CSCI 241: Data Structures

"Lecture" 0

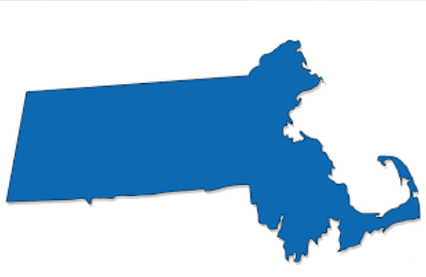
Introduction and Getting Things Rolling

Today

1. About me
2. Course overview
3. In teams: collaboratively write norms for your team
4. Syllabus
    - As a class: Questions
    - In teams: collaboratively answer syllabus questions in your gdoc
    - As a class: Any remaining questions
5. Teamwork practice
    - As a class: brief demo of AWW whiteboard
    - In teams: collaboratively answer drawing exercises in your gdoc

About Me:

Scott Wehrwein

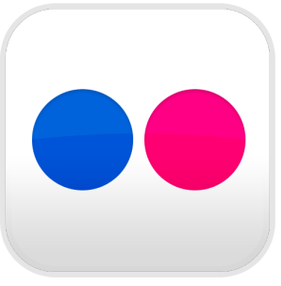


OLYMPUS
MANUAL ADAPTER
OM-SYSTEM ZUIKO MC AUTO-S 1:1.8 f=50mm
Japan

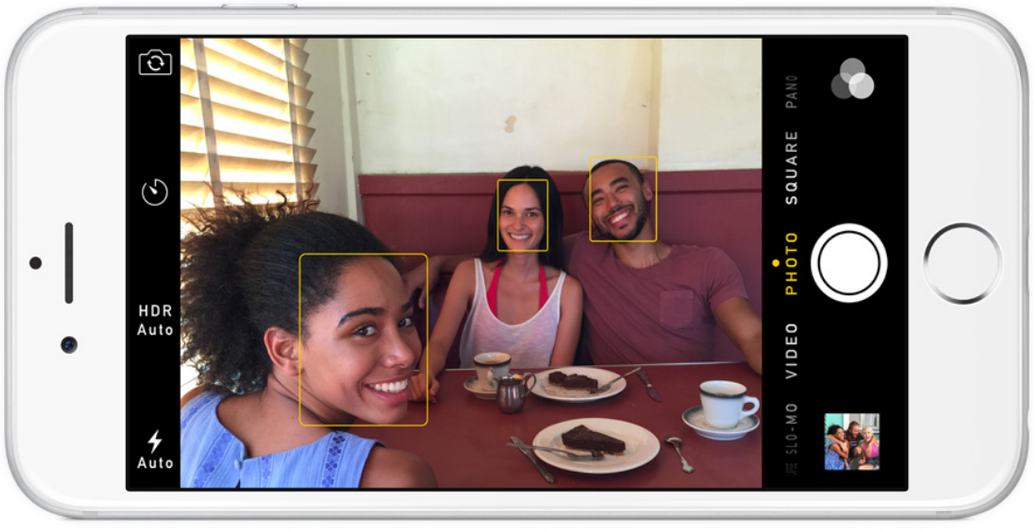
1 Hour Photo

AXIS

1H:02
93%
RES
1080
FPS
120
FOV
WIDE



Computer Vision: Familiar Examples



In-Camera Face Detection

Autonomous Driving

Panorama Stitching

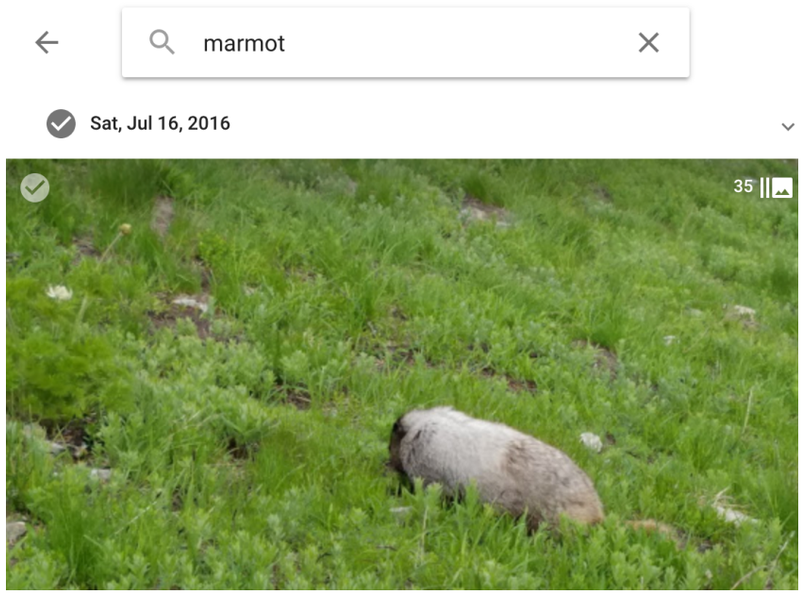
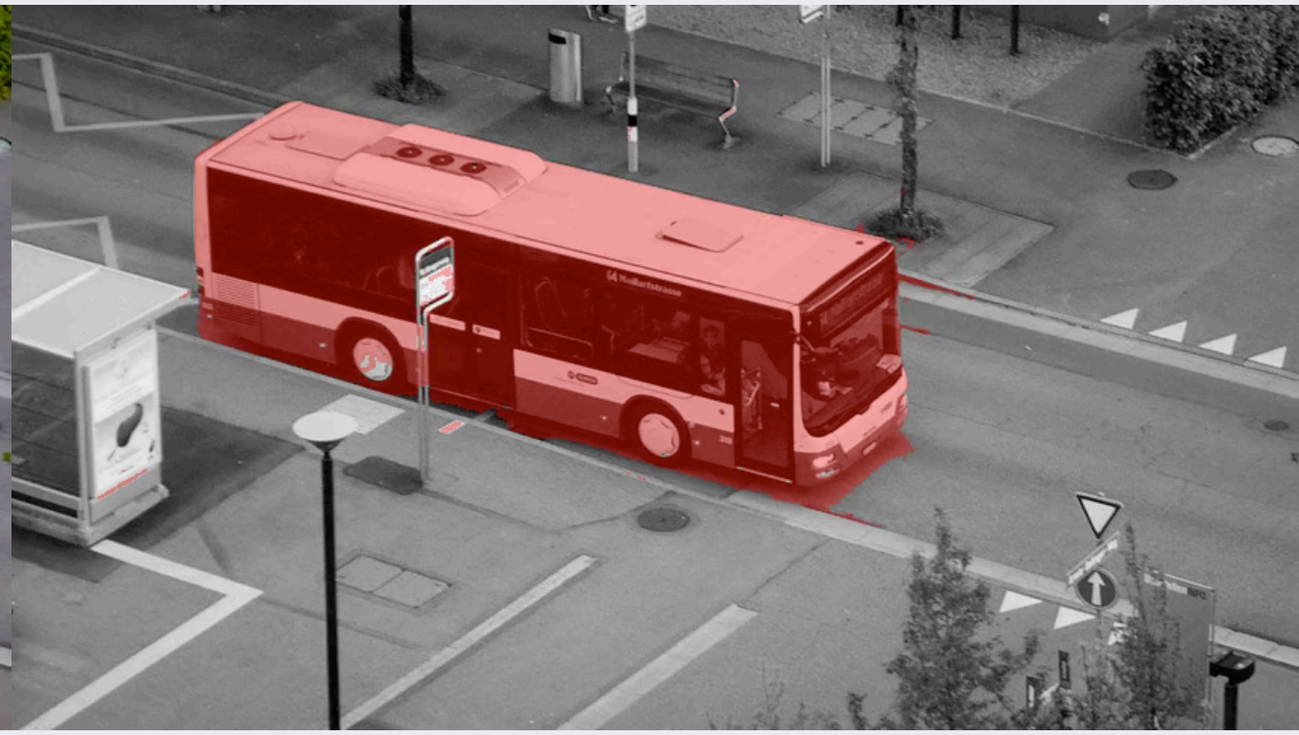


