Introduction

What is C++?

- C++ is a cross-platform language that can be used to create high-performance applications.
- C++ was developed by Bjarne Stroustrup, as an extension to the C language.
- C ++ gives programmers a high level of control over system resources and memory.
- The language was updated 4 major times in 2011, 2014, 2017, and 2020 to C++11, C++14, C++17, C++20.

Why Use C++

- C++ is one of the world's most popular programming languages.
- C++ can be found in today's operating systems, Graphical User Interfaces, and embedded systems.
- C++ is an object-oriented programming language which gives a clear structure to programs and allows code to be reused, lowering development costs.
- C++ is portable and can be used to develop applications that can be adapted to multiple platforms.
- C++ is fun and easy to learn!
- As C++ is close to C, C# and Java, it makes it easy for programmers to switch to C++ or vice versa.

Difference between C and C++

- C++ was developed as an extension of C, and both languages have almost the same syntax.
- The main difference between C and C++ is that C++ support classes and objects, While c does not.

C++ Getting Started

To start using C++, you need two things:

- A text editor, like Notepad, to write C++ code
- A compiler, like GCC, to translate the C++ code into a language that the computer will understand

C++ Install IDE

An IDE(Integrated Development Environment) used to edit And compile the code.

Popular IDE's include code::Blocks, Eclipse and Visual Studio. These are all free and they can be used to both edit and debug C++ code.

NOTE: Web-based IDE's can work as well, but functionality is limited.

Command for Compile and Run

Command for Compilation

```
g++ file_name
```

Command for Run

./a.out

The First Program

```
#include<iostream>
using namespace std;
int main(int argc, char const *argv[])
{
    cout << "HEllo World!";
    return 0;
}</pre>
```

Introduction 1