

Dynamic Balance Device

Date: 02/15/2026 - 02/21/2026

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 mutli-functional so as to help patients with varying degrees of need and be effective in the rehabilitation treatment.

Brief status update: This week the team acquired the old prototypes from the client in order to gather information about their specs and learn where to make improvements. The team also completed the preliminary design presentation and divided up work for the preliminary report.

Difficulties / advice requests: None to report

Current design: None

Materials and expenses

None to report, see table below:

Item	Description	Manufac-turer	Mft Pt#	Vendo r	Vendo r 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. Complete the preliminary report
2. Create a preliminary CAD design
3. Obtain electronics

Next week's individual goals

- Kat Sattel
 - Obtain electronic materials needed and begin construction of circuit
 - Complete sections of preliminary report
- Therese Kalt
 - Complete sections of the preliminary report
 - Create preliminary CAD model of chosen final design
- Noor Awad
 - Complete sections of preliminary report
 - Begin to assemble electronic materials
- Freyja Heggeland
 - Complete the preliminary report
 - Communicate with team and begin ordering materials for draft

Timeline

Task	Week				Week					Week				Week	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Project R&D															
Empathize	X														
Background...	X	X	X	X											
Prototyping															
Testings															
Deliverables															
Progress Reports	X	X	X	X											
Prelim presentation				X								X			
Final Poster															
Meetings															
Client		X		X											
Advisor	X	X	X	X											
Website															
Update	X	X	X	X											

Filled boxes = projected timeline

X = task was worked on or completed

Previous week's goals and accomplishments

- Kat Sattel
 - Completed sections of preliminary presentation and presented

- Got old prototypes from client
- Weighed and measured old prototypes
- Practiced sections of preliminary presentation
- Therese Kalt
 - Completed sections of the preliminary presentation
 - Conducted research regarding the presentation
 - Practiced preliminary presentation
- Noor Awad
 - Completed sections of presentation
 - Conducted research for design matrix explanation
- Freyja Heggeland
 - Worked more on and presented the preliminary presentation
 - Communicated with team and came to a conclusion about material choices
 - Started writing the preliminary report

Activities

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Kat Sattel	2/14/2026	- Preliminary presentation	1.5	4	14
	2/17/2026	- Received old prototypes, talked with client	1		
		- Finalized preliminary presentation	1.5		
Therese Kalt	2/14/2026	- Completed sections of the preliminary presentation	1.5	3	13
	2/18/2026	- Conducted research for sections of the presentation	0.5		
	2/19/2026	- Practiced presentation for Friday	1		
Noor Awad	2/16/26	- Completed section of preliminary report	2	3	11
	2/17/26	- Practiced presentation	1		
Freyja Heggeland	2/15/2026	- Preliminary presentation development	1	5	18
	2/16/2026	- More preliminary presentation development	1		
	2/18/2026	- Team discussion and presentation development	2		
	2/19/2026	- Practiced and prepared for delivery of prelim presentation	1		