

C#.Net

Note: Each Session consists of 1 Hour Duration

Session 1 Introduction To .Net

- History of .Net
- .Net Definition
- .Net Benefits over Java
- Assignments
- Mock Interview Questions

Session 2 Introduction to .NET Framework

- .Net with different languages
- .Net Features
- Introduction To Assemblies
- CLR
- BCL
- .Net Framework Architecture
- Assignments
- Mock Interview Questions

Session 3 Introduction to .NET Framework

- CTS
- MSIL
- JIT Compilers
- COM
- Web Services
- Assignments
- Mock Interview Questions

Session 4 Variables

- Simple .Net Program
- Variables
- Introduction To Data Types
 - Pre-Defined Data Type
 - Derived Data Type
 - User Defined Data Type
 - Assignments
 - Mock Interview Questions

Session 5 Data Types In .Net

- Boolean Data Type
- Integrals
- Floating and Decimal
- Strings
- Unary Operators
- Binary Operators
- Assignments
- Mock Interview Questions

Session 6 Arrays

- Single Dimension
- Multi Dimension
- Jagged Arrays
- Assignments
- Mock Interview Questions

Session 7 Boxing and Unboxing

- Value Type
- Reference Type
- Importance of Boxing and Unboxing
- Assignments
- Mock Interview Questions

Session 8 Control Structures

- If Statement
 - If-Else Statement
 - Nested If-Else Statement
- Switch Statement
- While
- Do While
- for loop
- for-each loop
- Assignments
- Mock Interview Questions

Session 9

- Functions
- Function Parameters
- Call-By-Value
- Call-By-Ref
- Static Function
- Assignments
- Mock Interview Questions

Session 10 Structures and Enumerations

- Introduction To Structures
- Difference Between Structures and Classes
- Enum Definition
- Assignments
- Mock Interview Questions

Session 11 Constructors

- Constructors and Destructors
- Abstraction
- Encapsulation
- Constructor OverLoading
- Private Constructors
- Constructor Chaining
- Static Constructors
- Assignments
- Mock Interview Questions

Session 12 Inheritance

- Single Inheritance
- Multi Level Inheritance
- Hierarchical Inheritance
- Assignments
- Mock Interview Questions

Session 13 Inheritance and Polymorphism

- Abstract Classes
- Interfaces
- Differences Between abstract Classes and Interfaces
- Multiple Inheritance

- Static Polymorphism
- Dynamic Polymorphism
- Assignments
- Mock Interview Questions

Session 14 Exceptions

- Unhandled Exceptions
- Handled Exceptions
- Finally Block
- Importance of Finally Block
- Assignments
- Mock Interview Questions

Session 15 Exceptions and Namespace

- Multiple Catch Blocks
- Generic Exceptions
- User Defined Exceptions
- Namespace
- Importance of Namespace
- Assignments
- Mock Interview Questions

Session 16 Windows Applications

- Forms
- Form Properties
- Login Program
- Mouse Events
- Assignments
- Mock Interview Questions

Session 17 Controls

- Run Time Controls
- Design Time Controls
- Button Controls
- Text Boxes
- Assignments
- Mock Interview Questions

Session 18 Controls

- Rich Text Boxes
- List Boxes
- Link Label
- Assignments
- Mock Interview Questions

Session 19 Controls

- Check Boxes
- Radio Buttons
- Differences Between Check Boxes and Radio Buttons
- Group Boxes
- Assignments
- Mock Interview Questions

Session 20 Controls

- Combo Box
- Tree View Control
- Tool Tip
- Error Provider
- Context Menus
- Color Dialog Box
- Assignments
- Mock Interview Questions

Session 21 Files

- Working with Files
- StreamReader and StreamWriter Class
- Create A File and Read from it
- Open Dialog Box
- Assignments
- Mock Interview Questions

Session 22 Database

- Introduction To Database
- Object Model
- Types of Databases
- Architecture of Object Model
- Differences Between Connected Architecture and Disconnected Architecture

- Assignments
- Mock Interview Questions

Session 23 ADO.Net

- Disconnected Database Connection
- ADO.Net Data Architecture
- DataSet
- Data Provider
 - SQL Data Provider
 - OLEDB Data Provider
 - Connection Object
 - Command Object
 - DataReader Object
- DataAdapter
- Assignments
- Mock Interview Questions

Session 24 Database

- Connection To SQL Server with wizard
- Connection To SQL Server through code
- Adding data to the database through Front End
- Deleting data in the database through Front End
- Working with DataSets
- Assignments
- Mock Interview Questions

Session 25 Assemblies

- IL Code
- Manifest
- Private Assemblies
- Global Assemblies
- Satellite Assembly
- Strong Name Key
- Global Assembly Cache
- Assignments
- Mock Interview Questions