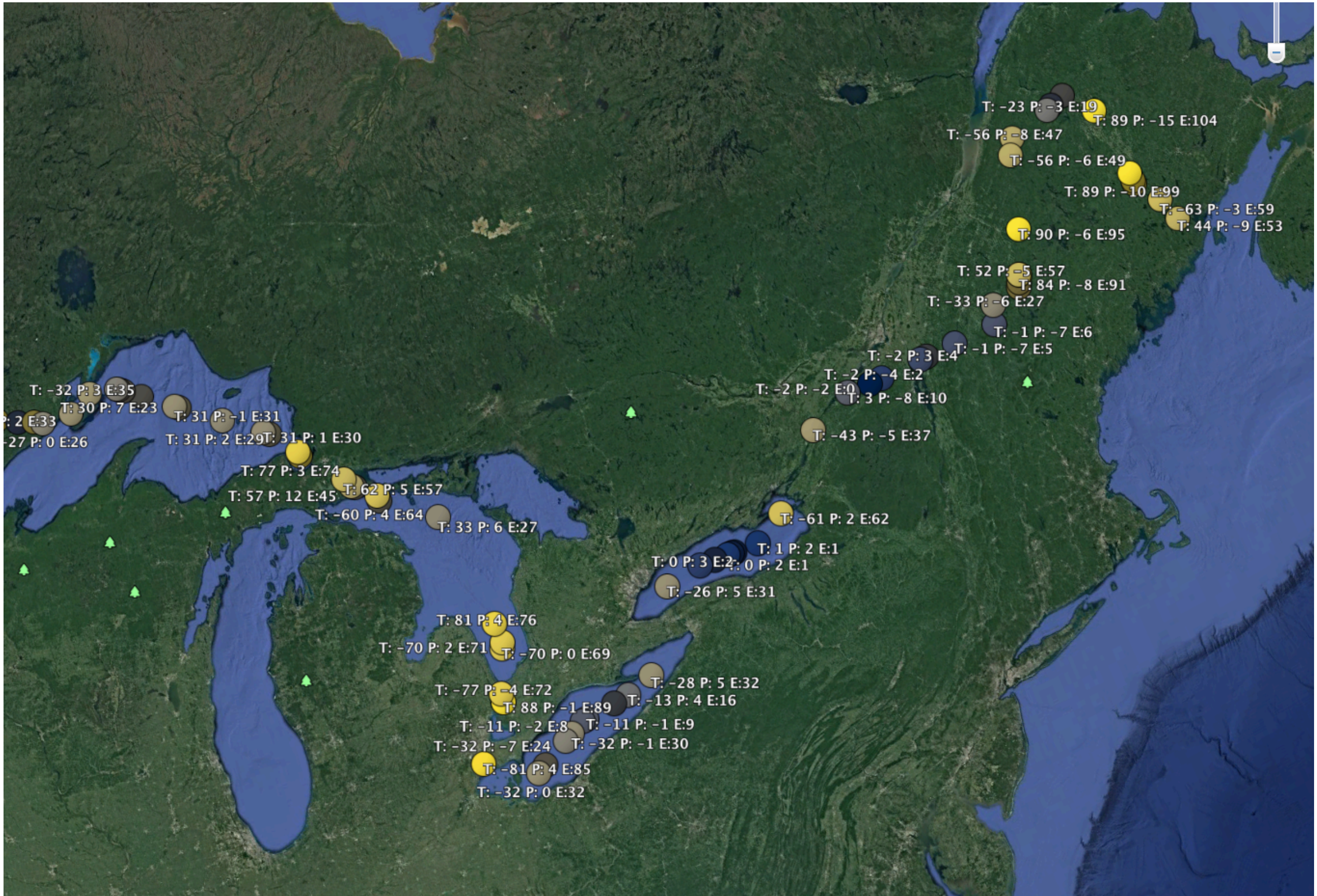
Image Search



Sage Chapel
