CPSC 5011 – OO Concepts

Introductions

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Syllabus high points

- BLUF: READ IT.

- Textbook: *An Introduction to Object-Oriented Programming (3ed.)*

- There will be (lots of) coding!

- No cheating will be tolerated. You need to know this stuff.

About me

- Tech exec, manager, engineer for 24 years
- Coding for 41 years

- I LOVE SOFTWARE.
  - I think it's the coolest thing in the world.
  - Also love learning about anything.

- BSCE, Milwaukee School of Engineering
- MSE, Seattle University

About me - programming

- Languages
  - C, C++, C#, Objective C, Swift, Java, Pascal, Forth, F#, Elixir, Perl, Python, Lisp, Visual Basic, Assembly (6502, 68000, 80x86)

- OSes
  - DOS, Windows (3, 95+, Server), Linux, Solaris, GCOS, Mac OS 6, Mac OS-X

- Industries
  - Desktop publishing, multimedia, e-commerce, embedded, Wall Street, telephony, web security, entertainment, sales tax, personal security, NLP AI, fin-tech, genetics…

- Favorite topics: compilers, languages, software quality

My biases

- I am *not* an academic computer scientist.

- I *am* a commercial software developer.
  - Pragmatism wins every time.
  - Every decision is an economic one, not a theoretical one.

- Second time teaching a course at SU.

- If you want more theory, just ask. ☺

My commitment to you

- I will do everything reasonable to teach you this material to prepare you for your future academic and professional careers.

Your commitment to me

- You will do everything reasonable in your power to learn this stuff.

  - Do all readings.
  - Do the homework.
  - Be willing to be challenged.
  - Ask questions!

Remote class protocols

- Education is interactive. Keep your camera on.

- If you have a question, ask audibly. Otherwise, mics off.

- Talking on the zoom chat is okay, but I don't always keep an eye on it.

- If I ask for a show of hands, use the "response" emoji.
  - Let's practice…

Goals for the course

- You will understand:

    - Understand what "object-oriented" means

    - Understand why object-oriented programming exists and what problems it solves

    - Understand *classes*, *interfaces*, *objects*, *types*, and *pointers*

    - Increase understanding of Java and learn the basics of C++

Meta-goals for the class

- Have fun.

- Learn stuff.

- Learn to love programming.

Meta-goals for the class

- "Computers are not the thing. Computers are the thing that *gets* you the thing." -- *B. Balkan*

- However, let's acknowledge you must be able to program them for this to work.

About YOU

- Kahoot.it

- (We'll be doing these from time to time…)

SHALL WE PLAY A GAME?

Now let's talk about OO…