

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 - icounts@wisc.edu - BSAC

Kalob Kimmel kokimmel@wisc.edu - BWIG

Navya Jain njain52@wisc.edu - BPAG

Date: September 19, 2024 to September 26, 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 ramp and lock system will provide the fix needed for the client to use her gait trainer while on the treadmill.

Brief Status Update

This week, the team met with the clients in person to understand the mechanics of the project. During the meeting, the team collected necessary measurements for the design. Additionally, the team talked with the client to better understand the logistics of the problem itself. The team is working on the Design Matrix this week to narrow down the three major designs picked.

Summary of Weekly Team Member Design Accomplishments

- Team -
 - Meet in person with the client
 - Finish design matrix
 - Select the initial designs
 - Collect necessary measurements
 - Start working on preliminary presentation
- Meghan Kaminski -
 - Created three individual designs for the team meeting to discuss
 - Create AutoCAD design for final design
 - Created progress report
 - Collaborated with team to finish the design matrix

- Visited the client
- Conducted more research on the project
- Belle Counts -
 - Drove to clients house
 - Visited client and completed measurements / answered questions
 - Decided on designs for project
 - Finished Design matrix
 - Started working on preliminary report / presentation
 - Kept completing research
- Jacki Szelagowski -
 - Met at clients house
 - Took measurements needed
 - Created individual designs to present to the team
 - Continued relevant research
 - Worked/completed design matrix
 - Sent out progress report
- Kalob Kimmel -
 - Created three individual designs
 - Updated the website
 - Visited the Client
 - Individual Research
- Navya Jain -
 - Created three unique designs
 - Continued individual research on materials to be used
 - Worked on Design Matrix

Team Member	Tasks (brief)	Weekly Time	Total time to date
TEAM	Client meeting, initial designs, design matrix	3 hrs	5.5 hrs
Meghan Kaminski	Research, client meeting, work on design matrix	5 hrs	11 hrs
Belle Counts	Research, Client meeting, Work on Reports / Matrix	4.5 hrs	10 hrs
Jacki Szelagowski	Research, Client meeting, design matrix work	4 hours	9.5 hours
Kalob Kimmel	Client meeting, brainstorming and sketching, Research	4hrs	9.5hrs

Navya Jain	Researching, creating and brainstorming designs	4hrs	8hrs
		Total	53.5hrs

Weekly/Ongoing Difficulties

- The team is having difficulty picking a design. Each idea has favorable aspects, but the team is unsure which one the client would prefer.
- The team is unsure about the preliminary presentation requirement for a prop. Due to the bulk and use of the objects involved in the design, there is no larger prop the team can bring. Additionally, the team has not started the fabrication processes.
- 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 -
 - Preliminary presentation preparation
 - Start working on preliminary report
 - Create a smaller version of design for preliminary presentations
 - Continue to conduct research
- Meghan Kaminski -
 - Initiate finding times to meet outside of class to practice preliminary presentation
 - Create preliminary report
 - Create preliminary report slides
 - Continue individual research
- Belle Counts -
 - Work on preliminary report
 - Divide sections for preliminary report
 - Finish preliminary presentation
 - Continue individual research
- Jacki Szelagowski -
 - Prepare preliminary presentation
 - Start working on the report
 - Present section of presentation to advisor
 - Continue research of materials
- Kalob Kimmel -
 - Continue Research
 - Think about materials once design is chosen
 - Continue updating website
 - Work on preliminary report and presentation

