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Next Projects:

- Warehouse
- Quadcopter
- Arm
- Segway

Come up with final project for Tuesday

Arm & Hand

- EEG
- EMG

Materials:

- Electrodes
- Majo? → rather use Pi with servo shield
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Equipment:

PowerLab 8/35

3 Dual Bio Amps

EOG Pads

SW - LabChart 8

10/20

Overall project:

- 1) Why?
- 2) What exists; how done
- 3) What your project brings

Processor

- 1) Why?
- 2) External components vs. internal capabilities
- 3) Speed cushion/improvement possibilities - project life cycle
- 4) Cost considerations

Hardware Choices

- 1) Availability
- 2) Reliability
- 3) Same as 3 above

Answer for website

Overall Project:

1) Why?

- Help those who lost (n) arm/hand to complete simple tasks by using a robotic arm/hand using EMG/EEG signals

2) What exists; how done?

- this project is a very popular topic since the advancement of technology in biomedical field
- Many DIY projects are constructed of a 3D printed hand/arm which are controlled through servos
 - These servos are powered through a microcontroller
 - very often Pi
 - The microcontroller receives input from electrodes attached to skin → program is written to interpret movement
 - then microcontroller tells servos how to act

3) What your project brings:

- Advancements in biomedical engineering
- help those who lost (n) arm/hand

Processor: (Raspberry Pi)