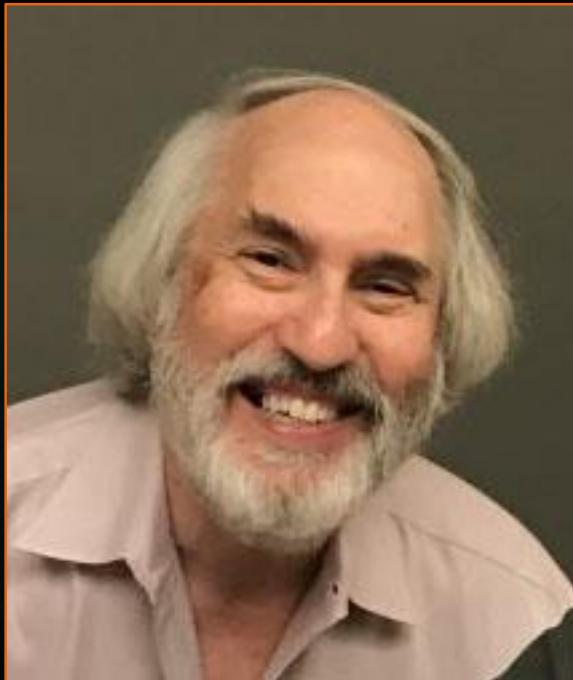


February 1, 2022
Issues of Human Interface Design



ENGR110/210

Perspectives in Assistive Technology



David L. Jaffe, MS
Instructor

16
Years

Questions?



Please notify me of your comments, suggestions, and concerns so I can explain / address / correct them.

Many thanks!



Students working on projects:

- Meeting with me
- Providing updates

Community members:

- Co-designing projects
- Attending class sessions

Guest lecturers:

- Presenting interesting topics



Upcoming Events



- ▶ RESNA Student Design Competition



Upcoming class sessions



- ▶ Accessible Making: Designing Makerspaces for Accessibility - Thu, Feb 3rd by Zoom
Katherine M. Steele, PhD, MS
- ▶ Mid-term Student Project Presentations -
Tue, Feb 8th
- ▶ Assistive Robotics - Thu, Feb 10th
Monroe Kennedy III, PhD
- ▶ VA Palo Alto Health Care System - Tue, Feb 15th
B. Jenny Kiratli, PhD & Jeffrey P. Jaramillo, DPT
- ▶



Students working on Team Projects



- ▶ Connect with project partner
- ▶ “Understand the Problem”
- ▶ Brainstorming
- ▶ Select Design Concept(s)
- ▶ Sketches, low resolution prototypes
- ▶ Prepare for Mid-Term Presentation and Report
- ▶ Contact me if you have questions about your project direction
- ▶ Weekly - Meet with me or Bennett to discuss project progress, submit reports to both Bennett and me
- ▶ **Mid-Term Reports due Mon, Feb 14th**



Students working on Team Projects

Mid-term Presentations in 7 days!



- ▶ Mid-term presentations will be 7 minutes
- ▶ Project title, background, problem, aim, design criteria, “understanding the problem” & brainstorming activities, and selected solution, with **low resolution prototype**
- ▶ Send slides to me, **to be run from my laptop**
- ▶ **Don't embed videos - supply YouTube link on slide**
- ▶ Strive to be professional
- ▶ Include feeling & emotion
- ▶ Presentation tips on course website
- ▶ **Signup Sheet for presentation order**

Students working on Team Projects

Mid-term Report



- ▶ Mid-term report - 10 to 15 pages of narrative - text and images
- ▶ Suggested format different for fabrication vs non-fabrication projects
- ▶ Include sketches and photos
- ▶ Goal: short, concise, well-written, and highly readable report with few grammatical and spelling errors.
- ▶ Report Writing Tips documents **suggested** report features

Students working on Individual Projects



- ▶ **Meet with me to approve your project, get information**
- ▶ Submit project name
- ▶ Contact me if you have questions about your project direction
- ▶ Weekly - Meet with me or Bennett to discuss project progress
- ▶ Submit progress reports to both Bennett & me

