

January 16, 2018

Needfinding and Assistive Technologies - Gayle Curtis



ENGR110/210

Perspectives in Assistive Technology



David L. Jaffe, MS
Instructor



For Students working on Individual Projects



- ▶ 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



Student / Project	Aerospace	Automotive	Biomedical	Chemical	Civil	Electrical	Environmental	Industrial	Mechanical	Software	Other
Drew, David											
Drew, Kyle											
Drew, Tyler											
Drew, Zach											
Drew, Adam											
Drew, Alex											
Drew, Brian											
Drew, Cameron											
Drew, Connor											
Drew, Daniel											
Drew, David											
Drew, Dylan											
Drew, Eason											
Drew, Eric											
Drew, Evan											
Drew, Gabriel											
Drew, Ian											
Drew, Jacob											
Drew, James											
Drew, John											
Drew, Joseph											
Drew, Justin											
Drew, Keith											
Drew, Kevin											
Drew, Kyle											
Drew, Liam											
Drew, Logan											
Drew, Luke											
Drew, Mark											
Drew, Matthew											
Drew, Michael											
Drew, Nicholas											
Drew, Noah											
Drew, Owen											
Drew, Patrick											
Drew, Paul											
Drew, Peter											
Drew, Quinn											
Drew, Ryan											
Drew, Samuel											
Drew, Sean											
Drew, Stephen											
Drew, Thomas											
Drew, Timothy											
Drew, Trent											
Drew, Tyler											
Drew, Vance											
Drew, Victor											
Drew, Wade											
Drew, Walker											
Drew, Xavier											
Drew, Yusef											
Drew, Zachary											

- ▶ Browse to Project Preferences
- ▶ Or suggest a student-defined project
- ▶ Make sure the project your are interested in is available
- ▶ Contact project suggestor for more information & access to users
- ▶ Refer to Student / Project Preference Matrix
- ▶ 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 me with your project selection, team members, and team name - **due this Friday**

Available Projects



- ▶ ~~Lighter Leg Braces~~
- ▶ Hybrid Body-Powered Harness
- ▶ Grip Sense
- ▶ Abby's Wheelchair
- ▶ Abby's Service Dog
- ▶ Clean House
- ▶ Within Reach
- ▶ Pack Rat
- ▶ Wheelchair Camber
- ▶ Wheelchair Work Tray
- ▶ Magical Bridge Playground
- ▶ At Home Monitor
- ▶ Creative Expression for Danny
- ▶ Get a Grip
- ▶ Authoring Grade School Lessons
- ▶ Creative Expression
- ▶ Designing Your Afterlife
- ▶ Student-defined projects

Team Project Selection Policies



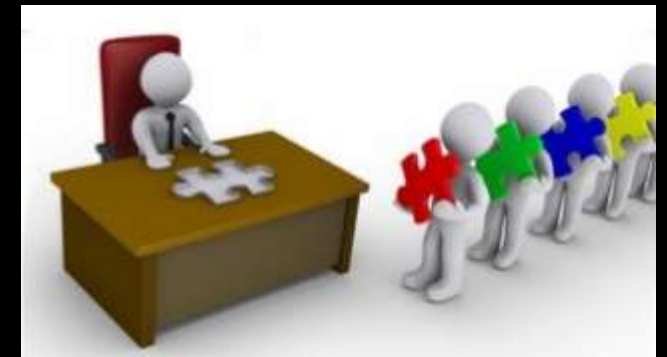
- ▶ Form a team of three
- ▶ There are 27 students enrolled in Team Projects, so there will be exactly 9 teams
- ▶ The Magical Bridge Playground supports two teams
- ▶ Projects are reserved on a “first-to-submit” basis



Team Project Selection Policies



- ▶ Ok for the two *Magical Bridge Playground* 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



Project Documentation

- ▶ Lab notebooks are not required
- ▶ Optional diary for your Individual Reflection
- ▶ Take photos and short videos:
 - ▶ Your team 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. [Anonymous Suggestion Box](#) for comments and rhetorical questions
3. Sign up for PRL Safety Orientation & Shop passes
4. Last bits:
 - ▶ I have difficulty remembering names
 - ▶ I am on your team
 - ▶ I am on your side
 - ▶ I want to award good grades



Formed Project Team

- ▶ **Lighter Leg Braces Project**
- ▶ **Favorite Fighting Frenchmen**
 - ▶ Evan Long
 - ▶ Oscar Molina
 - ▶ Ben Taylor



Form your Project Teams this week



- ▶ Project
- ▶ **Team Name**
 - ▶ Student 1
 - ▶ Student 2
 - ▶ Student 3



Other Items

- ▶ Your team project effort is self-directed
- ▶ Your project budget is \$200
- ▶ Your class participation is appreciated