147 Ho Plaza

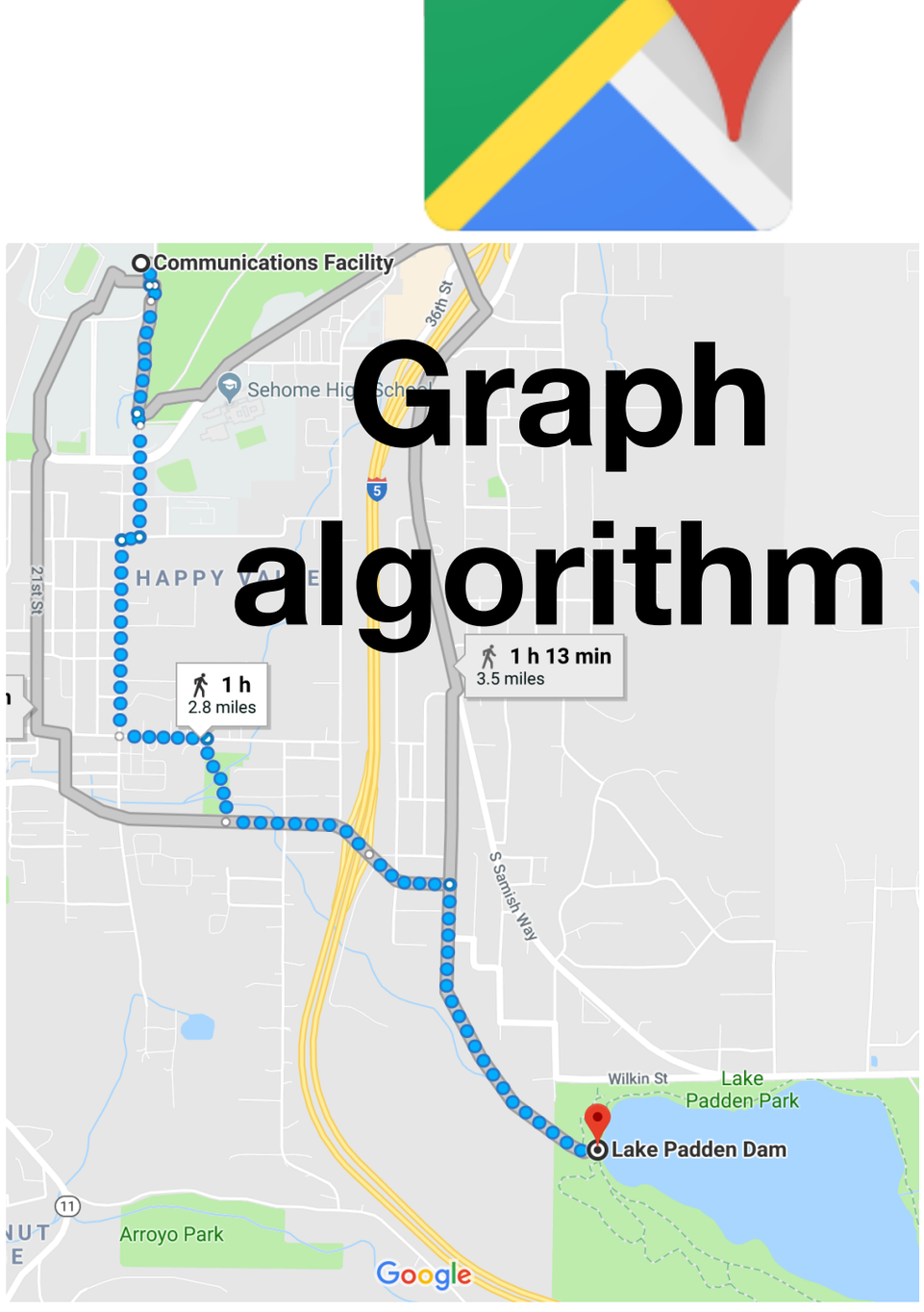
Some current work...

