Glucose Alerting System
Client: Olive Cernigila & Callie Berg
Advisor: Dr. John Puccinelli

Design Team:
Isabel Ploessl - Team Leader
Claudia Beckwith – BWIG & BPAG
Lauren Klein – BSAC & Communicator

Business: Kiera Klemm

Date: 2/26/26

Problem Statement:

Parents and caregivers of children with T1D often struggle to quickly see and interpret glucose readings, leading to stress and delayed decisions. The Wearable Glucose Alerting System aims to solve this problem by providing a clear, visible signal that instantly shows when a child's blood sugar needs attention.

Brief Status Update:

We have given our preliminary presentation and turned in our report; we will now be focusing on fabrication!

Summary of Weekly Team Member Design Accomplishments:

Whole Team: Preliminary report, and presentation complete 😊

Name	Activity	Time (hr)	Week Total (hr)

Isabel Ploessl	- Presentation Day - Report Research - Report Writing - Report Editing - Feedback fruits - Progress Report Setup	2 hrs 1 hrs 2 hrs 1.5 hrs ½ hr ½ hr	7.5 hrs
Claudia Beckwith	- Prelim Presentation - Report Writing - Report Edits - Feedback fruits - Lab archives BPAG documentation - Coding App (it works!)	2 hrs 2.5 hrs 1.5 hrs .5 hrs .5 hrs 3.5 hrs	10.5 hrs
Lauren Klein	- BSAC - Presentation Prep and Day - Report Writing & Editing - Feedback Fruits	 1 hr 2 hrs 4 hrs ½ hr	7.5 hrs
Kiera Klemm	- Client Meeting - Cold calls - Start working on pitch deck	1hr 1hr 2hr	4 hrs

Weekly/Ongoing Difficulties: None

Upcoming Team and Individual Goals:

- Team:
  - Continue Fabrication
  - Feedback Fruits
- Isabel Ploessl:
  - Feedback fruits reflection
  - Edit/reprint box
  - Research packages needed for app creation
- Claudia Beckwith:
  - BLE connectivity from app to microcontroller

- Lauren Klein:
  - BSAC
  - Feedback Fruits
  - Arduino Packages
  - Box Configuration
- Kiera Klemm:
  - Continue cold calls
  - Work on pitch deck

Project Timeline :

Project Goal	Deadline	Team Assigned	Progress	Completed
Client Meeting	1/29	ALL	100%	YES
Weekly Progress Report	1/29	ALL	100%	YES
PDS	2/5	ALL	100%	YES
Design Matrix	2/13	ALL	100%	YES
Preliminary Presentations	2/20	ALL	100%	YES
Preliminary Deliverables	2/25	ALL	100%	YES
Show and Tell	3/20	ALL	10%	Working 💪
Poster Presentations	4/24	ALL		
Final Deliverables	4/29	ALL		

Expenses :

Category 1 - Appearance										
Item	Description	Manufacturer	Mft Pt#	Vendor	HS Code	Date	QTY	Cost Each	Total	Link
Category 2 - Internal/Electronic Components										
Item	Description	Manufacturer	Mft Pt#	Vendor	HS Code	Date	QTY	Cost Each	Total	Link

Seeed StudioXIAO ESP32-C6 (3PCS)	Microcontroller for internal bracelet circuitry	Seeed Studio	102010574	Seeed Studio	8543709990	2/4/2026	1 (3 pack)	19.98	19.98	[XIAO C6 microcontroller (3 pack)](#)
1 x NeoPixel Jewel - 7 x 5050 RGB LED with Integrated Drivers[ID:2226] =	LED light for bracelet	Adafruit Industries	2226	Adafruit Industries	N/A	2/4/2026	1	20.39	20.39	[NeoPixel Jewel - 7 x 5050 RGB LED with Integrated Drivers : Adafruit Industries, Unique & fun DIY electronics and kits](#)
1 x Lithium Ion Polymer BaΣery - 3.7v 500mAh[ID:1578]	Battery for bracelet	Adafruit Industries	1578	Adafruit Industreis	N/A	2/4/2026	1	22.50	22.50	[Lithium Ion Polymer Battery - 3.7v 500mAh : Adafruit Industries, Unique & fun DIY electronics and kits](#)
								TOTAL:	62.87	