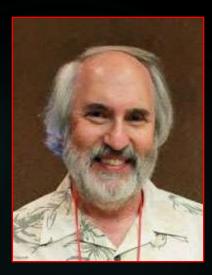
January 17, 2017

ENGR110/210 Perspectives in Assistive Technology



David L. Jaffe, MS Instructor



Questions?





Attendance Sheet, Evaluation Form, and Meet with Dave Signup

For all students:

Attendance Sheet - important to verify your attendance

Meet with Dave signup

For everyone:

Class Session Evaluation Form

Erest address -	January 10,	Perstamon II	Name of Streeted Danmer	Class Session Evaluation Form	Use a pen wi a legible for		
anotoine.	Alberta, Status & Summittee	Chini Bard anto	Walks Tot 1.1 charges	Lacture D1x Course Dvervlew & Introduction to Assistive Technology - Devid L. Jaffe, MB			
	Lance rouge in investigation		Name of Street, States,				
	Sarma Int Parenter		that diama	Are you an enrolled student?			
	Gan Jacob Issue		Speaking, State Th Long	그는 것이 이렇게 가지 않는 것이 같은 것이 같은 것이 같다. 것이 같아요. 것이 같아요. 그는 것이 같이 많이			
	Hang Delder	-	denters, hereits, horse anna	The purpose of the questionnane is to help the teaching team assess today's class assests. Please teta to	The purpose of this questionnairs is to help the teaching team assess today's class session. Please retained the following teams		
	Bax, 20142 6400		-Bull Paseri ITatar				
	depth, Majorith	-	Segn Neuer	D O D. Special's present execution specifies where universide bits one of interview.	O G: Speaker's overall presentation: speaking volume, understandability, ease of following concepts and O O arguments, clarity of explanations, quality of Preventhant alides, use of exporting media (videos) and		
	Ranging (a) (1994)		Salarata, Komo Mali	The Control of the Co			
	Revents Arguington	1	Subkasseders, Annual	un un un aus auführteren, canny un expensatione, duesty is Preventuren expension exporting medie	(woace) and		
	Ran, Smith Laboration		Bh. Nate	presentation aids (Show&Tell items), stage presence, knowledge of topic, preparedness,	presentation		
	n. Noncesser	-	Shang Inc.	shucture, organization, pace and management of altotled time, opportunity for quadratic	to and choin		
	France d Artist Car-	and has been a second and a sec		angigartiers, provided good answers, examples, and demonstrations			
	an Takti Adamide	-	and an	· · · · · · · · · · · · · · · · · · ·			
	ter series for the series of t			O Preservation content: tapic interest, relevance to the broad accept of assistive technology	to endertainer of		
	Anglish, Tarring Martinia			I I I I any internation, appropriate level of detail and technical content, overall value of preservices	in a contraint		
	en. accelere	-		and an an under state of the st	Application .		
	at, Sulline forth	1					
4	Japan Transform Galantin	1	NAMES OF TAXABLE PARTY.	Submit your convents, quasitore, and suggestions, especially if you found portions of the lecture to be p	ANTIGUIARY Q OF B.		
	Menglan, (Solid Thursday)	- makes o	a deservation and an electric	Supply your name if you want a response and use the back of this form if you need mine room.			
	Marght Server						
	Milled, Rocheyyee	-					
	Winton Roll						
	Mand, high Statistic						
	North Jart	1		Minut and their shift back that a set of a set when the set of a set of the set of the set of the set of the set	Lancas C		
	The others	-		What one Rem dkl you hear, see, or learn that was new, surprising, trianseting, or provided a new perspec	CAVE?		
	fine 20th from Hot	1					
	Astead these starting to make		1. Contraction (1. Contraction)				
	Badavan, III (at	-	in the second				
	Titeger, for Deliver			2014년 1월 2014년 1월 2014년 1월 2014년 1월 2014년 2014년 1월 2014년 1			
				How much dol yourisem from body's fecture? Di -A great deal Di -a tut. Di -a moderata amount Di- What is your stress here! body? Di -tow Di -medum Di -high Hojou a your stress whol body? Di -downword Di -statest Di -usyvani	althe G-noting		



Date & True

Bafore class - 3-diper - mitside classrican

Wednesday - January SE

anabay - Janaary 10

After these - fairs

Morning - IR Mart - 13 DEwe

to-Janvatry 20







Individual Projects - Durga & Kevin

- Consider the these options:
 - Assistive technology topic
 - Paper design of an assistive technology device
 - Work of art
 - Aftermarket aesthetic, functionality, usability design
- Interview an individual with a disability. This could include: a family member, a friend, a classmate, a community member attending class, or others that I can suggest
- Report on their lives, challenges they have faced, successes they have achieved, desires for their future, assistive technology they use, and problems they have experienced with them.
- Meet with Dave to agree on project





Team Project Selection Procedure

Project Preferences

Suggest a student-defined project



- Make sure the project your are interested in is <u>available</u>
- Contact project suggestor for more information & access to users
- Refer to <u>Student / Project Preference Matrix</u>
- Contact other students who have similar project interests
- Verify their desire and availability to work on the project
- Once a team of three is formed, email Dave with your project selection, team members, and team name due this Friday

Available Projects

- Add-a-Sock Project
- Grip Sense Project
- Hybrid Body-Powered Harness
- Project Dance Therapy Project
- Paddle Project
- Customize Abby's Scooter Project
- Hand Grasp Project
- Get a Grip Project

