CSET-105
Intro to Web Applications

## Welcome to CSET!

Find a seat, meet your fellow students, and fill out the **first page** in front of you.

## Agenda

[ ] Complete Info Sheets
 [ ] Daily Journal
 [ ] Review Schedule
 [ ] Review Syllabi
 [ ] Programming Basics
 [ ] Hand Out Laptops

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Quickest way to contact me is on Slack.

### Find Someone Who...

Flip your info sheet over and see how many boxes you can fill out by meeting your classmates.

## Daily Journal

- Short writing prompt every day to start class
- Write down the date
- Write down the prompt word for word
- Then write a few lines about it

Sometimes they're questions to make you think about life. Sometimes they'll be puzzles to get you warmed up for class.

2019-08-19

What do I want to build with the knowledge I'll have when I graduate?

#### Class Schedule

The easy stuff:

- Seventeen weeks until Winter Break
- Monday through Friday from 12:00 to 4:30 pm
- Wednesdays start at 12:30 pm
- Greenfield campus

#### Class Schedule

Slightly harder stuff:

- Monday & Tuesday:
  - CSET-105 first half of semester
  - CSET-115 second half of semester
- Wednesday & Thursday:
  - CSET-110
- Friday:
  - CSET-120

#### Course Websites

- CSET-105 Intro to Web Applications
- CSET-110 Web Development I
- CSET-115 Technical Requirements & Data Structures
- CSET-120 Software Project I

## Programming Basics

Or, How To Think Like A Computer

#### Terms

- Computer Program
- Algorithm
- Binary
- Unicode
- Abstraction
- Pseudocode
- Boolean

Do you **know** any of these terms? What about **recognize**? Are any **new**?

The goal is to improve your knowledge and skills to develop programs that solve real-world problems.

# What is a computer program?

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Black Box



# How do we represent our problem?

Count the number of people in this room.

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- Tally marks on the whiteboard
- Counting on our fingers

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What if I only have one hand?

## Binary

- Computers only understand electricity or not electricity
- Yes / No, True / False, 1 / 0
- We count in Decimal, there are 10 symbols
- Binary is counting with 2 symbols

## 123

## One Hundred Twenty Three

## Decimal

Hundreds	Tens	Ones
1	2	3

# Binary

Fours	Twos	Ones
0	0	0
0	1	1

# Binary Is More Than Numbers

- ASCII, common pattern to translate
- 65 means "A", 66 means "B"...
- Computer uses context to figure out what the binary means

Bit: One binary digit Byte: Eight bits

## 72 73 33

72 73 33

H I !

SUS Keyboard Layout

# How many symbols are there?

## Abstraction

- Lower levels are hidden
- We use easier higher levels

We don't need binary, we'll use a programming language

### Pseudocode

- Not a real programming language, just an abstraction
- Looks like english

# Program me to make a PB&J

The End!