#### GAIT TRAINER WITH TREADMILL

Clients: Amanda Pajerski - amanda@continuumtherapy.org

Nicole LaBante - nadineguardians@gmail.com

Advisor: Dr. Megan Settell - settell@wisc.edu

Meghan Kaminski - mfkaminski@wisc.edu - Leader

Jacki Szelagowski szelagowski@wisc.edu - Communicator

Isabelle Counts - <u>icounts@wisc.edu</u> - BSAC Kalob Kimmel <u>kokimmel@wisc.edu</u> - BWIG Navya Jain <u>niain52@wisc.edu</u> - BPAG

Date: November 28, 2024 to December 5, 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 is finishing up final touches on the system. We are additionally preparing for the final presentation which will be held on Friday from 12:05 PM to 2:15 PM. The team has been working on the final report in addition.

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

- Team -
  - Final presentation
  - o Fabrication
  - o Final report
- Meghan Kaminski
  - o Fabricated the tracks
  - Completed the final poster
  - o Printed the final poster
- Belle Counts -
  - Worked on Poster
  - o Finished fabrication on ramp and tracks
  - Went to clients house for testing
  - Solid works testing
- Jacki Szelagowski -

- Fabrication of tracks
- Completed final poster
- Kalob Kimmel
  - o Fabrication of Tracks
  - Completion of Ramp
  - o Completion of Final Poster
- Navya Jain -
  - Fabrication of tracks and ramp
  - Completed final poster
  - Worked on Lab Archives

Team Member	Tasks (brief)	Weekly Time	Total time to date
TEAM	Fabrication and research	8 hrs	33.5 hrs
Meghan Kaminski	Fabrication, research, and meetings	12 hrs	54 hrs
Belle Counts	Fabrication, client meeting, work on poster	hrs	45 hrs
Jacki Szelagowski	Fabrication, Meetings	7 hrs	50 hours
Kalob Kimmel	Fabrication, Meetings	8hrs	50hrs
Navya Jain	Fabrication, Poster, Report	hrs	39 hrs
		Total	hrs

## 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 -
  - Complete final presentations
  - Continue working on the final report
  - Deliver the device to the client for use
- Meghan Kaminski -

- o Split up the final report
- Work on the final report
- o Final presentation
- Belle Counts -
  - Give final presentation
  - o Work on final report
  - o Drop of device at clients house
- Jacki Szelagowski
  - o Give final presentation
  - o Finish final report
- Kalob Kimmel
  - o Give Final presentation
  - Work on final report
  - o Touch up Lab Archives
- Navya Jain
  - o Finish final report
  - o Give final presentation
  - Work on Lab Archives Notebook

## **Project Timeline**

Project Goal	Deadline	Team Assigned	Progress	<b>Date Completed</b>	
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	100%	N/A	
Fabricate		All	100%	N/A	
Show & Tell	11/1/24	All	100%	N/A	
Final Poster Presentations	12/6/24	All	90%	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	Pamazy		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										
	4x8 ft Pressure Treated Plywood	The Home Depot				11/9/2024	1	\$50.08	\$50.08	https://www
	2inx8inx10ft Lumber	The Home Depot				11/9/2024	2	\$8.82	\$17.64	https://www
								TOTAL:	\$122.50	