CSCI 1300

Intro to Computing

Gabe Johnson

Lecture 30 April 1, 2013

C++ and Projects

Lecture Goals

1. Rest of the Semester
2. Projects
3. C++
4. **BA in CS! Woooooo!**

Rest of the Semester

Two possible tracks: **C++** or **Project**. Yes, you can do both!

For those of you continuing on to CS 2270:

I strongly urge you to take the C++ track.

After Today: 13 Lectures, 3 homeworks. Awesome project presentations on the last day.

Remaining Lectures on C++

FYI: All the remaining lectures will be on C++. Those of you doing project should still come to class even if you aren't doing the C++ homeworks. There's a lot of good stuff in here, and this helps you understand your current languages better.

Projects

Not going on to Data Structures?

Or, feel comfortable with C++ already and don't want to do C++ homework?

Do a project!

You can work in teams of 1, 2, 3, or 4 people.

Project Group / TA

Instead of doing programming HW we will let you turn in project progress. Pick a group name, e.g. “SputnikIsCool”. Your group’s TA will be the TA of the person whose last name is alphabetically first.

Project HW = Summary

To turn in your homework:

* Write a short (300-1000 word) plain text summary. Name it SputnikIsCool.txt (after your group name).
* Summary **must** have the group name *and* group members inside the file.
* All group members submit the text file to RG.
* One group member emails the group TA with the contents of the file (just paste it in, don't send attachments).
* Subject line must be **[1300] SputnikIsCool** (replace that with your group name).

For Next Time (Projects):

Form a group, email the group's TA indicating your name, who is in the group, and a short (less than 100 word) summary of what you plan to do do by May 3.

You may choose *any project that involves programming that is also awesome.* It doesn't matter what language it is, or if it is graphical, or if you are programming an Arduino-based robot. It just needs to involve programming, and be awesome.

Project Ideas

Text Adventure Game
Web Crawler
Implement Game of Life in Minecraft
Physics Engine for a Game
Learn Ruby on Rails and build a site
Learn an esoteric (programming) language
Write a spec for a new language

... or anything else that is awesome and involves programming.

C++

All remaining lectures are important, and we will go pretty fast.

You absolutely have to study this on your own, or you will fall behind.

Notice how I used both **bold** and *italic* at the same time there. That's how you know I mean it.

everything.cpp

(Almost) everything we will cover is already up in Retrograde at this path:

`cs1300 / code / cpp / everything.cpp`

This file is meant to be read sequentially. It is also interactive—you need to edit, compile, and run it according to the instructions.

You can always get another version from RG if you mess up your version.

For Next Time (C++):

Ensure your environment is set up so you can write fresh C++ programs, compile them, and run them.

Begin hacking away with the everything.cpp file I mentioned.

Start reading Learn C the Hard Way and get as far as you can before you get sick of it.