

About C++ Training

C++ is general Purpose Programming language which supports Object Oriented Concepts. Generally C++ is a Super Set of C Language Every C application can be upgraded in C++ with Object Oriented Concepts There are many application like Operating Systems.

Unix, Windows, Linux, NoCrysis Warhead and Other Coolgames, No Photoshop, No FireFox, No VLC, No FL Studio, No Playstation, No XBOX and the list continues . 90% of the applications in the world are written in C and C++.

C++ Training Course Objective

The main objective student can able to implement the applications can develop the Programs with classes and objects. The developed application of C can change into with classes and objects can add all the object Oriented Concepts. Developing in C++ the application is more optimized and efficient than C.

C++ Training Course Duration

- Normal Track 45 Working days, daily one and half hours.
- Fast Track 35 Working days, daily two hours.

C++ Training Course Overview

Basic In C++

- Programming Methods
- Object Oriented Programming
- Introduction to C++
- Variables, Datatypes, Operators
- Reference Operator
- Scope :: Resolution Operators
- New Structure of a C++ Program

Control Structures

- Conditional – if, if...else, Nested if...else, Switch...Case
- Loops – While, do...while, For, Nested Loops
- Jump – Goto, Continue & Break

Functions

- Introduction a Function
- Defining a Function
- Prototype
- Actual and Formal Arguments
- Parameter Passing Techniques
- Call by Value
- Call by Reference
- Call by Pointer
- Default Arguments
- Function Overloading
- Inline Functions

Oops Concepts

- Encapsulation
- Abstraction

- Polymorphism
- Static Binding
- Dynamic Binding
- Inheritance
- Message Passing
- Class
- Object

Classes and Objects

- Class Declaration
- Access Member and Member Functions
- Creating Objects
- Differences between Class and Structure
- Objects as arguments
- Returning Objects
- Static Members
- Friend Functions
- Friend Classes

Constructors and Destructors

- Introduction
- Defining Constructor
- Comparing Constructor Member Function
- Default Constructor
- Argument Constructor
- Copy Constructor
- Constructor Overloading
- Default Argument in Constructor
- Destructor
- Defining Destructor

Operator Overloading

- Need of Overloading
- Defining Operator Overloaded Function
- Operator Overloading Rules
- Overloading Unary Operators
- Overloading Unary Operators using Friend
- Overloading Binary Operators
- Overloading Binary Operators using Friend
- Overloading Other Operators

Inheritance

- Introduction
- Types of Inheritance
- Single Level Inheritance
- Multilevel Inheritance
- Multiple Inheritance
- Hybrid Inheritance
- Hierarchical Inheritance
- Base Class

- Derived Class
- Inheritance Scope
- Protected Members
- Virtual Base Class
- Virtual Destructors

Advanced Class Concepts

- Container Class & Contained Class
- Local Classes
- Inheritance v/s Containershi

Polymorphism and Virtual Functions

- Type Polymorphism
- Dynamic Binding
- Function Overriding
- Difference between Function Overloading and Overriding
- Need of Virtual Functions
- Pure Virtual Functions

Templates

- Need of Template
- Defining Template
- Function Templates
- Class Templates

Exception Handling

- What is Exception?
- Need of Handling Exceptions
- Types Of Exceptions
- Exception Handling Mechanism

Streams

- Hierarchy of I/O Streams
- Istream Class Functions
- Ostream Class Functions
- IOS Class Functions
- Manipulators

Files

- Hierarchy of File Streams
- Opening a File
- File Opening Modes
- Sequential Access Files
- Random Access Files
- Command Line Arguments