Some current work...

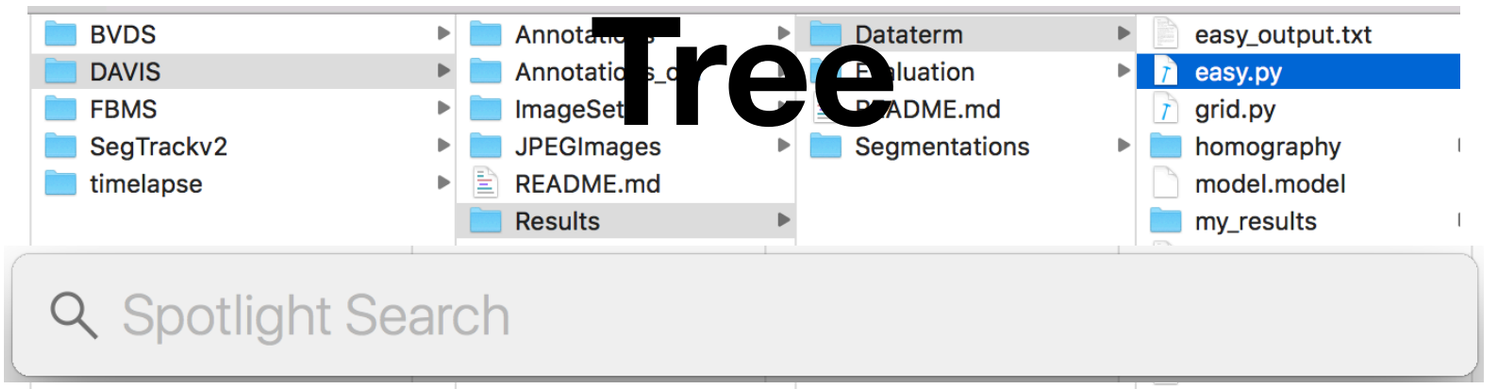


Data Structures: Why?

Graph



Graph algorithm



Tree

Hash table

Classroom Environment

- I expect everyone to take part in maintaining an inclusive and welcoming classroom environment.

- It's surprisingly easy to be exclusionary without meaning to.

- Think carefully about how you conduct yourself and how your behavior may be perceived by others.

In Teams: Norms

- 2 minutes: introduce yourselves to your team members
- 3 minutes: what guidelines do you want to establish for members of your team?
- You may want to consider things like:
    - Should team members have their cameras on?
      (I recommend this if possible)
    - Standards for tone, professionalism, side-conversations, etc.

How this class will run

- Before class: watch videos, complete **Exercises**
- In class:
  - In teams: go over Exercise solutions and write a solution set in your Google Doc
  - As a class: address any questions that came up
  - In teams: work through as many **Problems** as you have time for, writing solutions in your Google Doc.

Syllabus: Questions?

Course website:

https://facultyweb.cs.wwu.edu/~wehrwes/courses/csci241_20f

Also pinned in #general on Discord
and linked from the Syllabus page on Canvas.

In Teams: Syllabus Questions

- On the course webpage, find the "Problems" linked from todays' row of the Schedule table.

- Open the Google Doc pinned in our team's text channel.

- In teams, collaboratively write up answers to Problems 1 - 4.

- When done, feel free to chat; after about 4 minutes I'll summon everyone back with a mention in #general.

Drawing Diagrams

- Some problems will require drawing diagrams in your Google Doc.
- A few possible approaches:
    - Google docs drawing editor
    - Powerpoint, Keynote, Google Slides, etc.
    - Online whiteboard apps such as AWW (awwapp.com)
- Reconvene in teams and try out one or more of the above (or your own creative solution) to solve the Diagram Drawing Practice problems (5, 6, 7).

See you on Friday for L01!