

bitmap parts (file header, image header, pixels) (blue, green, red) (garbage bytes)

Command line arguments

String parsing from bible concordance assignment

namespace

standard output – the place that cout writes to

complex types

- struct vs object (cookie cutter vs cookie)

- syntax to define a struct

- syntax to use an object defined from a struct

- SuperHero struct example

- Defining methods in a struct

- Calling methods of an object

- Constructor & destructor

- Separate the class definition from its implementation (.h files & .cpp files)

- Including the .h files with `""` vs `<>`

pointers and dynamic memory

- pointers (\*what's at, & address of)

  - see example from 2016-3-31.cpp

- dynamic memory, asking the OS for memory at run-time, why do it?

- dynamically allocating an array

- delete - gives the memory back to the OS

- delete memory for a single dynamically allocated value

- delete memory for an array of dynamically allocated values

- do not delete memory that you did not allocate

- do not delete twice

- memory leaks

- use a list of dynamically allocated values

files

- binary vs text files

- reading and writing text files

- reading and writing to binary files (read and write as a char\*)

- flags (binary, app, nocreatre)

- gpointer

- ppointer

- opening a file (2 ways to open, with open method or at declaration)

- file handle