# HCI 1/14

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#### Two sides of HCI World

- Computer Side
  - Most of us are familiar with this
  - CPU
  - I/O devices that feed data into the CPU
    - \* Keyboard
    - \* Mouse
    - \* Speakers
    - \* Microphone
  - Monitor of some sort
  - GPU
  - Power Source
  - Memory
- Human Side
  - This is the part that most of us haven't had experience with
  - Human being! (Making me think of Greendale)
    - \* Brains
    - \* Eyeballs
    - \* Hands
    - \* Mouth
    - \* Ears
    - \* Nose \* Heart
- How do these two sides interact?
  - Eyes are looking at the screen
  - Hands use mouse and keyboard (and screen if device is a touch screen)
  - Ears utilize the speaker
  - Mouth utilizes the microphone
  - Heart rate is monitored by some devices like Apple watches
  - Human computer interaction loop:
    - $\ast$  Human creates input for the computer, the computer analyzes these inputs, and outputs something new that we see/hear/whatever
- What the class is about: How can we make computation work well for people?

#### **Intro Stuff**

- Dwaine Kenney is the TA (he's the best)
- His office hours are:
  - M: 11:30-1:00
  - W: 11:30 -1:00
  - F: 11:30 12:30
  - And by appointment:)
- Other TA is currently unknown
- We'll have group presentations on Tuesday and Thursday of dead week

#### **Class Structure**

- Subject
  - Intro to theory and practice of HCI with a focus on GUIs
- Topics
  - fundamental principles
  - human cognitive and perceptual capabilities
  - user interface design/analysis
  - UI development tools
  - social implications of computing
- Work
  - Teams of 5 will develop their own HCI projects
  - Individuals will design and implement a movie collection browser app using java/javafx and a simple html/css/javascript web stack
- Grades
  - 40% for the team project, graded by prof
  - 45% for individual homework, graded by TA
  - -15% for final exam, graded by prof and TA together
  - Grades are usually about 40% are A's, 50% are B's, 10% are C's and below
- Due Dates, Late Penalties
  - Slides are due before presentations
  - Presentations can go in order of team number but can be adjusted
    - \* Remote/video participation in special circumstances
  - Written assignment instructions will specify due date and time, if time is not specified it is due at the beginning of class
    - \* Written assignments can be turned in up to 72 hours late with a -10% penalty for each day its late
- How to succeed in this class
  - Do readings **before** class (definitely not gonna happen)
  - Attend class and participate (probls will happen)
  - Dive in, work creatively, assess objectively

## Introduction: HCI History

- Vannevar Bush: some people say that he is where HCI started
  - An article from the Atlantic published in July 1945 called "As We May Think"
  - Surprising how much that we consider as a good interface was described way back when