







ASP.NET CORE TRAINING



Engineering Your Success Story

ASP.NET CORE TRAINING





Er. Suneel Chaudhary **Trainer** LINE ACADEMY







- Elevate ASP.NET MVC Expertise: Transition from ASP.NET MVC to ASP.NET Core MVC for a deeper understanding of the modern MVC design pattern in web application development.
- Master Cross-Platform Development: Gain proficiency in Visual Studio Code and .NET Core Command Line Interface to develop robust, cross-platform applications.
- Advanced Data Handling: Develop advanced skills in using LINQ and Entity Framework for seamless database access and efficient CRUD operations.
- RESTful Services Expertise: Become adept at utilizing ASP.NET Core's Web API features to create powerful RESTful services.
- Seamless JavaScript Integration: Learn to efficiently render and execute JavaScript code within ASP.NET Core applications for dynamic, interactive user experiences.
- Professional Deployment Skills: Acquire the knowledge to deploy ASP.NET Core applications on production servers with confidence.
- Gain a Competitive Edge: Stay ahead in the web development field by mastering the latest advancements in ASP.NET Core, ensuring you remain at the forefront of industry standards.

This revision enhances the focus on skill mastery and professional growth, aligning with Line Academy's goal of providing top-tier engineering and IT training.







BENEFITS OF ASP.NET CORE TRAINING AT LINE ACADEMY

- Learn from Industry Experts: Gain insights from highly experienced and certified instructors who bring real-world expertise to ASP.NET Core training.
- State-of-the-Art Facilities: Benefit from well-equipped labs designed to provide a hands-on, practical learning experience in ASP.NET Core.
- Engaging Learning Environment: Enjoy a friendly and interactive atmosphere that fosters collaboration and active participation.
- Career Advancement Opportunities: Access internship and job placement support, helping deserving students kickstart their careers in web development.
- Financial Support for Students: Take advantage of scholarships available for students who demonstrate need and meet eligibility criteria.
- Continuous Skill Enhancement: Participate in regular practice sessions designed to reinforce and test your understanding of ASP.NET Core.
- Flexible Learning Options: Opt for online training if you're unable to attend in person, ensuring accessibility and convenience.
- Real-World Project Experience: Work on projects under the supervision of instructors and industry experts, gaining practical experience and building your portfolio.



COURSE OUTLINE

- **Basic C# Concept**
- **Database Programming**
- Advance ADO.Net **ASP.Net Core**
- **EntityFramework Core**
- **Asp.net Core MVC Application**
- Securing asp.net core Application
- Hosting and Deploying ASP.NET Core Application (\mathbf{z})





Basic C# Concept

- Introduction to .Net framework.
- Compilation and execution of .Net applications,
- Keyword and Identifier, Parameters
- Control Statement, Loop, Statements: goto,continue,break,return
- Class and Object,
- Constructor, Properties,
- Arrays and String,
- Indexers.
- Inheritance.
- use of "base" keyword,
- Method hiding and overriding,
- polymorphism in code extensibility,
- structs and enums.
- abstract class sealed class.
- interface, Delegate and Events, Partial class,
- Collections, Generics,
- File IO, LINQ (Language Integrated Query) Fundamentals: Lambda Expressions,
- Try statements and Exceptions,
- Attributes: Attribute Classes.
- Named and Positional Attribute Parameters, Attribute Targets, Specifying Multiple Attributes, Asynchronous Programming: Principle of Asynchrony, Async/Await patterns in C#





Database Programming

- Relational databases: SQLite and SQL Server
- Install SQL Server
- Configure SQL Server instances and databases.
- Configure SQL Server security
- Understanding Normalization and Relationships
- SQL Queries
- SQL Insert, Delete, Update statements
- SQL Joins
- Implement a table
- Implement a view
- Implement triggers
- Implement functions
- Implement stored procedures
- Implement constraints
- Implement indexes
- Create user-defined types
- Implement a full-text search
- Manage databases by using Transact-SQL
- Back up a database
- Restore a database
- Move a database between servers



Advance ADO.Net **ASP.Net Core**

- Common web application architectures,
- MVC Pattern.
- ASP.NET Core Architecture Overview.
- Projects, and Conventions,
- ASP.NET and ASP.NET MVC

EntityFramework Core

- Object Relation Mapping
- Introduction to Entity Framework
- Implementing Inheritance
- Implementing Associations
- Implementing Database First
- Implementing Code First
- Code First Migration
- LINQ Expressions
- Lambda Expressions
- Working with Stored Procedures
- All types of Join queries
- Aggregate Functions



ASP.NET Core MVC **Application**

- Setting up the Environment,
- Controllers and Actions: Create Controllers, Create Actions and Action Results Types.
- Rendering HTML with Views: Razor Syntax, Understanding Tag Helpers,
- Models: Binding and Validations,
- URL Routing and features,
- Web API Applications: API Controllers,
- JSON, Dependency Injection and IOC containers
- Validation and Data Annotation
- State Management: Client Side and Server Side.
- Areas: Understanding Areas, Adding Areas, Defining Area Routes, Linking between Areas
- Routing: Url Routing Overview, Custom Routes, Attribute Routing, Routing Constraints
- Common client-side web technologies, JQuery, Forms and Validation.





Securing ASP.NET Core Application

- Authentication: ASP.NET Core Identity,
- Adding authentication to apps and identity service configurations
- Authorization: Roles, Claims and Policies,
- Securing Controllers and Action Methods,
- Common Vulnerabilities: Cross-site Scripting attacks, SQL Injection attacks, Cross-site Request Forgery (CSRF), Open Redirect Attacks

Hosting and Deploying ASP.NET Core Application

- IIS,
- Docker and Containerization,
- Publish to Azure cloud



Academy

Engineering Your Success Story

Contact Us

(3) Website	lineacademy.edu.np
Phone	01-5445555 / +977-9749424636
E-mail	info.lineacademy@gmail.com
Location	Jal Vinayak Marg, Na Tole, Pulchowk, Lalitpur

