

Release Notes:

[2.2.0] Sun Sep 27 2020

What's new

- Created Hello World as a start to learning C++
- Applied basic knowledge on input/output and variables on Hello World

What I learned

(Comparing this to C# since it's my strongest programming language)

- C++ is a "lower" language compared to C#. One example is C++ requires the user to manually handle memory (eg. pointers), whilst C# handles it automatically. It gives the programmer more control over managing/optimizing performance.
- Giving the user more control also means giving them more "nubs and dials" to watch out for, so I expect this language to be more complex and a tad harder to learn
- The syntax for C++ and C# are pretty similar, so far the only noticeable difference is the way the output message is done and the way variables are passed into functions (using pointers, not the actual variable)

Resources used when researching

1. w3schools on C++

<https://www.w3schools.com/cpp/default.asp>

2. How to do Hello World on C++

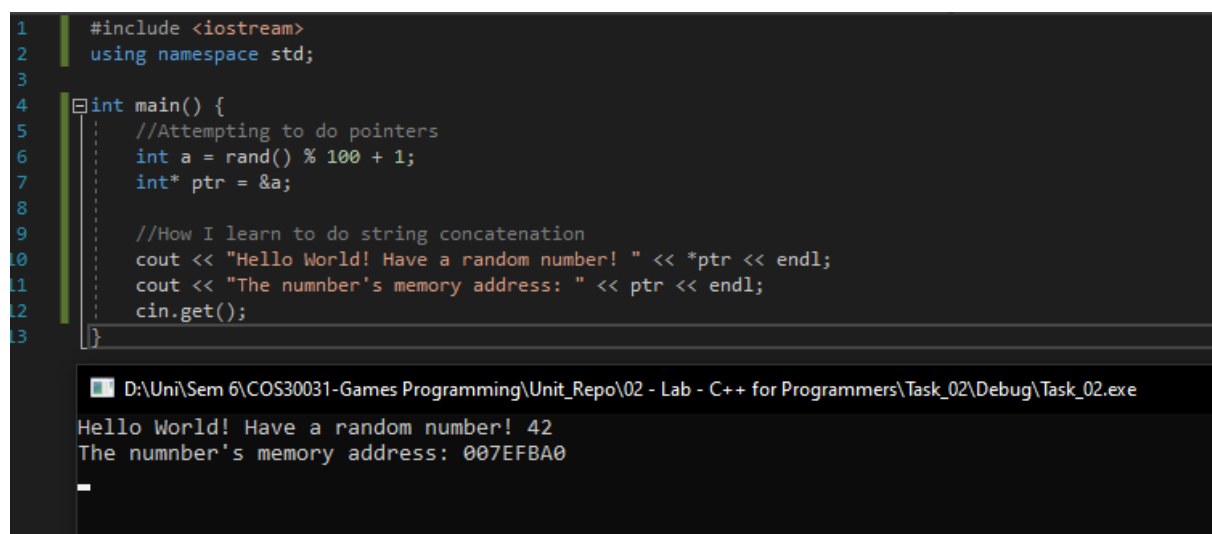
https://www.youtube.com/watch?v=VWJWUR-UnzQ&ab_channel=ProfessorHankStalica

3. Differences between C++ and C#

<https://www.guru99.com/cpp-vs-c-sharp.html>

4. What is a pointer in C++

https://www.youtube.com/watch?v=DTxHyVn0ODg&ab_channel=TheCherno



```
1  #include <iostream>
2  using namespace std;
3
4  int main() {
5      //Attempting to do pointers
6      int a = rand() % 100 + 1;
7      int* ptr = &a;
8
9      //How I learn to do string concatenation
10     cout << "Hello World! Have a random number! " << *ptr << endl;
11     cout << "The number's memory address: " << ptr << endl;
12     cin.get();
13 }
```

D:\Uni\Sem 6\COS30031-Games Programming\Unit_Repo\02 - Lab - C++ for Programmers\Task_02\Debug\Task_02.exe

Hello World! Have a random number! 42
The number's memory address: 007EFBA0

Figure 1. Code and Output for HelloWorld