Executive Summary

The paper proposes an IoT based system that monitors the heart rate from an output given by a hardware system consisting of a micro controller and a pulse sensor. The user will use this device as a wearable to check heart rate and body temperature, and be able to monitor their own heart rate through a mobile application.

The main board for this device will be the STM32 Microcontroller. This board will be connected to the Firebase database where our app will be in constant communication to show real-time values.

BME280 will be reading the temperature data and the Pulse Sensor Amped will be reading the heart rate data from the user. All the data collected then will be sent to the Firebase's RealTime Database, where the 7-Segment will pick up the data for display and an SD card Adapter will pick the data up for storage.

The user can see the data in a mobile application that displays real time data from the database.

Link Towards Youtube Video :
https://youtu.be/LKBqTUXIRbM