

# GDSC - SHA

# C# Programming

.NET Backend Development Agenda

[ Youssef Adel ]

# Section 1: Getting Started (1 Session)

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- 01 Getting Started With Cmd
- 02 Cmd Basics & Navigation Commands
- 03 Getting Started With Version Control
- 04 GitHub & Git Commands
- 05 IDE & Text Editor
- 06 Environment vscode Setup
- 07 Getting Started With .Net
- 08 C# Syntax & Top Level Statements
- 09 Variables

# Section 2: C# Basic Level (1 Session)

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- 01 Conditional Statements
- 02 Arrays
- 03 Loops
- 04 Control Flow Statements
- 05 Casting & Type Conversion
- 06 Methods
- 07 Exception Handling

## Section 3: C# Intermediate Level (5 Sessions)

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- 01 OOP Concepts
- 02 Class & Object
- 03 Fields
- 04 Const & Static Keywords
- 05 Encapsulation
- 06 Properties
- 07 Constructor
- 08 Abstraction
- 09 Interface
- 11 Inheritance
- 12 Polymorphism
- 13 Finalizer
- 14 Indexers
- 15 Struct
- 16 Enum
- 17 Nested Types

# Section 4: C# Advance Level (2 Sessions)

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- 01 Generics
- 02 Generic Delegate Types
- 03 Extension Methods
- 04 Attributes
- 05 Operator Overloading
- 06 Delegate
- 07 Events

# Section 5: MS SQL Server (3 Sessions)

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- 01 SQL Server & Database
- 02 Introduction To Database
- 03 Data Manipulation Language (DML)
- 04 Database Indexes
- 05 Procedure & Functions & Views
- 06 Manage Your Database
- 07 Mastering DB Queries

# Section 6: Entity Framework Core (5 Sessions)

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- 01 Setting Up Environment
- 02 Project Structure
- 03 Data Annotation and Fluent API
- 04 Code First Database
- 05 Setting Domain Models
- 06 Relations
- 07 Indexes
- 08 Sequences
- 09 Data Seeding
- 11 Migrations
- 12 Query Data
- 13 Joins
- 14 Tracking & No Tracking
- 15 Loading Types
- 16 Using Raw SQL
- 17 Updates in EFCore 7
- 18 Database design Projects

```
echo “Thank You” > gdsc.txt
```