouts in ASP.NET MVC

- Creating Views in ASP.NET MVC
- Using layouts for consistent design in ASP.NET MVC

- Using Razor syntax for creating dynamic Views in ASP.NET MVC

Week 17: Models and Data Access in ASP.NET MVC

- Understanding Models in ASP.NET MVC
- Using Data Annotations for Model validation in ASP.NET MVC
- Data access in ASP.NET MVC with Entity Framework

Week 18: Authentication and Authorization in ASP.NET MVC

- Understanding authentication and authorization in ASP.NET MVC
- Using Forms Authentication in ASP.NET MVC
- Role-based authorization in ASP.NET MVC

Week 19: Advanced ASP.NET MVC Techniques

- Customizing ASP.NET MVC routes
- Creating custom filters in ASP.NET MVC

Week 20: Deploying and Testing ASP.NET Applications

- Understanding deployment options for ASP.NET applications
- Deploying an ASP.NET application to IIS
- Testing an ASP.NET application using unit testing frameworks