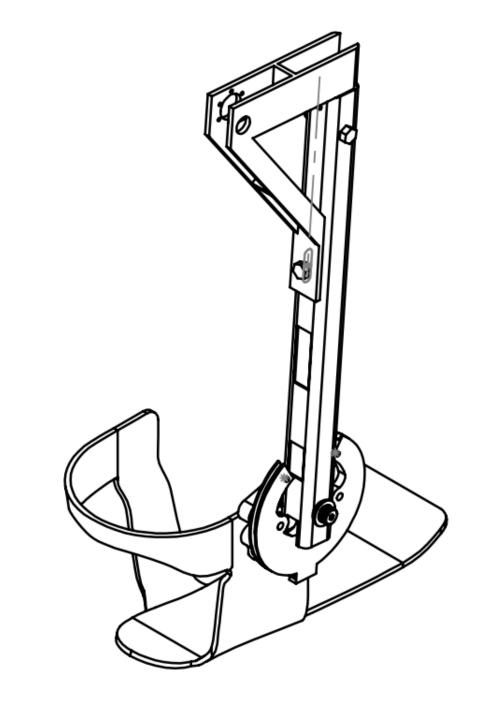
33% Build Presentation

By: Diego Avila, Emma De Korte, Joscelyn Green

Design Efforts

- Implemented New motor Mount and Pulley to our Design
- Redesigned Rod for New Motor Mount and Pulley
- Design a Cover of Chain to Pulley system as Requested by Lerner



Design Efforts New Designs



Purchasing Plan

Current Bill of Materials									Lead Times			
Part	Number in Category	Manufactor/Source	Quantity Per Unit	Cost Per Unit	Quantity Needed	Item Number	Link	How it will be aquired	Part Status	Who will Manufacture	Start Date	Estimated End Date
Footplate		1 Provided by Lerner	-		. 2	2		Provided				
Torque Sensors	:	2 Provided by Lerner	2	-	. 2	2		Provided				
Computer Chip and Electronic Components		3 Provided by Lerner	-	L -				Provided				
M58 X 35 mm Phillip Screws	4	4Home Depot	3	\$1.25	1	L	<u>Link</u>	Puchased	Aquired			
Chain (1ft, 05B, 8mm Pitch)	!	5 McMaster-Carr	2	\$9.00	2.00	6027k91	<u>Link</u>	Purchased	Aquired			
M47 30mm Bolt	(6 Home Depot	<u>:</u>	\$1.25	1.00)	<u>Link</u>	Purchased	Aquired			
M47 Hex Nut	:	7 Home Depot	4	\$1.25	1	L	<u>Link</u>	Purchased	Aquired			
M4.7 Washer	8	8 Home Depot	4	\$1.25	1	L	Link	Purchased	Aquired			
Stainless Steel Ball bearing	9	9 Mcmaster-Carr	-	\$13.17	2.00	57155k585	Link	Purchased	Aquired			
Stainless Steel Ball bearing 5mm	10	0 Mcmaster-Carr	:	\$9.20	2	7804k138	Link	Purchased	Aquired			
Stainless Steel Shoulder Screw	1:	1 Mcmaster-Carr	:	\$6.31	2	91273A392	<u>Link</u>	Purchased	Aquired			
Steel Hex Nuts	12	2 Mcmaster-Carr	100	\$0.05	1	90592A095	<u>Link</u>	Purchased	Aquired			

Purchasing Plan

M2 x .04mm Phillip Screws	13	Mcmaster-Carr	100	\$0.08	1	92000A015	<u>Link</u>	Purchased	Aquired		
Steel Cable 2mm diameter + Clamps	14	Amazon	1	\$12	1		<u>Link</u>	Purchased	Aquired		
PLA Material		Amazon	1	\$18	1		Link	Purchased	Aquired		
M5 x 0.80 mm Thread, 35mm Long	16	McMaster-Carr	10	\$10.36	1	90116A267	<u>Link</u>	Purchased	Aquired		
M4 x 0.70 mm Thread, 30mm Long	17	McMaster-Carr	50	\$16.24	1	90116A225	<u>Link</u>	Purchased	Aquired		
800cc Onyx Filament Spool	18	MarkForged	1	\$190	1	F-MF-0001	<u>Link</u>	Purchased	Purchased		
50cc Carbon Fiber CFF Spool	19	MarkForged	1	\$150	1	CF-BA-50	<u>Link</u>	Purchased	Purchased		
Sprocket (05B, 8 Teeth)	20	McMaster-Carr	1	\$13.05	2	2302K79	<u>Link</u>	Will Purcahase		23- Jan	28-Jan
Motor	21	Maxon	1	\$715.13	2	323218	<u>Link</u>	Will Purchase			
Gearbox	22	Maxon	1	\$294.65	2.00	370782	<u>Link</u>	Will Purchase			

