

## ***GAIT TRAINER WITH TREADMILL***

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Date: November 7, 2024 to November 14, 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 are adding the complex component in the future. We are continuing to fabricate twice a week as a group.

### **Summary of Weekly Team Member Design Accomplishments**

- Team -
  - Gathered most of the materials needed for fabrication
  - Began fabrication
  - Continue research
- Meghan Kaminski -
  - Assisted in fabrication
  - Assisted in buying materials
  - Continue research
- Belle Counts -
  - Team Meeting
  - Continued research
  - Assisted in fabrication
- Jacki Szelagowski -

- Met with team
- Ordered and picked up materials from The Home Depot
- Measured out cut lines on wood pieces
- Kalob Kimmel-
  - Met with team
  - Continue Research
  - Begin Fabrication
- Navya Jain -
  - Continued research
  - Continued fabrication research
  - Created invoice

Team Member	Tasks (brief)	Weekly Time	Total time to date
TEAM	Fabrication and research	5 hrs	25.5 hrs
Meghan Kaminski	Fabrication, research, and meetings	2 hrs	36 hrs
Belle Counts		2 hrs	41 hrs
Jacki Szelagowski	Material Pickup, Fabrication, Meetings	5 hrs	36 hours
Kalob Kimmel	Fabrication, Meetings, Research	2.5 hrs	30hrs
Navya Jain	Research, Fabrication Planning	4 hrs	31 hrs
		<b>Total</b>	<b>hrs</b>

**Weekly/Ongoing Difficulties**

- The team is having difficulty finding resources to use on campus for fabrication. Because of our busy schedules, we are only able to meet at 2 hour increments. The fabrication would be ideal to complete in a longer period of time.
- 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
  - Final touches of the project
  - Testing with the client

- Begin final poster
- Meghan Kaminski -
  - Create testing plans
  - Meet with the client for testing
  - Create poster document
  - Continue work over break
- Belle Counts -
  -
- Jacki Szlagowski -
  - Finish ramp fabrication
  - Make sure payment is finalized and received
  - Meet with client
- Kalob Kimmel -
  - Testing with client
  - Begin Final poster
  - Continue Fabrication
- Navya Jain -
  - Continue fabrication
  - Design testing plans
  - Order any remaining materials

### 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	75%	N/A
Fabricate		All	N/A	N/A
Show & Tell	11/1/24	All	100%	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
<b>Category 1: Tracks</b>										
	Neoprene Rubber Sheet roll	Pamaz		Amazon		10/24/2024	1	\$20.03	\$20.00	<a href="https://www.amazon.com">Amazon.com</a>
	Stainless Steel C-Clamp	WOPPLY		Amazon		10/24/2024	1	\$17.92	\$17.92	<a href="https://www.amazon.com">https://www</a>
	Non Slip Silicone Pads	3M		Amazon		10/24/2024	2	\$8.43	\$16.86	<a href="https://www.amazon.com">https://www</a>
<b>Category 2: Ramp</b>										
	4x8 ft Pressure Treated Plywood	The Home Depot				11/9/2024	1	\$50.08	\$50.08	<a href="https://www.homedepot.com">https://www</a>
	2inx8inx10ft Lumber	The Home Depot				11/9/2024	2	\$8.82	\$17.64	<a href="https://www.homedepot.com">https://www</a>
								<b>TOTAL:</b>	<b>\$122.50</b>	