# TEAM 6(Personal Data Aquisition)

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# 1 Abstract

**The aim of this senior capstone project is to design and implement a versatile data logging system that integrates single board computers (SBCs), STM32 microcontrollers, and the Rust programming language. The system will be capable of collecting, storing, and processing data from various sensors and input sources, providing a flexible and reliable solution for a wide range of applications.**

**The project will involve the development of software for both the SBCs and STM32 microcontrollers, leveraging the unique capabilities of each platform. The Rust programming language will be used for its safety, performance, and ease of use, allowing for efficient and reliable code development.**

1. Selection and integration of sensors and input devices for data collection.
2. Design and implementation of communication protocols between SBCs and STM32 microcontrollers.
3. Development of data processing algorithms and storage mechanisms.
4. Creation of a user interface for system configuration and data visualization.

**The project will culminate in the deployment and testing of the data logging system in real-world scenarios, demonstrating its effectiveness and reliability. The system will be designed with scalability and modularity in mind, allowing for future expansion and customization.**

**Overall, this project aims to provide a comprehensive solution for data logging applications, showcasing the capabilities of modern embedded systems and the Rust programming language in real-world applications.**

# 2 Change Log

**... okay**