18 - CLASSES in C++

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CLASSES in C++

- OOP is a styla on how to write your code
- C++ doesn't mipl certain impies but support it
- way to grudata and functionalites together
- Variables made of class are called object variables
    - And a new object is na instance of that class
- Defining a class we define the visibility of the variables and functions
    - By default the visibility is private, need to specif as public to acces or protected
- Fuctions inside classes are called methods
- USEFULL TO GROUP THINGS TOGETHER AND ADD FUNCTIONALITIES TO THE OBJECT

CLASSES vs STRUCTS in C++

- Kind a similar one
- there is no much difference
- the main diference is the visibility options in structures (private, public, protected
    - Class is private by default
    - struct the default is public
- But this is tecnicly, but the use in code may differ
- struct exists by bacward compatibility with previous versions
    - the ompiler wouldn't know wht it was in old codes
- The usage differs
    - That is no right or wrong answer, differ by opinion
- struct used just to represent variables
- Never use a structure with inherence, go to classes

How to Write a C++ Class

- Log class to manage the log messages, used for debug process
- console is like na information dump
- Defined simple functions, member variables (public and private)
- Instantiated in main and also used the public functions

Static in C++

- 2 meanins,
    - outside of a class
        - Linkage of that symbel will be internal, only visible to that transation unit that you are working with (translation unit = file)
    - Inside of a class
        - All instances of that class will share the same memory, will only be one instance of that static variable across all instances of the class
- Focus on static outside of a class