Percent Purchased

- Total Parts counting parts provided by Lerner-32
- Parts Purchased-22-68.7%
- Parts on Hand-20-62%



Manufacturing Plan









	Current Bill of Materials Lead Times									Times		
Part	Number in Category	Manufactor/ Source	Quantity Per Unit	Cost Per Unit		Item Number	Link	How it will be aquired	Part Status	Who will Manufacture	Start Date	Estimated End Date
LL-Spark Plug Motor Mount Mod1	1	.ProtoLabs	1	\$500.14		1471- 8919-003	<u>Link</u>	Manufactu red			5-Feb	9-Feb
Spark Plug Motor Mount Mod1		ProtoLabs	2	\$422.72		1125- 8486-002	<u>Link</u>	Manufactu red			5-Feb	9-Feb
3" Pulley (Most likely 3D printed)	3	ldea Lab	2					Manufactu red			Unknown	Unknown
Carbon Fiber Tubing	4	Rockwests composite	2	\$55.30	2	25483-L12	<u>Link</u>	Manufactu			Unknown	Unknown

Percent Manufactured

- 7 Total Manufactured Parts Needed
- 3 parts currently being manufactured and will be completed and delivered on the 2/9/24









Demonstration of Purchased Parts



Gnatt Chart

Project Management				
Go through and update Gantt Chart	E. De Korte	100%	1/16/24 1/19/24	4
Update BOM	T. Green	100%	1/16/24 1/19/24	4
Revise and Update all sections	D. Avila, E. De Korte, T. Green	100%	1/16/24 1/19/24	4
Engineering Calculations Summary				
Purchase Rod and Get machined	T. Green	100%	1/18/24 1/26/24	9
Task 1: Top Level Design Summary	D. Avila	100%	1/20/24 1/26/24	7
Task 2: Summary of Standards, Codes, and Regulations	D. Avila, E. De Korte, T. Green	100%	1/16/24 1/26/24	11
Task 3: Summarize the Conditions	D. Avila, E. De Korte, T. Green	100%	1/24/24 1/26/24	3
Task 3: State all Equations	D. Avila, E. De Korte, T. Green	100%	1/16/24 1/26/24	11
Task 3: Summarize the Minimum FoS	D. Avila, E. De Korte, T. Green	100%	1/20/24 1/23/24	4
Task 3: State What Changed	D. Avila, E. De Korte, T. Green	100%	1/23/24 1/26/24	4
Task 4: Flow Charts and Other Diagrams	E. De Korte	100%	1/20/24 1/23/24	4
Task 5: Moving Forward	T. Green	100%	1/24/24 1/26/24	3
Hardware Status 33+% Build				
Task 1: Purchase Rod and Get machined	T. Green	50%	1/18/24 1/26/24	9
Task 2: Just Bottom Pieces (foot plate, pulley, rod, toruqe sensors)	D. Avila, E. De Korte, T. Green	25%	1/29/24 2/6/24	9
Task 3: Design Efforts: 100%	D. Avila, E. De Korte, T. Green	100%	1/16/24 1/26/24	11
Task 4: Purchasing Plan: 67%	T. Green	100%	1/16/24 1/26/24	11
Task 5: Demonstration: 33%	D. Avila, E. De Korte, T. Green	50%	2/5/24 2/6/24	2
Task 6: Update Gantt Chart	E. De Korte	100%	2/5/24 2/6/24	2
Task 7: Task Purchase Metal sheet and send to machine shop	T. Green	25%	2/5/24 2/27/24	23
Website Check #1				
Add in LinkedIn accounts, updated Resume's, and individual portfolio's	E. De Korte	33%	2/6/24 2/23/24	18
Hardware Status 67+% Build				
Task 1: Bracket and Motor Assembly		0%	2/27/24	
Task 2: Design Efforts: 100%		0%	2/27/24	
Task 3: Purcahsing Plan: 100%	T. Green	0%	2/27/24	
Task 4: Demonstration: 67%		0%	2/27/24	
Task 5: Update Gantt Chart	E. De Korte	0%	2/27/24	

