**Beginning C++ Programming by Frank J. Mitropoulos**My Course Notes

Introduction

* There are multiple versions of C++: C++98, C++03, **C++11**, **C++14**, and **C++17**. The digits represent the year that version was released. The former two versions are referred to as classic C++, while the latter three are referred to as modern C++.
* C++98 was the first official standard. C++11 added many new features to the language. The other versions mainly corrected issues with the language or simplified pre-existing features.
* The process to create run an application is as follows:
* The developer inputs C++ code into header (.h) and source (.cpp) files in an IDE.
* The compiler converts the high-level C++ code into low-level machine/binary/object code (.obj).
* The linker combines our code with other libraries and outputs an executable (.exe).
* The course will use CodeLite since it’s free, but the instructor stated that CLion by JetBrains is his IDE of choice. I have opted to use CLion as I have access to it and think highly of JetBrains.

Installation and Setup

Curriculum Overview

Getting Started

Structure of a C++ Program

Variables and Constants

Arrays and Vectors

Statements and Operators

Controlling Program Flow

Characters and Strings

Functions

Pointers and References

OOP - Classes and Objects

Operator Overloading

Inheritance

Polymorphism

Smart Pointers

Exception Handling

I/O and Streams

The Standard Template Library (STL)

Bonus Material and Source Code