Reminder - Work with Diligence

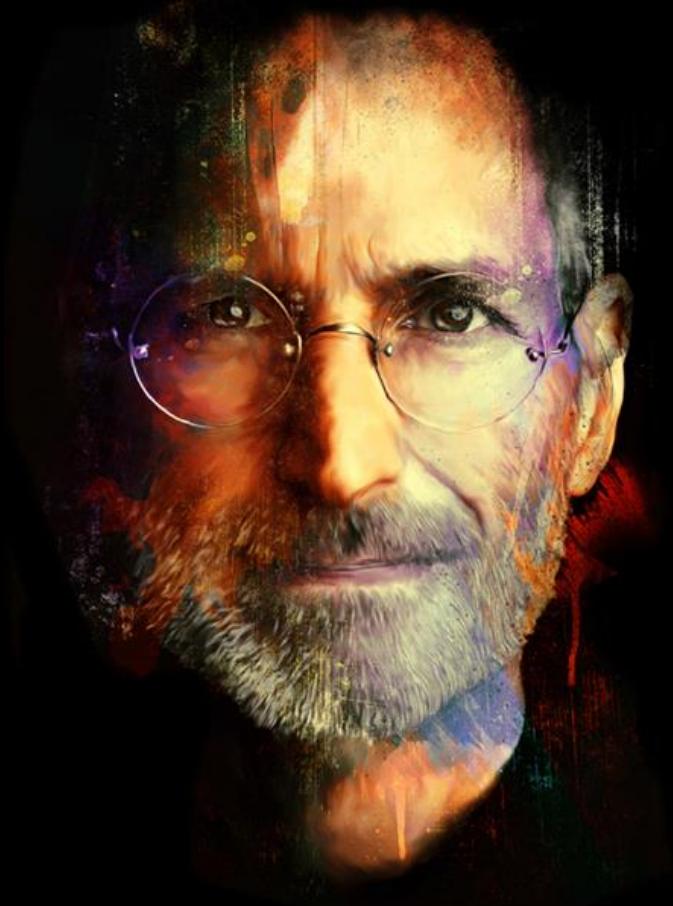


- ▶ Time is your most precious resource
- ▶ 7 days until Mid-term Presentations - Tue, Feb 8th
- ▶ Outline your presentation & report



Steve Job's Quote

- ▶ "You can't just ask customers what they want and then try to give that to them. By the time you get it built, they'll want something new."
- ▶ Most people don't even know what they want until they see it. So sometimes you must give people what they need, not what they're asking for.



Ethical / Moral Dilemmas Related to Disability



Formerly titled
“Fun with Ethics”

Making Decisions



1. Everyone evaluates situations and makes decisions everyday
2. As one gets older, these decisions more frequently involve and affect others
3. Tough decisions are often made using a complex combination of upbringing, economics, religion, law, individual notion of what is right, politics, and personal experience



Situation 1



Would it be wrong for a “normal” couple to abort a fetus diagnosed with dwarfism or Down Syndrome?



Situation 2

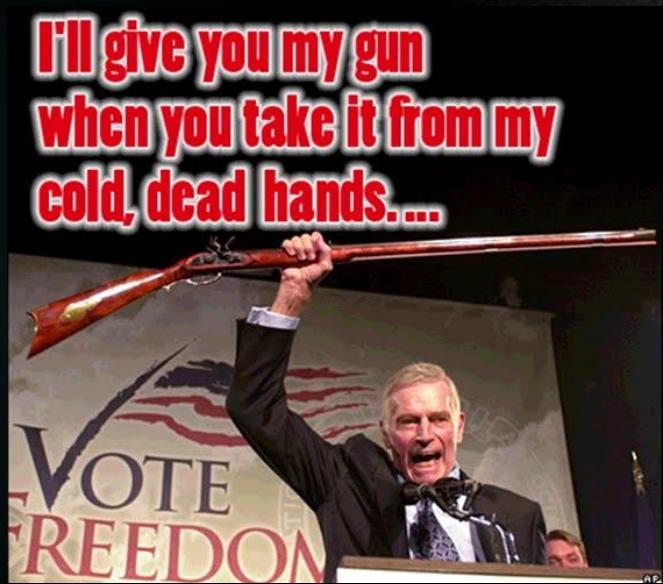
If two parents with Achondroplasia - an inherited form of dwarfism - wanted a child who looked like them, would it be wrong for them to terminate a normal-sized fetus?



