



Course Name: Full Stack .NET Developer Professional Certification Program

Course Overview:

Our Full Stack .NET Developer Program is a comprehensive training program designed to equip participants with the skills and knowledge required to become proficient .NET developers capable of handling both front-end and back-end development tasks.

The Program commences with an in-depth introduction to C#, the primary programming language for .NET development. Participants learn essential programming concepts, control flow, object-oriented programming, and asynchronous programming in C#, setting a solid foundation for .NET development.

Next, the Program covers SQL Server database management, providing participants with skills to design, query, and manage databases effectively. Participants learn T-SQL fundamentals, database optimization techniques, and Azure SQL Database management, preparing them for real-world database challenges.

The front-end development segment introduces participants to HTML5, CSS3, and Bootstrap, enabling them to create responsive and visually appealing web interfaces. Participants learn to structure web content, apply styling, and implement responsive design principles, enhancing their front-end development skills.

Moving to back-end development, the Program delves into ASP.NET MVC, Entity Framework, and ASP.NET Web API. Participants learn to build dynamic web applications, manage data with Entity Framework, implement RESTful services, and secure web applications, covering the full spectrum of back-end development with .NET.

Throughout the Program, practical application is emphasized with hands-on exercises, projects, and real-world scenarios, ensuring participants gain practical experience alongside theoretical knowledge. This approach fosters problem-solving skills and prepares participants to tackle real-world development challenges confidently.

With a total estimated time, commitment of 140 hours, our Full Stack .NET Developer Program offers a comprehensive pathway for professionals aiming to excel as .NET developers. Upon completion, participants will possess the skills and confidence to design, develop, and deploy robust .NET applications, making them valuable assets in the tech industry.

Embarking on this learning journey signifies a commitment to mastering the .NET development ecosystem and unlocking exciting career opportunities in the rapidly growing field of full-stack .NET development. Join us on this transformative journey and elevate your .NET development skills to the next level.



What You'll Learn?

C#, SQL Server, Front-End Development (HTML5, CSS3, Bootstrap), ASP.NET MVC, Entity Framework, ASP.NET Web API

Duration: 144 Hours (24 Weeks) + 3 Months (Internship Program)

1. Total Estimated Time: 126 hours
2. Projects: 18 hours

Requirements:

C#, SQL Server, Front-End Development (HTML5, CSS3, Bootstrap), ASP.NET MVC, Entity Framework, ASP.NET Web API

Pre-requisite:

No pre-requisite



Curriculum

Module 1: C#

- Introduction to C#
- Control Flow in C#
- Working with Arrays and Strings
- Object-Oriented Programming in C#
- Advanced C# Concepts
- Deeper into C#
- Asynchronous Programming in C#

Module 2: SQL Server

- Getting Started with SQL Server
- T-SQL Fundamentals with SQL Server
- SQL Server Views and Indexes
- SQL Server Stored Procedures and Functions
- SQL Server Triggers and Cursors
- Understanding and Managing Azure SQL Database

Module 3: Front-End Development

HTML5

- Introduction to HTML5
- Content Structuring in HTML5
- Advanced HTML5 Features

CSS3

- CSS3 Fundamentals
- Advanced CSS3 Concepts

Bootstrap

- Getting Started with Bootstrap
- Styling and Utilities in Bootstrap
- Bootstrap Components

Module 4: ASP.NET MVC

- Introduction to ASP.NET MVC
- ASP.NET MVC Fundamentals
- ASP.NET MVC Forms and Validation
- Working with Data Using Entity Framework
- ASP.NET MVC Unit Testing
- ASP.NET MVC Pipeline and Security
- Building RESTful Services with ASP.NET Web API

Module 5: Entity Framework

- Introduction to Entity Framework: Getting Started
- Entity Framework Database First Approach
- Entity Framework Code First Approach
- EF Code First Migrations and Relationships
- Entity Framework Advanced Concepts

Module 6: ASP.NET Web API

- Introduction to Web API: Getting Started
- ASP.NET Web API Fundamentals
- Building RESTful Services with ASP.NET Web API
- ASP.NET Web API Advanced Concepts