

CS368 Lecture 2

Wednesday 10 September 2014

Reminders:

- Register on Piazza
- HW0 due today
- P1 released, due 11 PM Friday September 26
- Email ansari@cs.wisc.edu about VISA, any conflicts, etc.

Last class:

- Course Handout and Intro, Logistics
- Historical Overview
- Differences in Philosophies, Goals
 - Memory management, access
 - Security
- A simple program (code on website)

Today:

- Includes and Namespaces
- Basic Types, Enumerated Types
- Editing, compiling, running C++ programs
- Structures, Arrays, Vectors

Includes and Namespaces

Basic Types, Constants, Enumerated Types

Basic Types:

Constants:

Enums:

Editing, Compiling, and Running C++ programs

Structures in C++

Structs: A contiguous block of memory that is a user-defined data type.

Properties:

- Name acts as the type
- Where should structs be declared?
- “Members”
- Public/private?
- Quickly assigning values
- Copying structs
- using structs with cout

Example:

```
struct Date{  
    int year;    // year is a member  
    int month;  // month is a member  
    int day;    // day is a member  
};
```

How can structs be used?

Arrays in C++

Similar to Java Arrays, with some critical differences.

Notation:

Bounds:

Search example (code on website)

On Your Own

- Practise declaring and using structs, arrays, and vectors
- Look at the STL reference for vector
- Practice editing, compiling, and running with examples