Situation 3



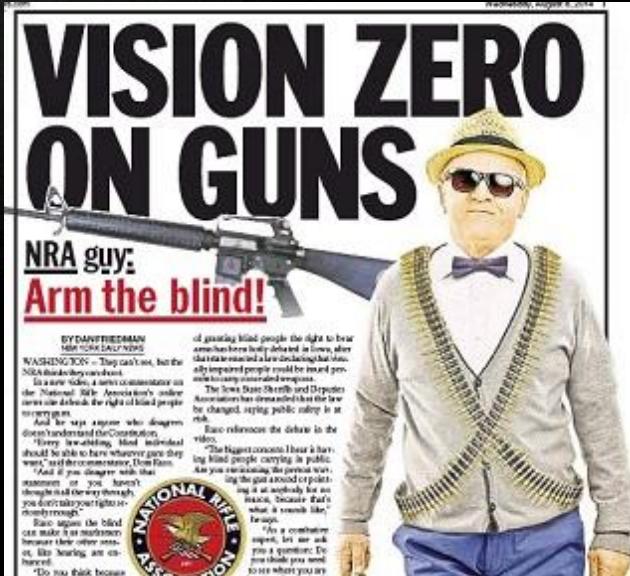
Should everyone have a right to bear arms?



Situation 3



Should someone **who is blind** have a right to bear arms?



Situation 4



You are a biomedical engineer working in a spinal cord injury ward. An occupational therapist approaches you with a patient's request. The patient, an individual with quadriplegia, wants a device that would enable him to independently smoke a cigarette.



What do you do?



Situation 5



You are a sign language interpreter for a deaf woman. Her communication includes a lot of obscenities which causes you much embarrassment and distress.

What do you do?



Situation 6



As a surgeon, would you approve a heart transplant for someone with a disability?



Situation 7



As a concerned citizen, would you condone the marriage and subsequent parenthood of a couple, one or both with developmental disabilities?



Thursday, February 3rd - by Zoom



Accessible Making: Designing Makerspaces for Accessibility

Katherine M. Steele, PhD, MS

Assistant Professor, University of Washington

Department of Mechanical Engineering

Today



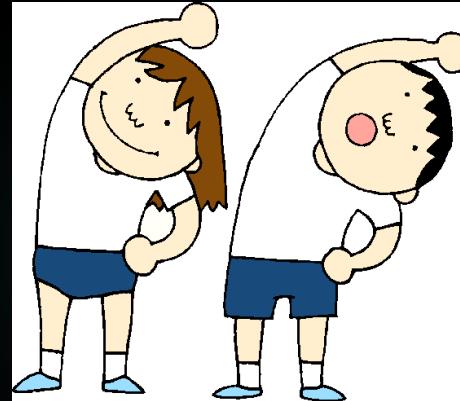
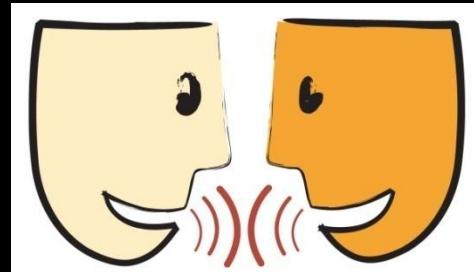
Issues of Human Interface Design

Gary M. Berke, MS, CP, FAAOP

Stanford University School of Medicine

Break Activities

- ▶ Attendance sheet
- ▶ Presentation Order
- ▶ Stand up and stretch
- ▶ Take a bio-break
- ▶ Text message
- ▶ Web-surf
- ▶ Respond to email
- ▶ Talk with classmates
- ▶ Reflect on what was presented in class



Short Break

