

Smart Walker

Progress Report 1: 09/11/25

Client: Mr. Daniel Kutschera

Advisor: Duc-Huy Nyugen

Team:

- Leader: Nicolas Maldonado
- BSAC: Carolyn Randolph
- Communicator: Aidan Burich
- BWIG: Nial Donohoo
- BPAG: Henry Salita

Problem Statement: Design, develop and prototype a device(s) to modify an existing walker to track and report in real time the speed, distance walked, and pressure applied by users. This data will be used by clinicians as an assessment tool and by stroke patients as a means of motivation.

Brief Team Status Update: This week the team started research and referenced past iterations of the project. They also prepared questions for their first client meeting and attended their first advisor and client meetings.

Summary of Weekly Individual Design Accomplishments:

- Nicolas Maldonado: Started initial research and familiarized with past work
- Carolyn Randolph: Looked at past semesters posters and read the discussion/conclusion sections of their final reports. Began research and entered notes into Lab Archive. Added questions to ask during the client meeting.
- Aidan Burich: This week, I researched different types of walkers and familiarized myself with the past walker projects. I brainstormed some ideas for the project and set up the meeting with our client. I also looked at some other 'smart walkers' to get ideas for our project, and what other products have done.
- Nial Donohoo: Started research and added findings to Lab Archives. Added to the client question document and looked at past work on the project.
- Henry Salita: Briefly reviewed previous projects with similar goals as ours, began researching and entering my notes into Lab Archives, and came up with some questions to ask during our first client meeting.

Weekly/Ongoing Difficulties: No notable difficulties.

Upcoming Team Goals: The next big goal for the team is drafting the Product Design Specifications. Additionally, the team will use the client and advisor feedback to guide further research. Lastly, if time permits, begin initial brainstorming and sketching.

Upcoming Individual Goals:

- Nicolas Maldonado: Continue researching and familiarizing with the project. Work on PDS
- Carolyn Randolph: Continue research. Work on PDS.
- Aidan Burich: Continue researching and work on the PDS
- Nial Donohoo: Continue doing research and work on PDS.

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- Henry Salita: Continue researching and contribute to the PDS.

Project Timeline

Project Goal	Deadline	Team Assigned	State of Completion
Initial Research	9/12	All	The team will continuously research throughout the semester.
Product Design Specifications	9/18 Draft	All	
Design Matrix		All	
Preliminary Presentation	10/3	All	
Preliminary Report	10/8	All	
Initial Fabrication for Show and Tell	10/31	All	

Expenses

Item	Description	Manufacturer	Part Number	QTY	Cost Each	Total	Link
TOTAL:							\$0.00

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