- **7Title**: Smart Walker, BME 400

- **Date**: 10/11/24 - 10/18/24

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 in three parts has worked through more fabrication

- **Difficulties / advice requests**: No difficulties or advice requests for this coming week.

- **Major team goals for the next week**: Devices are able to measure and display results for show and tell.

- **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: Finish Solidworks for design to integrate the load cell with the walker.

  Jacob: Try to get the OLED display working, and prepare for Show and tell

  Nolan: Work with jacob on OLED display as well as helping James with the load cells

  James: Finish load sensor circuitry and calibrate the weight.

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	40%	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: Created design for load cell container which will attach to the walker legs.

  Jacob: Set accelerometer up so that it is able to calculate speed and distance, next steps will be to mount it and ensure calibration is accurate after mounting. Also did research on what the team intended to purchase this week.

Nolan: Soldered the load cells together as well as research on what needs to still be purchased for the team

James: Set up load sensor circuitry.

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