- **Title**: Smart Walker, BME 400

- **Date**: 11/8/24 - 11/14/24

Last Name	First Name	Role	Email
Nimunkar	Amit	Advisor	ajnimunkar@wisc.edu
Kutschera	Dan	Client	kutschera@att.net
BlomWillis	Nolan	Leader/Communicator	blomwillis@wisc.edu
Schiltz	Eva	BSAC	emschiltz@wisc.edu
Parsons	Jacob	BPAG	jcparsons@wisc.edu
Waldenberger	James	BWIG	jwaldenberge@wisc.edu

- **Problem statement**: In the rehabilitation process of acute strokes or similar conditions, it is necessary for the patient to be able to walk independently so they can safely return home. Our team must design a device that works in conjunction with a standard walker that will measure the speed and distance the patient walks and the pressure applied to the walker.

- **Brief status update**: The team is working on troubleshooting the issues that have came up with the code and the load cells as well as making progress on the 3D model that will be used to hold the load cells within the walker.

- **Difficulties / advice requests**: The team has had loose connection issues with the display and accelerometer, and testing issues with the load cells.

- **Major team goals for the next week**: To begin to integrate all of the components together.

- **Next week's individual goals**: A concise statement of intended action to continue progress on the project - be specific, i.e. what will you research.

  Eva: Create design and model for the box that will hold the display and accelerometer.

  Jacob: Begin to work on the code that will account for all electrical components.

  Nolan: Help with the 3D print for the load cell holder and fabrication of the walker, help with load cells as well.

  James: Finish load sensor circuit.

Project Goal	Deadline	Assigned	Progress	Completed
Initial meeting with client	9/12	Team	100%	Y
Gather research/project information	9/19	Team	100%	Y
Product Design Specification (PDS)	9/20	Team	100%	Y
Design Matrix	9/27	Team	100%	Y
Preliminary Presentation PDF	10/4	Team	100%	Y
Preliminary Report	10/9	Team	100%	Y
Order/Gather Materials	10/11	Team	100%	Y
Create prototypes, test	11/8	Team	80%	N
Final fabrication	11/20	Team	0%	N
Test and finalize final design	11/27	Team	0%	N
Poster Presentation PDF	12/6	Team	0%	N
Final Report	12/11	Team	0%	N
Final Notebook Team	12/11	Team	0%	N

- **Previous week's goals and accomplishments**:

  Team: Completed more steps towards final fabrication

Eva: Finished Solidworks and began 3d print for load cell holder and testing component.

Jacob: Soldered both Picos to pins and worked on testing the load cells.

Nolan: Worked on testing the load cells, Deconstructed previous teams walker

James: Troubleshot accelerometer, screen, and load sensor circuits. Created a testing plan for the load sensor circuit.

Activities: a concise accounting of time spent working on the project.

	Eva	Jacob	Nolan	James
Week 1	3 hrs	2 hrs	2 hrs	2 hrs
Week 2	3 hrs	4 hrs	4 hrs	3.5 hrs
Week 3	2.5 hrs	3 hrs	3 hrs	3 hrs
Week 4	2.5 hrs	3 hrs	2.5 hrs	3 hrs
Week 5	3 hrs	3 hrs	2 hrs	2 hrs
Week 6	3 hrs	7 hrs	3 hrs	5 hrs
Week 7	3 hrs	4 hrs	3.5 hrs	4 hrs
Week 8	3 hrs	4 hrs	3 hrs	1 hr
Week 9	3 hrs	3 hrs	2 hrs	4 hrs
Week 10	5 hrs	5 hrs	3.5 hrs	6 hrs