

CAPSTONE PROJECT SPONSORSHIP PROPOSAL

Project Title:

HEARTLINK

Prepared by:

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Group Name: IPD

Course/Department Name: MGMT-6134 - Capstone Project (BIA)

University/Institution Name: Fanshawe College

Submitted to:

Professor's/Advisor's Name: Vinnie Moraes

Department/Faculty Name: BIA- BUSINESS AND INFORMATION SYSTEMS ARCHITECTURE

University/Institution Name: Fanshawe College

Date:

Sept 15th , 2025

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Dear Professors,

We are excited to introduce our final project, **Heartlink**, developed as part of our capstone work at Fanshawe College. Heartlink is designed to address the growing need for accessible health monitoring tools by providing users with real-time insights into their cardiovascular health.

The project leverages the **ESP32 microcontroller** and **MAX30102 sensor** to collect vital data on heart pulse and blood oxygen levels. This information is then processed and displayed on a **dashboard**, accessible through a web interface. By integrating hardware with an interactive platform, Heartlink enables users to track their heart status over time and receive early cautions regarding potential health concerns.

Our motivation for developing Heartlink stems from the increasing importance of proactive health monitoring in both clinical and everyday contexts. By combining affordability, portability, and data-driven insights, Heartlink aims to serve hospitals, healthcare providers, and individuals who value preventive care.

We believe this project highlights both innovation and social impact, and we are eager to share its development process and outcomes with you. Enclosed in this proposal, you will find the project scope, work breakdown structure, schedule, budget, and risk management plan.

Thank you for taking the time to review our project. We look forward to your feedback and the opportunity to discuss Heartlink further.

Sincerely,
Ivan Guan

IPD Group

We are seeking sponsorship for our capstone project, which involves the acquisition of the **ESP32** and **MAX30102** devices. This project aims to empower hospitals and healthcare providers to better track and manage their clients' health through real-time monitoring and interactive technology. By supporting our initiative, you will help us leverage cutting-edge hardware to create practical solutions that improve patient care and deliver measurable results.

Work Breakdown Structure (WBS)

ID	Task	Subtask	owner	Vendor	Duration	
1.	Acquire ESP 32	<ul style="list-style-type: none">- Code implementation- Checks on device functionality- testing	Group 1	Amazon	1 Week	
2.	Acquire MAX30102	<ul style="list-style-type: none">- Code implementation- Checks on device functionality- testing	Group 1	Amazon	1 Week	

Project Scope

In-Scope

- Procurement of all listed hardware
- Installation and configuration of devices
- Software installation and testing
- Functional testing and quality assurance
- Deployment and operational launch

Out-of-Scope

- Ongoing maintenance post-launch
- Custom software development beyond pre-defined requirements
- Third-party integration not listed in the hardware/software specifications

Risks & Mitigation Strategies

Risk	impact	Mitigation Strategy
Hardware delays	High	Pre-order components; identify alternate suppliers
Software compatibility issues	medium	Conduct early integration tests
Resource unavailability	medium	Assign backup personnel
Budget overrun	High	Implement strict budget tracking and approval processes

Budget (Hardware-Based Estimate)

Our budget is divided into 2 separate alternatives as shown below:

Budget A

Item	Quantity	Unit cost	Total Cost	Delivery Days	Vendor
ESP32	1	-	-	-	Acquiring from Fanshawe College
MAX30102	1	C\$11.29	C\$11.29	5 Days	Amazon
			C\$11.29		

Budget B

Item	Quantity	Unit cost	Total Cost	Delivery Days	Vendor
ESP32	1	C\$15.81	C\$15.81	3 Days	Amazon
MAX30102	1	C\$11.29	C\$11.29	5 Days	
			C\$27.10		

Conclusion / Sponsorship Call-to-Action

Your sponsorship will directly contribute to the successful execution of Group 1 Capstone project, enabling us to move forward to the next stage of the project. We invite you to partner with us and gain strategic visibility, positive brand association, and firsthand access to project outcomes.