- Wheelchair Backup Monitor and Alert
- Enhanced bed control for veterans with SCI
- Enhanced access to touch screens
- Pickup Sticks Project
- Project employing the Leap Motion Controller
- Creative Expression
- Designing Your Afterlife
- Student-defined projects



Team Project Selection Policies

Form a team of three

- Teams of less than three are ok only if all other students who have indicated a preference for the project are members of other teams
- (# of students working on team projects) / 3
 - $\blacktriangleright \text{ Remainder of 1 = one team of 4 or two teams of 2}$
 - Remainder of 2 = one team of two
- Not all projects can support multiple teams
- Projects are reserved on a "first-to-submit" basis



Team Project Selection Policies

- Ok for more than one student team to work on some of the team project suggestions
- Ok for teams to share background tasks
 - Driving to the facility
 - Interviewing project suggestors



Each team must address a separate problem or pursue a different solution

Team Project Selection Policies

Since there is no guarantee that other students will have the same project interests or that your preferred projects will still be available, you should be prepared to:

- convince others to work with you on one of your selected projects
- consider working with another student on a project he/she has chosen
- keep an open mind



Team Member Solicitation

Teams looking for a third member
Student looking to join a team of two



Engineering Design Process



- Identify the problem
- Understand the problem (empathy & ethnography)
 - Talk to users and stakeholders
 - Research what has already been done and why it hasn't fully solved the problem
 - Consult with experts
- Determine the need (a judgment)
- Brainstorm many design concepts
- Select top concepts
- Fabricate, test, evaluate, quickly repeat until time or \$ runs out
- Report and demonstrate your results
- Reflect on your project experience

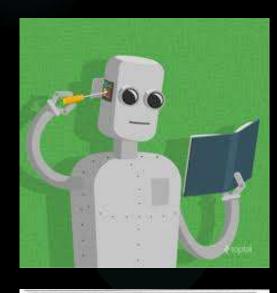
Engineering Design Process

Does not include:

- Building to another's vision
- Making incremental improvements
- Utilize project resources and team skills
 - PRL and Room 36 (equipment and TAs)
 - Person who suggested project
 - Course resource people
 - Classmates

Dave

Make and justify all your project decisions

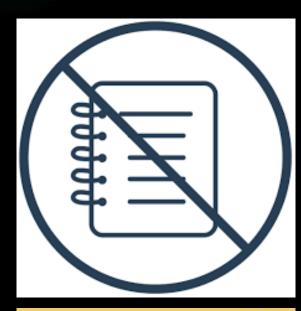




Project Documentation

- Lab notebooks are not required
- Diary for your Individual Reflection
- Photos and short videos strongly suggested
 - Working with a person with a disability
 - Illustrating your design process
 - Prototypes







Work with Diligence

Time is your team's most precious resource
7 weeks of class left to work on your projects
Mid-term team presentations in 4 weeks





Miscellany



- 1. Weblinks, videos, and photos linked from lecture webpages
- 2. <u>Anonymous Suggestion Box</u> for comments and rhetorical questions
- 3. PRL Safety Orientation & Shop passes
- 4. Last bits:
 - Remembering names
 - On your team
 - On your side
 - Good grades



Art Tools Project

Robotikids

- ▶ Deo, Darrel Rohit
- ► Lopez, Francisco Gabrielle
- ► Kolbehdari, Ehson Sedaghati

- Magical Bridge Playground Project
- ► All the Lights
 - **Ron**, Daniel
 - Sambrick, Maria Nichole
 - ▶ Shah, Naomi Chetan

Magical Bridge Playground Project

Le Joy Masters

- ► Carney, Leo Pastorfide
- ▶ Nevills, Zach
- **Reyna**, Javier Alan

- Plugs for Molly Project
- ► Team JAR
 - **Gurevich**, Anna Caitlin
 - ► O'Rourke, Ryan Daniel
 - Pedersen, Jon Lee

Orthotic Rebound Shock Project

► Legtastic

- Lai, Paul Truc Chinh
- Singh, Navjot
- ▶ **Trac**, Nick Lam

Authoring Grade School Lessons on Disability and/or Assistive Technology

Nearpod X

- ► Cabral, Felipe de Almeida Castanho
- ▶ Hu, Daniel Alexander
- ► Jackson, David Alexander

- Add-a-Sock Project
- Sock It to Me!
 - Christine Chang
 - Andrew Austin Lee
 - Kat Barbara Pfleeger

Project

► Team Name

- Student 1
- Student 2
- Student 3

Other Items

- Paddle Project Description
- Letters of Recommendation
- Self-directed
- Project budget \$200
- Class participation







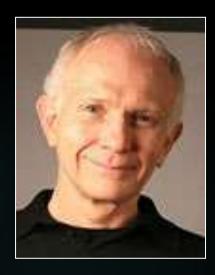
Thursday, January 19th



Bridging the Gap between Consumers and Products in Rehabilitation Medicine

Deborah E. Kenney, MS, OTR/L Stanford University VA Palo Alto Health Care System Foothill College

Today



Needfinding and Assistive Technologies

Gayle Curtis - UX Design Consultant

Short Break

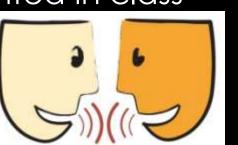




Break Activities



- Sign attendance sheet
- Grab a cookie
- Stand up and stretch
- Take a bio-break
- Text message, web-surf, email
- Talk with classmates
- Reflect on what was presented in class











Laptops Galore





