Welcome to ineuron.ai

C++ Bootcamp for Beginners

Description:

Ultimate modern C++ Bootcamp. A modern approach to understand C++. By mastering the fundamentals of the language, you can start writing C++ programmes right away. Additionally, you will hear several methods and viewpoints on using C++ professionally.

Start Date:

Doubt Clear Time:

Course Time:

Features:

Course material

Course resources

On demand recorded videos

Practical exercises

Quizzes

Assignments

Course completion certificate

What we learn:

Introduction to CPP

Getting Started with CPP

Basics but indepth of CPP

Functions in CPP

Object Oriented Programming

Smart Pointers in CPP

Requirements:

System with Internet Connection

Interest to learn

Dedication

Instructor:

Name:

Hitesh Choudhary

Description:

I like to make videos related to code and tech in my free time. I also lead a few tech teams in startups, help in hiring talent for companies. I am also on a part time traveller, with 31 countries checked off so far!

>Introduction to CPP:

>>CPP20 A note

>>CPP20 section1

>>Welcome to Cpp bootcamp

>>Prerequisite and tools for cpp

>>Understand the entry point of hello world

>>Compare the 2 hello world

>>Version history and official documentation of cpp

>Getting Started with CPP:

>>CPP20 section2

>>Return type and comments

>>Redefining program in cpp

>>What is namespace in cpp

>>First iteration of program

>>Can I name that

>>Get the color and assignment

>A Little fast pace CPP:

>>CPP20 section3

>>Your first introduction to pointers

>>Reference is the actual tough thing in cpp

>>Cpp array are different with pointers

>>A formal introduction to integers

>>Conditionals and ternary

>>Conditionals as switch

>>While and do while loops

>>Introduction to for and range based for loops

>>Loop with pointers and shortcuts

>Basics but indepth of CPP:

>>CPP20 section4

>>Always use float with caution

>>Why always divide by zero for try catch block

>>Sneek peek to functions in cpp

>>linkers qualifiers prefix and postfix

>>Basics of operations on cpp

>>Logical AND OR and NOT

>>bitwise operation in cpp

>>Memory leaks in cpp

>More datatypes in CPP:

>>CPP20 section5

>>Get started with structs in cpp

>>Enums and Preprocessors

>>A challenge to strongly types language

>>Heap and Stack memory with a version discussion

>Functions in CPP:

>>CPP20 section6

>>Detailed introduction to functions

>>How to create a header file in cpp

>>Your first introduction to templates

>>What are functional pointers

>>nullptr saves the day

>>Factorial and recursion are close friend

>>Lets talk about MACROS

>>Variadic templates and recursion

>Object Oriented Programming:

>>CPP20 section7

>>A design example

>>Get started with class and objects

>>Getters and Setters for a data member

>>Method separation and const qualified methods

>>Constructor destructor and rule of 3

>>Disable the constructor

>>THIS is not easy in cpp

>Little more OOPS:

>>CPP20 section8

>>Inheritance is my favourite

>>Base class Derived class and overriding

>>Friend keyword come with caution

>>Multiple Inheritance

>>polymorphism and virtual

>Smart Pointers in CPP:

>>CPP20 section9

>>What are smart pointers

>>Unique pointers and issues

>>Shared pointers in smart pointers

>>Weak pointers in smart pointers

>Move Semantics file & lambda:

>>CPP20 section10

>>Move semantics Lvalue and Rvalue

>>Vectors - Dynamic array from STD template library

>>Lambda - a small hello

>>Create, rename and delete files

>>Reading and writing into files and MODES

>STL - Standard Template Library:

>>CPP20 section11

>>Introduction to STL and generic programming

>>Main components in STL

>>Functors in STL

>>SORT algorithms in STL

>>SEARCH algorithms in STL

>>Partition and Stable partition in STL

>STL - a little more:

>>CPP20 section12

>>Revisiting vectors in STL

>>List in STL

>>Queue and priority queue in STL

>>Deque in STL

>>Stack in STL and assignment

>>Sets and MultiSets in STL

>>MAPS and assignment