

Dynamic Balance Device

Date: 01/23/2026 - 01/29/2026

Client: Mr. Daniel Kutschera

Advisor: Professor Monica Ohnsorg

Team:

Kat Sattel - Team Leader (sattel@wisc.edu)

Therese Kalt- Communicator (tkalt@wisc.edu)

Noor Awad - BSAC (nawad2@wisc.edu)

Freyja Heggeland - BWIG/BPAG (heggeland@wisc.edu)

Problem statement: Patients that have suffered strokes have a 25-30% rate of developing spatial neglect syndrome. Symptoms of spatial neglect syndrome include loss of awareness of the body in space. Our client, Dr. Kutschera, a physical therapist, helps patients to regain strength and balance following a stroke. The client seeks to develop a device that can be used to improve visual scanning and balance training that is an update from the previous yard-stick design. The device should be multi-functional so as to help patients with varying degrees of need and be effective in the rehabilitation treatment.

Brief status update: The team began researching and familiarizing themselves with the project. The team also contacted the client to begin asking questions and coordinated a weekly team meeting time.

Difficulties / advice requests: None to report

Current design: None

Materials and expenses

None to report, see table below:

Item	Description	Manufacturer	Mft Pt#	Vendor	Vendor Cat#	Date	#	Cost Each	Total	Link
Category 1										
									\$0.00	
									\$0.00	
Category 2										
									\$0.00	
									\$0.00	
								TOTAL:	\$0.00	

Major team goals for the next week

1. Meet with the client
2. Continue research of previous semesters work as well as new research
3. Work on PDS

Next week's individual goals

- Kat Sattel
 - Continue research
 - Compile list of detailed questions to ask client
- Therese Kalt
 - Continue research
 - Meet with client
 - Complete PDS
- Noor Awad
 - Begin to work on PDS
 - Work on list of questions for client and use client meeting to guide further research
- Freyja Heggeland
 - Continue research
 - Begin product design statement development
 - Compile list of questions for our client

Timeline

Task	September				October				November				December		
	5	12	19	26	3	10	17	24	31	7	14	21	28	5	12
Project R&D															
Empathize	X														
Background...	X														
Prototyping															
Testings															
Deliverables															
Progress Reports															
Prelim presentation															
Final Poster															
Meetings															
Client															
Advisor	X														
Website															
Update	X														

Filled boxes = projected timeline

X = task was worked on or completed

Previous week's goals and accomplishments

- Kat Sattel
 - Researched 4 primary sources to help define design constraints and impact (criteria 2b and 4b)
 - Created and organized team notebook
- Therese Kalt
 - Researched 4 primary sources focusing on the global impact of stroke and stroke treatment
 - Contacted the client to plan first client meeting and advisor to set client meeting time
- Noor Awad
 - Researched 4 primary sources based on library lecture
 - Organized personal notebook and google drive
- Freyja Heggeland
 - Researched 4 different primary sources and learned previous work development by other groups that have worked on this project
 - Started writing the product design statement and organized group meetings.

Activities

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Kat Sattel	1/28/2026	- Research primary sources	2	2	2
Therese Kalt	1/23/2026 1/27/2026	- Contacted client and advisor - Researched 4 primary resource articles regarding global impact	3	3	3
Noor Awad	1/29/26	- Researched primary sources based on library lecture focusing on need for the project	2	2	2
Freyja Heggeland	1/23/2026 1/27/2026	- Researching dynamic ranges and learning about previous iterations of the project. - Researched primary sources on post-stroke therapies	1 3	4	4