



Web Development with C# .NET

	Title	
1	Introduction to C# & .NET Framework	<ul style="list-style-type: none"> • Difference between C# & .NET • What is CLR • Visual Studio • Simple App for kick start
2	Primitive Types and Expressions	<ul style="list-style-type: none"> • Variables & Constants • Overflowing • Type Conversion • Operators • Quick overview of Comments
3	Non-Primitive Types	<ul style="list-style-type: none"> • Classes • Structs • Arrays • Strings • Enums • Generics
4	Conditional & Iteration Statements	<ul style="list-style-type: none"> • If / else • Switch / case • For, foreach, while, do / while
5	Arrays, Lists, Collections	<ul style="list-style-type: none"> • Deep dive to arrays & lists with usacases • Hands on arrays & lists (domos, exercises)
6	Working with Files	<ul style="list-style-type: none"> • Working with System.IO • Streams
OOP		
7	Classes & Objects	<ul style="list-style-type: none"> • Constructors & Destructors • Object Initializers • Properties • Class Coupling • Inheritance • Composition
8	Interfaces & Inheritance	<ul style="list-style-type: none"> • Access Modifiers • Upcasting & Downcasting • Boxing & Unboxing • Interfaces and Testability • Multiple Inheritance

9	Polymorphism	<ul style="list-style-type: none"> ● Method Overriding ● Abstract Classes ● Sealed Classes
10	SOLID	<ul style="list-style-type: none"> ● Go thought solid principles
11	Design Patterns	<ul style="list-style-type: none"> ● Abstract Factory ● Factory Method ● Singleton ● Decorator
12	TPL vs Thread Pool	<ul style="list-style-type: none"> ● Pros & Cons ● Difference ● async/await
WEB		
13	ASP.NET	<ul style="list-style-type: none"> ● Introduction ● Environment ● Life Cycle ● First Example
14	ASP.NET MVC & API	<ul style="list-style-type: none"> ● Introduction ● Models & Data ● Controllers ● Views with Razor ● Data Formats
15	Lifecycle & Configuration	<ul style="list-style-type: none"> ● Lifecycle ● Routing ● DI ● Filters ● Middlewares
16	Security	<ul style="list-style-type: none"> ● Authentication & Authorization ● CORS ● External Authentication Services ● OAuth 2.0
17	MS SQL & T-SQL	<ul style="list-style-type: none"> ● Basic Scripting ● Tables ● Views ● Functions ● Procedures ● Transactions
18	Data Providers - ADO.NET	<ul style="list-style-type: none"> ● Architecture ● Data Types ● Executing Commands & Queries ● What is ORM? ● Couple words about EF
19	LINQ	<ul style="list-style-type: none"> ● Syntaxes ● Basic Query operations ● Data Transformations ● Type Relationships ● Lambda expression
20	Repository & Unit of Work Patterns	<ul style="list-style-type: none"> ● Basic Ideas & Use Cases

21	Last 4 weeks I would take to Work on a project, go through full lifecycle of project creation, breaking into tasks, working as a Team
22	
23	
24	

* **შენიშვნა:** კორპორატიული დაკვეთის შემთხვევაში კომპანიებს ვთავაზობთ მათ ინდივიდუალურ საჭიროებებზე მორგებულ სილაბუსს.