

Glucose Alerting System

Client: Olive Cernigila,

Advisor: Dr. John Puccinelli

Team:

Isabel Ploessl - Co-Team Leader

Claudia Beckwith - Co-Team Leader

Lauren Klein - BSAC

Ella Prose - BPAG

Audrey Zeller - BWIG

Kiera Klemm - Communicator

Date: 10/02/2025

Problem Statement:

The overall goal of the Continuous Glucose Monitoring Bracelet is to make blood glucose status more clearly visible, understandable, and actionable for anyone supervising a young child with Type 1 Diabetes. Studies show that a diagnosis of diabetes can become just as stressful for parents to monitor and understand, as it is for the kids. This prototype should help relieve some of this stress by eliciting a visible and actionable signal to parents, which will convey whether treatment is needed or not.

Brief Status Update: We have completed our design matrices and are finishing up the Preliminary Presentation!

Summary of Weekly Team Member Design Accomplishments:

- Team:
 - Edited PDS
 - Finished Matrices
 - Created Slides for Presentation
 - Began drafting Report

Name	Activity	Time (hr)	Week Total (hr)
Isabel Ploessl	- Attended client meeting - Completed Slides - Edited PDS - Created Progress Report - Re-drew battery designs - Sketched Idea and dimensions for Final Design - Created Final Design	.5 hr .5 hr .5 hr .5 hr 1 hr 1 hr 2 hr	6 hrs
Claudia Beckwith	- Attend client meeting - Researched alternate connectivity options - Worked on preliminary presentations - Updated PDS	.5 hrs 1 hr 1hr .5 hrs	3 hr
Lauren Klein	- Attended Client Meeting - BSAC with Faculty Meeting - Preliminary Slides - Researched for PDS Updates	.5 hr 1 hr 1 hr 1 hr	3.5 hrs
Ella Prose	- Attended BPAG meeting - Attended Client Meeting - Completed preliminary slide - Researched T1D statistics - Edited and completed Design Matrix	.5 hr .5 hr 1 hr 1 hr 1 hr	4 hrs

Audrey Zeller	- Finished slide for preliminary presentation - Updated website with PDS and progress reports - Made/drew designs and wrote paragraphs for the PDS - Took feedback and fixed my design matrix	.5 hr 1 hr 1 hr 1 hr	3.5 hrs
Kiera Klemm	- Edited design matrix and PDS with given feedback - Prepared for preliminary presentation - Reviewed client meeting notes - Continued battery research	1hr 1.5 hr .5 hr .5 hr	3.5 hr

Weekly/Ongoing Difficulties:

- Connectivity

Upcoming Team and Individual Goals:

- Team:
 - Finish Presentation
 - Begin Report
 - Order Materials!!!
 - Create circuit on a large scale
- Isabel Ploessl:
 - Create the format of the preliminary report
 - Work on preliminary report
 - Start working on large-scale circuit
- Claudia Beckwith:
 - Start building Nightscout API
 - Work on preliminary report
 - Develop circuit for proof of concept with colored LEDs
- Lauren Klein:

- Work on preliminary report
- Start prototyping/fabrication
- Attend BSAC Executive
- Ella Prose:
 - Practice preliminary design presentation
 - Find materials and order them
 - Work on preliminary report
- Audrey Zeller:
 - Practice for preliminary design presentation
 - Update website
 - Do more research and refine ideas for designs
- Kiera Klemm:
 - Give preliminary design presentation
 - Make final battery decision
 - Work on preliminary report

Project Timeline :

Project Goal	Deadline	Team Assigned	Progress	Completed
Client Meeting	9/8	ALL	100%	Yes
Weekly Progress Report	9/11	ALL	100%	Yes
PDS	9/18	ALL	100%	Yes
Design Matrix	9/27	ALL	100%	Yes
Preliminary Presentations	10/3	ALL	95%	Almost!
Preliminary Deliverables	10/8	ALL	15%	No
Show and Tell	10/31	ALL		
Poster Presentations	12/5	ALL		
Final Deliverables	12/10	ALL		

Expenses :

Item	Description	Manufacturer	Part Number	Dat	QTY	Cost Ea	Total	Link
No purchases scheduled so far								
TOTAL:							\$0.00	