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

- **Date**: 11/1/24 - 11/8/24

Last Name	First Name	Role	Email
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- **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**:

- **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: Continued working on Solidworks for load cells and met with Jesse Darley for a design consultation.

Jacob: Determine the root of the testing problems with the Pico and work with James on the calibration of the sensors

 Nolan: Work with jacob on OLED display as well as helping James with the load cells, If Eva needs help, aide in design help

James: Work with Jacob to fix the load sensor circuit. Make a schematic of all components for the final product.

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 Solidworks model for load cell container which will attach to the walker legs.

Jacob:I have completed the display code and integrated it into the measuring code so this part should be nearly completely functional.

Nolan: Met with client at the rehab facility to give an update on the team's progress as well as learn about equipment currently being used.

James: Tested the load sensor circuit and tried to diagnose problems. Tested resistance values for the load sensors. Researched voltage regulators and did some calculations with regard to power consumption of the 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
Week 8	3 hrs	4 hrs	3 hrs	1 hr
Week 9	3 hrs	3 hrs	2 hrs	4 hrs