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: 10/09/2025

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 had our Preliminary Presentation and have turned in our Preliminary Report.

Summary of Weekly Team Member Design Accomplishments:

- Team:
 - o Presented
 - o Completed preliminary report

Name	Activity	Time (hr)	Week Total (hr)
Isabel Ploessl	 Presented and watched other presentations Attended Team Meeting Researched Materials for Report Formatted Progress Report Wrote Report Section Edited Report 	1 ½ hr 1 hr 2 hr ½ hr 1 hr 1 hr	7 hrs
Claudia Beckwith	 Prelim presentations Team meeting Develop test method for report Edited prelim report 	1.5 hrs 1 hr 1.5 hrs 1 hr	5 hrs
Lauren Klein	 Preliminary Presentation Team Meeting BSAC Executive Meeting Formatted Preliminary Report Revised Preliminary Report 	1.5 hrs 1 hr 1 hr 1 hr	5.5 hrs
Ella Prose	 Preliminary presentation Attended team meeting Researched biology and physiology aspects more Wrote and edited preliminary report 	1.5 hr 1 hr 2 hr 1 hr	5.5 hr
Audrey Zeller	PreliminarypresentationAttended team meeting	1.5 hr 1 hr	5

	 Wrote and edited preliminary report Updated website and uploaded nessesary documents 	2 hr .5 hr	
Kiera Klemm	-Preliminary Presentation -Attended team meeting -Research connectivity for final report -Wrote and edited preliminary report	1.5 hr 1hr 1hr 1.5hr	5 hr

Weekly/Ongoing Difficulties:

• Connectivity

Upcoming Team and Individual Goals:

- Team:
 - Order materials
 - o Create large scale circuit for proof of concept
- Isabel Ploessl:
 - o Compile materials research into a comprehensive document
 - o Create large scale circuit
 - o Start thinking about the circuit process flow with new parts
- Claudia Beckwith:
 - Start on the Nightscout API
 - o Research connection from API to bracelet
- Lauren Klein:
 - o BSAC Meeting on 10/10
 - o Prototyping
 - Look into WARF submission
- Ella Prose:
 - Order materials and keep track of costs
 - Work on testing

- Audrey Zeller:
 - o Update website
 - o Help with research and building
- Kiera Klemm:
 - o Update client on final report and progress report
 - o Research battery connectivity
 - o Assist with large scale circuit

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	100%	Yes
Preliminary Deliverables	10/8	ALL	100%	Yes
Show and Tell	10/31	ALL		
Poster Presentations	12/5	ALL		
Final Deliverables	12/10	ALL		

Expenses:

Item	Description	Manufactur er	Part Numb er	D a t	Q T Y	Co st Ea ch	T o t a	i n k
No purch	hases scheduled so far							

TOTA	\$0.00
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