

# Full-Stack .NET

## Gating Started with HTML 5

- Overview of what's new in HTML5
- Doctype
- Charset
- New structures / tags
- Inline Elements
- Html Tags
- Support for dynamic pages
- Form types
- Deprecated code
- Current browser / platform support
- Importance of the Document Object Model (DOM)
- Using the new HTML5 Tags
- Defining page structure using the new HTML 5 tags
- New HTML5 Elements
- Embedding rich content with multimedia elements
- Borders and Box Effects
- Transitions, Transforms, and Animations
- Layout: Columns and Flexible Box

## Images, Audio, and Video

- Adding Images Using the Element
- Using Images as Links
- Choosing the Right Image Format

## Introducing CSS 3

- Adding Images Using the Element
- Introducing CSS
- Where You Can Add CSS Rules

- CSS Properties
- Controlling Text
- Text Formatting
- Text Pseudo-Classes
- Styling Text
- Selectors
- Lengths
- Introducing the Box Model
- Creating a Style Sheet for Code

## Bootstrap

- Adding Images Using the Element
- Bootstrap Introduction
- Environment – setup
- Document structure
- Layouts – Breakpoints , Container types,
- Alignment in grids
- Contents – Typography, Images, Tables
- Forums
- Components – Dismissible Alerts, Badges, Breadcrumbs, Button
- And Button groups, cards, carousels, dropdowns, modal, navs,
- Navbar, popover, progress bars

## Java Scripts Concepts

- What Is Programming About?
- JavaScript Language Essentials
- How to Add a Script to Your Pages
- Create an External JavaScript
- The Document Object Model
- Starting to Program with JavaScript
- Variables
- Operators
- Functions
- Conditional Statements
- Looping

- Events Handlings
- Built-in Objects
- Writing JavaScript
- Interacting with Users
- Building Smarter Forms
- Working with Dates and Times
- Real World Applications of JavaScript

## Angular JS

- Angular 5 basics
- Using Custom Components
- What is Data binding?
- Components & Data binding Deep Dive
- Directives Deep Dive
- Using Services & Dependency Injection
- Changing Pages with Routing
- Understanding Observables
- Handling Forms in Angular Apps
- Introduction to the Reactive Approach
- Using Pipes to Transform Output
- Making Http Requests
- Authentication & Route Protection in

## Angular Apps

- Deploying an Angular App
- Typescript Introduction

## React JS

- Introduction of React
- JSX
- React Components
- Props and State
- React Forms
- React Events
- Routing in React
- Bootstrap, JQuery in React
- React Redux
- React Hooks

- HTTP Client
- Testing react

## Introduction to .Net Framework

- .Net Framework Architecture
- Components of framework
- CTS
- CLS
- CLR
- FCL
- ADO .Net
- Console Programming
- Windows Forms
- Assembly Types
- GAC
- Build, Package, Deploy
- C# Language
- CLR Execution Model
- Primitive Types
- Properties, Methods, Events & Delegates.
- Generics
- Interfaces
- Working with Chars Strings & Text
- Enums, Arrays.
- Assembly Loading & Reflection
- Serialization

## C# Programming

- C# Fundamentals
- Data types
- Operators
- Struct, enum, classes, partial classes and interfaces
- Static methods, instance methods and property methods
- Conditions & Loops

- Anonymous types, nullable types, dynamic types, value and reference types
- Date and time, string builder, covariance and contra variance
- Extension methods
- Collections
- Exception handling
- File I/O
- Events and Delegates
- Net for database connectivity

### Object Oriented Programming in C#

- Basic Concept of OOPs?
- Principles of OOPs
- Object
- Class
- Abstraction
- Encapsulation
- Inheritance
- Polymorphism
- Overloading

### Errors & Exception Handling

- The Idea behind Exception
- Exceptions & Errors
- Types of Exception
- Control Flow in Exceptions
- Use of try, catch, finally, throw, throws in Exception Handling.
- In-built and User Defined Exceptions

### Collections

- Collection Classes
- List, Dictionary, Hashtable
- IEnumerable, IList, IQueryable

### Web Forms

- Introducing Web Forms & Work Process
- Work with Server Control
- Create Web Form Applications
- Applying Styles to Control, Themes, and Skins etc.
- Managing Server Controls
- Using Data Controls
- HTML Controls
- Server Control Events
- Repeater Control
- AJAX Input Validations

### ADO .Net

- Basics of RDBMS
- ADO .Net Classes
- Connectivity to Database
- Connected & Disconnected Architecture
- Dataset, Datatable, DataReader
- XSD

### ASP .Net

- Introduction to Web Applications
- Why ASP .Net?
- IIS
- ASP .Net Pipeline
- Page Life Cycle
- Front end and Code Behind
- User Controls
- Custom Controls
- Master Pages
- Asp .Net Controls

- HTML Controls
- Validations
- Debugging

## Web Services

- Web Methods
- Attributes
- Using Web Services

## LINQ

- Linq Queries
- Conditions in Linq
- Data management

## Deployment

- Publishing Web Applications
- Create Web Setup Project

## ASP .NET MVC

- Introduction to MVC
- MVC Architecture
- Request flow in MVC
- What is Model | VIEW | CONTROLLERS
- First MVC Application
- Exploring Controllers
- Exploring Razor Views
- HTML Helpers
- Understanding Model Binders
- Annotations and Validations
- Configuration Files
- Security in MVC
- State Management Techniques
- Web Caching
- Authorization and Authentication

- CRUD Operations using Entity Framework
- DOT NET IDENTITIES
- Work Ares for MVC Project
- URL Routing
- Bundling and Minification
- AJAX & JQUERY – Methods, Controls, Templates
- Restful Services using ASP .NET WEB API
- Mobile Compatibility –Web Apps using MVC
- Test Driven Development with Debugging
- Real-Time Project – Multilayer Architecture Demo App

## Functions

- Joins And Views
- Sub Queries, Indexes, Security
- Stored Procedures & Functions
- Triggers, Cursors, Exception

## Handling

- CLR Integration
- Backup & Restore of Database
- XML in SQL SERVER
- Normalization

## SQL SERVER

- Introduction –SQL SERVER
- DML DDL DQL DCL TCL Functions
- Joins and Views
- Sub Queries, Indexes, Security
- Stored Procedures & Functions
- Introduction –SQL SERVER
- DML DDL DQL DCL TCL