

GAIT TRAINER WITH TREADMILL

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Date: October 24, 2024 to October 31, 2024

Problem Statement

Gait trainers are used to assist and support those who have issues with significant mobility impairments. In the winter, it is difficult to utilize the gait trainer outside. Due to the lack of access, users may suffer significant damage to physical and mental health. Utilizing a treadmill during the imperfect weather conditions would allow for increased mobility and less drastic damages to the overall health of the client. Creating a system to allow this will provide the fix needed for the client to use her gait trainer while on the treadmill.

Brief Status Update

The team has bought most materials to begin fabrication. The fabrication process started at the Makerspace on campus. The team is currently working on the base of the project and will add the complex component in the future. We are preparing for show and tell coming on Friday.

Summary of Weekly Team Member Design Accomplishments

- Team -
 - Ordered materials
 - Research
 - Fabrication
- Meghan Kaminski -
 - Fabrication at the Makerspace
 - Research
 - Initiate meeting times
 - Provide guidance for show and tell
- Belle Counts -
 - Worked on SOLIDWORKS testing
 - Scaled and prepared SOLIDWORKS file for 3D printing
 - Created full document of dimensions needed for the device
 - Fabrication in Makerspace

- Jacki Szlagowski -
 - Research
 - 3-D Print
 - Team meetings
- Kalob Kimmel -
 - Planed for Show and Tell
 - Research
 - 3-D Printed
 - Team meetings
- Navya Jain -
 - Worked on expense sheet for reimbursement purposes
 - Helped plan show-and-tell design
 - Research

Team Member	Tasks (brief)	Weekly Time	Total time to date
TEAM	Fabrication, research, and meetings	4 hrs	17.5 hrs
Meghan Kaminski	Fabrication, research, and meetings	3 hrs	31 hrs
Belle Counts	Fabrication, Determining Dimensions, SOLIDWORKS	5 hrs	36 hrs
Jacki Szlagowski		3hrs	30.5 hours
Kalob Kimmel		3hrs	28.5hrs
Navya Jain	Team Meetings, Expense Sheet, Research	3 hrs	27 hrs
		Total	hrs

Weekly/Ongoing Difficulties

- The team is having difficulties assessing the best possible course of fabrication. We have compiled materials and plans, but are unsure where to begin.
- The team is having trouble finding time to meet outside of the two hour block period. If there continues to be an issue of time, the team will utilize the extra thirty minutes left after the advising meeting to collaborate.

Upcoming Team and Individual Goals

- Team -

- Continue fabrication
- Continue research
- Show and tell
- Meghan Kaminski -
 - Attend show and tell
 - Bring necessary materials for show and tell
 - Start experimenting with testing
 - Continue fabrication
- Belle Counts -
 - Send in video for show and tell
 - Continue SOLIDWORKS testing
 - Continue fabrication
 - Start strength testing of materials
- Jacki Szelagowski -
 - Continue SOLIDWORKS testing
 - Continue fabrication
 - Attend show and tell
- Kalob Kimmel -
 - Continue fabrication
 - Strength test materials
 - Individual research
- Navya Jain -
 - Continue ordering materials
 - Continue fabrication
 - Design strength and failure test
 - Continue working on expense sheet

Project Timeline

Project Goal	Deadline	Team Assigned	Progress	Date Completed
Contact Client and Meet	9/12/24	All	100%	9/12/24
Research	9/20/24	All	N/A	N/A
Create PDS	9/20/24	All	100%	9/20/24
3 Preliminary Designs	9/27/24	All	100%	N/A
Preliminary Presentations	10/4/24	All	100%	N/A
Preliminary Deliverables	10/9/24	All	100%	N/A
Order Materials		All	N/A	N/A
Fabricate		All	N/A	N/A

Show & Tell	11/1/24	All	N/A	N/A
Final Poster Presentations	12/6/24	All	N/A	N/A
Final Deliverables	12/11/24	All	N/A	N/A

Expenses

Item	Description	Manufacturer	Mft Pt#	Vendor	Vendor Cat#	Date	QTY	Cost Each	Total	Link
Category 1: Tracks										
	Neoprene Rubber Sheet roll	Pamazzy		Amazon		10/24/2024	1	\$20.03	\$20.00	Amazon.com
	Stainless Steel C-Clamp	WOPPLXY		Amazon		10/24/2024	1	\$17.92	\$17.92	https://www
	Non Slip Silicone Pads	3M		Amazon		10/24/2024	2	\$8.43	\$16.86	https://www
Category 2: Ramp										
									\$0.00	
									\$0.00	
								TOTAL:	\$54.78	