

Developing Web Application Using .NET 6

1. Introduction to .NET 6
 - Understanding Core form of .NET framework
 - What's new with .NET 6
 - Comparing ASP.NET 4.X and ASP.NET CORE 3.1 with .NET 6
 - Understanding MVC structure with Core
 - Using Visual Studio 2022 create projects with following templates and compare structure of all
 - .NET FRAMEWORK (4.x)
 - Core
 - Core MVC
2. Working with Middleware using .NET 6
 - Applications of RUN, MAP AND USE middleware
 - Difference between Middleware and Service in .NET
 - Declare MVC as service to transform and use empty project as MVC project
 - Accessing media files from wwwroot folder
3. Working with MVC (Model- View -Controller)
 - Developing Controllers
 - Dependency Injection with Controllers
 - Actions and Action Filters
 - Overriding default route and Configuring Routes
 - Designing View
 - Understanding Razor Syntax
 - Working with HTML tag libraries – HTML Helper and Tag Helper
 - Dependency Injection with Views
 - Working with Partial views and view components
 - Developing Project using Model First Approach
 - Understanding Model First Approach
 - Working with Models => MVC project
 - Working with Forms & Validation using Data Annotations
 - Introducing Entity Framework core with MVC project
 - Understanding Nuget packages
 - CRUD using LINQ functions with SQL Database
4. Designing UI and Client-Side styling
 - Working with HTML 5 tags and styling with CSS
 - Overview of JavaScript
 - Working with Layouts
 - Understanding NPM
 - Apply responsive designing using Bootstrap

- Working with SASS or LESS using task runners

5. Understanding Testing in MVC

- What is TDD approach
- Working with Unit Testing
- Exceptional handling

6. Authentication and Authorization

- Working with Authorization & Authentication
- Working with Cache Memory v/s local and session storage
- Working with Session

7. Implementing Web APIs

- Understanding Web API
- Understanding Pub-Sub concept
- Creating API with .NET 6
- Consuming API

8. Deployment of Application on Azure

- Microsoft Azure Fundamentals