

VB .NET

Lecture 1

- Introduction to .Net Platform
- Elements of .Net Platform
- Common Language Runtime
- NET Base Class Library
- Common Type System

Lecture 2

- Data types
- Type Safety
- Type Conversion
- Console I/O, Operators
- Control Instructions
- Loops
- Procedures
- Call by Ref
- Call by Val
- Modules

Lecture 3

- Difference between Procedural & OO Programming
- Classes & Objects
- Access Specifiers
- References
- Constructors
- Overloaded Constructors
- Optional keyword
- Overloaded functions

Lecture 4

- Shared Data
- Shared Constructor
- Read-only, Inheritance
- Not inheritable Classes

Lecture 5

- Overridable
- NotOverridable

- MustInherit
- Implementing Multiple Interfaces
- Implementing Multiple Interfaces

Lecture 6

- Arrays-Rectangular & Jagged
- For Each-in loop
- Passing Arrays to Methods
- System. Array Class

Lecture 7

- Strings
- System. String Class
- Structures
- Classes vs. Structures
- Reference Types vs. Value Types
- ParamArray
- Common Type System
- Interoperability
- Properties
- Indexers

Lecture 8

- Namespaces
- Enumerations
- Reflections
- Exception Handling

Lecture 9

- Collections Namespace
- Stack, Queue
- Hash table
- Dictionary
- I enumerator

Lecture 10

- Win Forms - GDI+

Lecture 11

- Win Forms - GDI+

Lecture 12

- GDI+ - Transformations
- Processing Mouse & Keyboard Input
- Events & Delegates

Lecture 13

- Controls
- Employee Form
- Building UI

Lecture 14

- User Controls
- Building application with MS Agent COM component

Lecture 15

- SDI
- Menus
- Toolbars
- Status bars

Lecture 16

- File I/O & Serialization
- MDI

Lecture 17

- Threading
- How to launch threads
- Thread States
- Thread Priorities
- Foreground and Background Threads

Lecture 18

- Synchronization using Sync lock
- Monitor, Mutex
- R-W Locks and Interlocked mechanism
- Thread Pooling

Lecture 19

- Multithreading-Synchronization
- Thread Pooling
- Assemblies

- Static Linking
- Dynamic linking
- Dll Hell
- Disadvantages of DLLs
- COM

Lecture 20

- Assemblies & Manifests
- Creating and Using Private & Shared Assemblies
- Deployment
- Delayed Signing

Lecture 21

- Versioning
- Redirection
- Application Domains
- Language Interoperability
- COM Interoperability

Lecture 22

- Networking Basics
- TCP/IP chat
- UDP

Lecture23

- Internet
- Http GET and POST
- Request, Response
- Uploading and Downloading files using Web Client

Lecture24

- Software Architecture
- ADO.NET Architecture
- SQL.NET and OLE DB.NET Data Providers
- Creating & Accessing Stored Procedure

Lecture25

- Writing Image to Database
- Accessing BLOB
- Connected & Disconnected Approaches
- Using Data Grid Control

Lecture26

- XML
- XML & ADO.NET
- XML Document Parser
- XML Reader
- XML Writer

Lecture27

- Web Architecture
- Pros & Cons of Server Scripts/Programs
- ASP.NET
- Creating ASP.NET Applications
- Server Controls

Lecture28

- Validation Controls
- Accessing Database Through ASP.NET Application
- Web User Controls

Lecture29

- ASP.NET State Management Models
- Session States
- State Management Through Database
- Cookies State Management