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: 2/12/26

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 turned in our Design Matrix and are beginning on the Preliminary Presentation and Report (still waiting on materials 😡). Claudia working on making the mobile app from the local Flutter system.

Summary of Weekly Team Member Design Accomplishments:

Whole Team: We worked on some new research and created our design matrix for this semester

Name	Activity	Time (hr)	Week Total (hr)

Isabel Ploessl	• Client Meeting • Matrix Research • Matrix Editing and Paragraphs • Create Progress Report	1 hr 2 hr 2 hr ½ hr	5.5 hrs
Claudia Beckwith	• Client Meeting • Matrix Research • Matrix writing and edits • Configure Mac for Flutter	1 hr 2 hrs 2 hrs 2 hrs	7 hrs
Lauren Klein	• Client Meeting • Matrix Research • Matrix Creation/Writing • BSAC Exec	1 hr 2 hrs 2 hrs 1 hr	6 hrs
Kiera Klemm	• Client Meeting • Reviewed market identification • Met with marketing expert • Researched market size statistics	1 hr 1 hr 1 hr 1.5 hr	4.5 hrs

Weekly/Ongoing Difficulties: Material ship time :((

Upcoming Team and Individual Goals:

o Team:
  o Begin Preliminary Presentation and Preliminary Report
o Isabel Ploessl:
  o Complete sections of presentation
  o Begin fabrication with Lauren when materials arrive
o Claudia Beckwith:
  o Prepare for prelim presentation
  o Finish iOS development and deploy Flutter onto mobile application
o Lauren Klein:
  o Fabricate new circuit

- Prelim Presentation
- BSAC
- Kiera Klemm:
  - Create a claims matrix
  - Begin work on pitch deck content

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	25%	Starting 😊
Preliminary Deliverables	2/25	ALL	10%	
Show and Tell	3/20	ALL		
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

Item	Purpose	Vendor	Part #	Manufacturer	Mfr #	Date	Qty	Unit	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	