

Here is a document to get some collaboration on the ideas we came up with today (May 9th). Everyone can add their thoughts and ideas to each item on this list, then from here we will add each idea to Gitlab. From there we can have a structured way of finalizing a project.

#1: Building Energy Optimization system

- Black box that monitors input from electrical, gas, and water hookups
- Connects to cloud so that building manager/homeowner can set up specific energy "plan" to control inputs of resources- KEEP

#2: Furniture Viewing AR

- See how a piece of furniture would fit in a room without having to physically have it in the room - GONE

#3: Tennis Elbow

- Many people are affected by tennis elbow, is there something that we could develop to help?

#4: Braille Training

- Some sort of tactile feedback sensor on finger tip that will interpret braille and read it to blind person just learning it
- Could also be an electronic children book that reacts to touch on the braille letters, announcing the sound of the letter.

#5: Search and rescue beacon

- Many people go into the wilderness without knowing what they're getting into, and without proper safety equipment.
- Some sort of "set and forget" device that would allow the user to be found if something goes wrong
- Integrated in apparel of some sort (using programmable NFC tags?)
- Modify for buildings?

#6: Disaster victim locating

- When people are trapped in debris from a disaster, time is crucial when finding/rescuing people. Minimizing that time would be a huge innovation
- Some sort of probe that could find people in the rubble, and relay the information to a base station where rescuers can analyze it and deploy resources accordingly

#7: Blind person guiding

- Canes are large and there is a small area for immediate feedback
- If we could use sensors or something to give the user feedback about their surroundings to help guide them around, to avoid danger

#8: Wheelchair bound people accessibility

- To live independently in a wheelchair is hard, making that easier would be a solid product
- Storage above the height they can reach would be a huge advantage to utilize space that would otherwise be unusable because they wouldn't be able to reach it.
- This could all be controlled by some sort of app that could be controlled by eye movements if totally paralyzed or with cerebral palsy
- App could also be used to control everyday apps like texting or email or whatever

#9: Underwater Sonic Modem

- Receive RF or satellite signal above water, have an antenna underwater that emits Sonar signal
- Could be used in a shipwreck to send signal to inflate life vests, or to locate victims or debris in water.
- Must work in conjunction with a Sonar signal receiver gadget (to trigger life vest inflation)
- Communicate with other units to map out areas of the water?

#10: Motion Sensor Alarm

- Alarm that is motion sensed, can tell when you are at desk, in bed, or whatever, so that the alarm only goes off when you're in that area.
- For going to bed on time, taking a break, or whatever use you want.

#11: Small custom game system

- A small compact gaming system that could be developed with a microcontroller, small display, simple custom OS