

Unit I : Overview Of GUI Programming

Introduction to .NET Framework Components:

- **.NET Framework** A software development framework developed by Microsoft that runs primarily on Microsoft Windows. It includes a large class library called Framework Class Library (FCL) and provides language interoperability across several programming languages.

Common Language Runtime (CLR):

- CLR: The runtime environment provided by the .NET Framework. It manages the execution of .NET programs, providing services such as memory management, exception handling, and garbage collection.

Microsoft Intermediate Language (MSIL):

- MSIL: Also known as Intermediate Language (IL) or Common Intermediate Language (CIL), it is the intermediate language that .NET compilers produce. It is a platform-independent bytecode that can be executed by the CLR.

Just-In-Time Compiler:

- Just-In-Time (JIT) Compiler: The component of the CLR that converts MSIL code into native machine code at runtime, allowing .NET programs to be executed efficiently.

Exploring VB.Net IDE:

- VB.NET IDE: The Integrated Development Environment provided by Microsoft for developing applications using the Visual Basic .NET programming language. It includes features such as code editing, debugging, and project management.

System Namespaces in VB.Net:

- System Namespace: The root namespace for fundamental types provided by the .NET Framework. It includes commonly used classes and types for tasks such as data manipulation, file I/O, and networking.

Events and Event handling:

- Events: Mechanisms in .NET programming for notifying code when certain actions or state changes occur. Events are typically declared by classes and can be subscribed to by other parts of the program.

- Event Handling: The process of writing code to respond to events raised by objects in a program. Event handlers are methods or delegates that are invoked when an event occurs.