Structs & Other C Datatypes

Lecture 5
Jan 24th 2023 | COMP 211-002 | Joshua Bakita
Welcome!

Today:
➔ Structs

Logistics:
➔ Readings up, please read them for more detail, and before coming to office hours
➔ 75% started on Assign 1, 30% submitted.
➔ Prefer Piazza, then email: s23-comp-211-002-staff-cs@cs.unc.edu

```c
char fun_message[] = {
  0x54, 0x72, 0x79,
  0x20, 0x72, 0x75, 0x6e, 0x6e, 0x69,
  0x6e, 0x67, 0x20, 0x2e, 0x2f,
  0x74, 0x72, 0x00
};
```

See the slides from last time for the ASCII table.
Recap

What we've covered:

➔ Basic C Syntax
➔ Primitive C types
  ◆ And representation in binary
➔ C function declaration and definition
➔ C strings & 1-D arrays
  ◆ + they're just pointers to memory blocks
➔ ASCII character encoding
➔ printf()
➔ Basic command line tools

Want to understand better?
See the readings!
Structures

It's all 0s and 1s under the hood!
Structures

struct demo
Which variable(s) will cause printf() to always print "UNC"?

https://PollEv.com/joshuabakita182
Structures

struct bitfields demo
Recommended Readings

- The GNU C Reference Manual, §2.4 (5 pgs)
- info gnu-c "Structures"
- The C Programming Language, Chap. 6 (24 pgs)
Thanks!
Questions?

See office hour calendar on the website for availability.

Assignment 1 due Jan 26.

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