### Human Exoskeleton II

#### Team J

Ahmad Alharbi ( Project Manager )
Alroumi Alenezi ( Client Contact )

Fahad Alhajri (Website Developer)

Khaled Alzafairi (Budget Liaison)

Sayaf Almari (Secretary/Document Manager)

Mohammad Alrashidi (Editor)

Khaled Alzafairi – 07.11.2017 - Lerner-Exoskeleton-Mount

### 1- Project Description

The project is about designing an Adjustable Human-Exoskeleton Mounting Interface.



### **Project Description**

- The team seeks to look into and improve on the following factors:
  - Use strong materials
  - Make the design adjustable
  - Use soft fabric to minimize irritation
  - Ensure that the design is of limited weight
  - Make the system's size reasonable for effectiveness in use and portability

### 2- Updates

- Finished needed CAD Package.
- Finished 50% of project.
- Building the final details.

## Changes

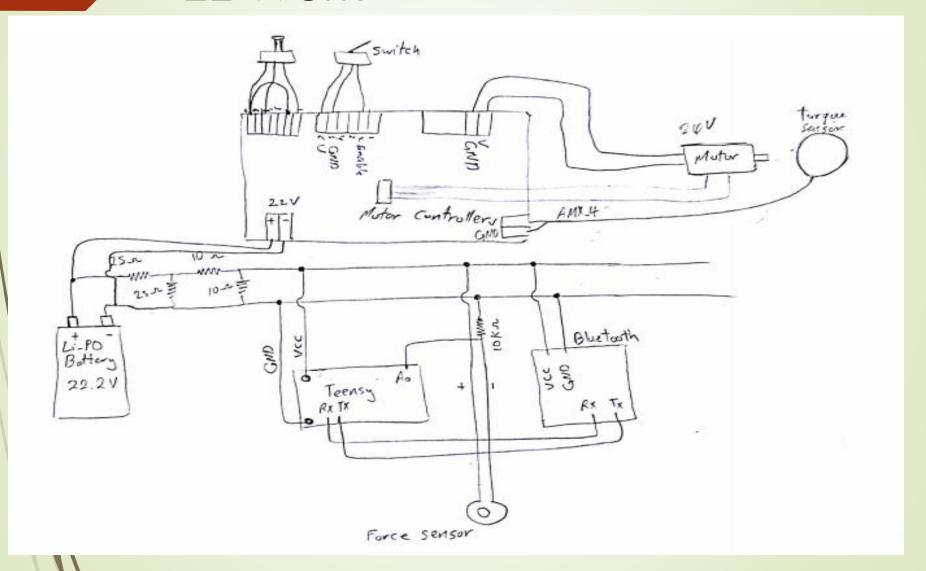
- ◆ Material used.
- ♦ Lengths, width.
- ◆ Lower steel to foot portion attachment.

Fahad Alhajri-07.11.2017 - Lerner-Exoskeleton-Mount

### NEED-TO-DO manufacturing

- Buying right size of screws.
- Molding Thermoplastic bands.
- Making holes in the thermoplastic bands.
- Finish Electrical work.

### **EE Work**



### Analytic Analysis

- Property of Material.
- Weight.
- Foot Ankle bending.

## 3- Moving Forward

- Thermoplastic size and shape.
- Attaching the project to the motor.

## Testing the Design

- Use kid's shoes for foot portion.
- Make sure the length of steel is fit.
- Make sure the width of steel is fit.

Alroumi Alenezi – 07.11.2017 - Lerner-Exoskeleton-Mount

## Contingencies

#### Budget:

We saved 500\$ for redesigns if occurs.

#### ♦ Schedule:

Week 7: For any additional editing from Hardware Review 2.

Week 9: For any additional editing from Testing the product.

Ahmad Alharbi- 07.11.2017 - Lerner-Exoskeleton-Mount

### Our Main Roles:

- Ahmad : Machine Shop
- Alroumi : Solid Work
- Khaled : Solid Work
- Fahad : Machine Shop and Website
- Sayaf : EE System
- Mohammad : EE System

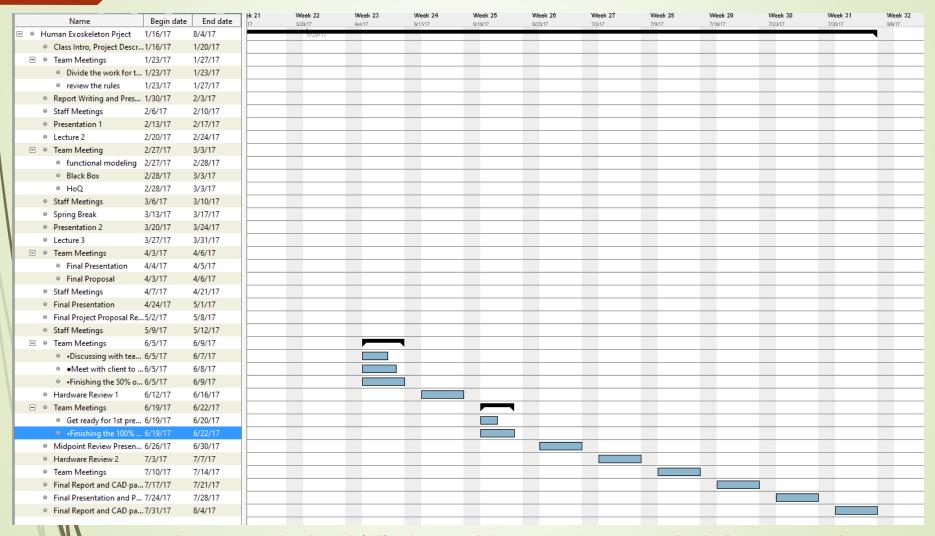
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### Schedule:

	Week #	Key Tasks	TO-DO
	6	Midpoint presentation, Hardware Review 2.	Finish building Thermoplastic bands.
	7	Comments from Hardware Review 2.	Edit the project. Finish EE Work.
/.	8	Testing Proof	Make sure everything is working as planned.
	9	Final Presentation and Poster	Presenting the Presentation and Poster.  Finish Final Report and get comments.
	10	Final Report and CAD	Edit final report.

Sayaf Almari- 07.11.2017 - Lerner-Exoskeleton-Mount

### Gantt Chart:



Mohammad Alrashidi- 07.11.2017 - Lerner-Exoskeleton-Mount

### Budget:

Our Project Budget is 500\$

#### Total Dollar Available:

**♦** 500\$

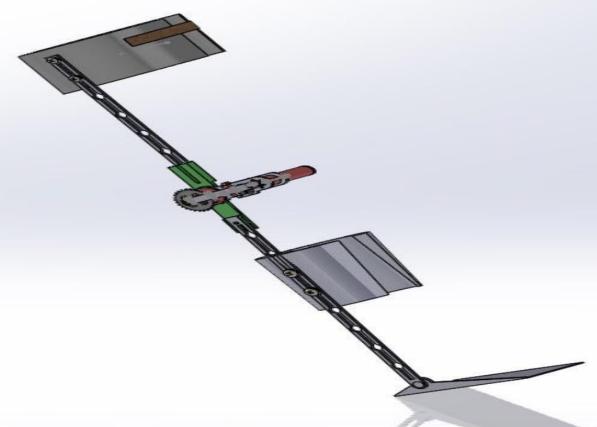
### Actual Expenses to date:

**♦** 1300\$

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## Hardware Review 2:

### Solid Work \*



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## Pictures of our design







# Questions?