Session 26 Delegates

- Function Pointers
- Usage of Delegates
- Deployment
- Assignments
- Mock Interview Questions

Session 27 Event Handles

- Event Handler Mechanism in .Net Framework
- Invoking an Event
- GUI Event Handling in VB
- Application of an Event Handler
- Assignments
- Mock Interview Questions

Session 28 Generics

- Understanding Generics
- Generic Types and Classes
- Generic Constraints
- Stacks
- Assignments
- Mock Interview Questions

Session 29 Generics

- Queues
- Linked List
- Sorting Collections
- Assignments
- Mock Interview Questions

Session 30 Multi-Threading

- What is a Thread?
- Working With Multi-Threads
- Applications Of Multi-Threading
- Life Cycle of a Thread
- Thread Priority
- Assignments
- Mock Interview Questions

Session 31 LINQ

- Introduction
- Types of LINQ
- LINQ To Objects
- Assignments
- Mock Interview Questions

Session 32 Attributes

- Using Attributes
- Why Attributes
- Attribute Basic
- Attribute Parameters
- Assignments
- Mock Interview Questions

ASP.Net

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Session 3 .Net Framework

- CTS
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Session 4 Introduction to HTML

- Introduction To Web Pages
- Static and Dynamic Web Pages
- User Controls
- Meta Data
- Assignments
- Mock Interview Questions

Session 5 Scripting Languages

- Introduction to Scripting Languages
- VB Script and Java Script

- Validating User Input
- Assignments
- Mock Interview Questions

Session 6 Server Scripting

- JS File
- Validating User Input
- ASP
- Introduction to ASP
- Request and Response Objects
- Getting Server Time
- Getting Data From Server
- Assignments
- Mock Interview Questions

Session 7 Introduction to ASP.Net

- Features of ASP.Net
- Advantages of ASP.Net
- Configuring IIS 7
- Assignments
- Mock Interview Questions

Session 8 Web Forms

- Web Form
- Components of The Web Forms
- ASP.Net Application Stages
- Assignments
- Mock Interview Questions

Session 9 Web Forms

- Code Behind Technique
- Calculating Simple Interest
- Generating User Name and Password
- Assignments
- Mock Interview Questions

Session 10 Web Application State

- Web Form Page Life Cycle
- Round Trips

- Stateless State
- Statefull State
- Assignments
- Mock Interview Questions

Session 11 Saving State At The Client

- Cookies
- HTML Hidden Form Fields
- Query String
- Assignments
- Mock Interview Questions

Session 12 Saving State At The Server

- Application State
- Session State
- PostBack
- Assignments
- Mock Interview Questions

Session 13 Web Controls

- Label
- Text Box
- Button
- Link Button
- Image Button
- Assignments
- Mock Interview Questions

Session 14 Web Controls

- Hyperlink
- Drop Down List
- Check Box
- Check Box List
- Radio Button
- Radio Button List
- Assignments
- Mock Interview Questions

Session 15 Web Controls

- Image
- Panel
- Calendar
- Table
- Assignments
- Mock Interview Questions

Session 16 Web Controls

- Validation Controls
- AD Rotator
- Assignments
- Mock Interview Questions

Session 17 Database

- Introduction To Database
- Object Model
- Types of Databases
- Architecture of Object Model
- Differences Between Connected Architecture and Disconnected Architecture
- Assignments
- Mock Interview Questions

Session 18 ADO.Net

- Disconnected Database Connection
- ADO.Net Data Architecture
- DataSet
- Data Provider
 - SQL Data Provider
 - OLEDB Data Provider
 - Connection Object
 - Command Object
 - DataReader Object
- DataAdapter
- Assignments
- Mock Interview Questions

Session 19 Database

- Connection To SQL Server with wizard
- Connection To SQL Server through code
- Adding data to the database through Front End
- Deleting data in the database through Front End
- Working with DataSets
- Assignments
- Mock Interview Questions

Session 20 XML

- Introduction to XML
- XML Program
- Relation Between XML and HTML
- Assignments
- Mock Interview Questions

Session 21 XML

- XML Parsers
- DTD's
 - Internal DTD
 - External DTD
- Assignments
- Mock Interview Questions

Session 22 Web Services

- WSDL
- UDDI
- SOAP
- SOAP Architecture
- XML Web Services
- Assignments
- Mock Interview Questions

Session 23 AJAX

- Basic Concepts
- Working of an AJAX
- XMLHttpRequest Object
- Example on AJAX

- Assignments
- Mock Interview Questions

Session 24 CSS

- Cascading Style Sheets
- Inline Style Sheet
- External Style Sheet
- Embedded Style Sheet
- Master Pages
- Assignments
- Mock Interview Questions

Session 25 Navigation Controls

- SiteMapPath Control
- Tree View Control
- Menu Control
- Assignments
- Mock Interview Questions