Computer Programming II

CS196 - Lecture 1
Instructor: Dr. V

Rules for Class Interaction

1. 🕐 Please be on time.
2. 💬 Jump in with comments/questions.
3. 📥 Pay attention to your email.
4. 📧 Email me if you have any questions.
   - ○ include CS196-1, CS196-2, or CS196-3 in subject
5. 💻 Bring your laptop to every class, unless explicitly told otherwise.
6. 😷 PLEASE wear a mask if you have
   - ○ sore throat or cough
   - ○ sneezing or runny nose
   (ask me for a mask if you do not have one)

Personal laptops

- You must have a personal laptop for CS courses
  - though there may be a way to use a phone/tablet instead
- If you cannot afford a laptop, you can borrow one from the library, and there should be laptops available in the lab
- If you need laptop recommendations (specific to your budget), just ask
- If your laptop is a chromebook, you can still use it
  - https://www.youtube.com/watch?v=GAMqfTqcGFc
- If you have a laptop, but it's old/slow, you should be able to install Chrome OS or Linux on it to make it faster
  - https://www.youtube.com/watch?v=72E31pfv8to
  - https://www.youtube.com/watch?v=W-RFY4LQ6oE

About the Instructor

Dr. Veksler (Dr. V)

WER218; vveksler@caldwell.edu

Office Hours:

https://calendar.app.google/HfDU5RobsgnjeqPC7

Engineer, Research Scientist, Professor
- worked in industry, government, academia, self-employed
- AI and robotics, HCI, data analytics, research on human behavior

I'd love to get to know each of you, but...

- I am bad at remembering names, so please just keep reminding me what your name is
- If I mess up your name, just correct me as many times as it takes
- Keep your name-plate in front of you

CS196

Blackboard
- https://caldwell.blackboard.com/

Grading (5-15-40-20-20)
- attendance/participation
- quizzes
- assignments
- midterm
- final project

Code Evaluation

- Submitted code will be evaluated for
  - Correctness
    - Does it work?
    - Does it do what is intended?
    - Are there bugs?
  - Robustness
    - Does the code break upon unexpected input?
  - Readability
    - **<u>Make sure your code is indented and spaced out properly</u>**
    - Name variables/functions/classes in a meaningful way
    - Follow standard naming conventions
    - Add comments and docstrings

Late submissions

- late assignments will lose 10pts (out of 100) for each week they are late, but will not go lower than 70 (out of 100)
  - 1-7 days late: highest grade = 90
  - 8-14 days late: highest grade = 80
  - >14 days late: highest grade = 70

Cheating

- don't do it. not worth.
- what is considered cheating in this class?
  - it's complicated (if you're not sure, just ask)
    - you're encouraged to look up answers online, but…
    - on quizzes/exams
      - don't look at classmates' answers
      - may have other requirement
    - on assignments
      - don't submit someone else's code
      - if a part of your code was copied, give credit to the source
      - i <u>will</u> have your code checked for plagiarism

Class Structure

- 14 weeks of classes
- each week:
  - lecture
  - quiz based on lecture
  - practicum
    - technical tips, interactive time to work on your assignments, ask questions, and get feedback

Inclement weather or other class cancellations

- If the school is open, I will be here
- Use your best judgment
- Check school site
- Sign up for notifications
- Check your email

Questions? Comments? Concerns?

Popular coding tools

- Code versioning
  - git
  - svn
  - diff
  - github.com
  - docker

Popular coding tools

- Sharing code
  - github.com
  - gist.github.com
  - codeshare.io
  - pastebin.com

Popular coding tools

- Code editor built-in tools and extensions
    - VSCode
        - syntax highlighting
        - auto-indent
        - auto-complete
        - debug points
        - terminal
        - fold/unfold
        - extensions
            - diff
            - git, github

Popular coding tools (python)

- Python REPL in terminal
- Jupyter notebooks
    - in VSCode
    - jupyter.org (online or download and install)
    - google colab (https://colab.research.google.com/)

Popular coding tools (python)

- download and install libraries
  - pip (python default package manager); e.g.,
    > **pip install numpy**
- bundle applications from your python code
  - for desktop (Windows, Linux, OS X)
    - pyinstaller
  - for mobile (iOS, Android)
    - buildozer

Coding resources

- google.com
- youtube.com
- w3schools.com
- stackoverflow.com
- github.com