

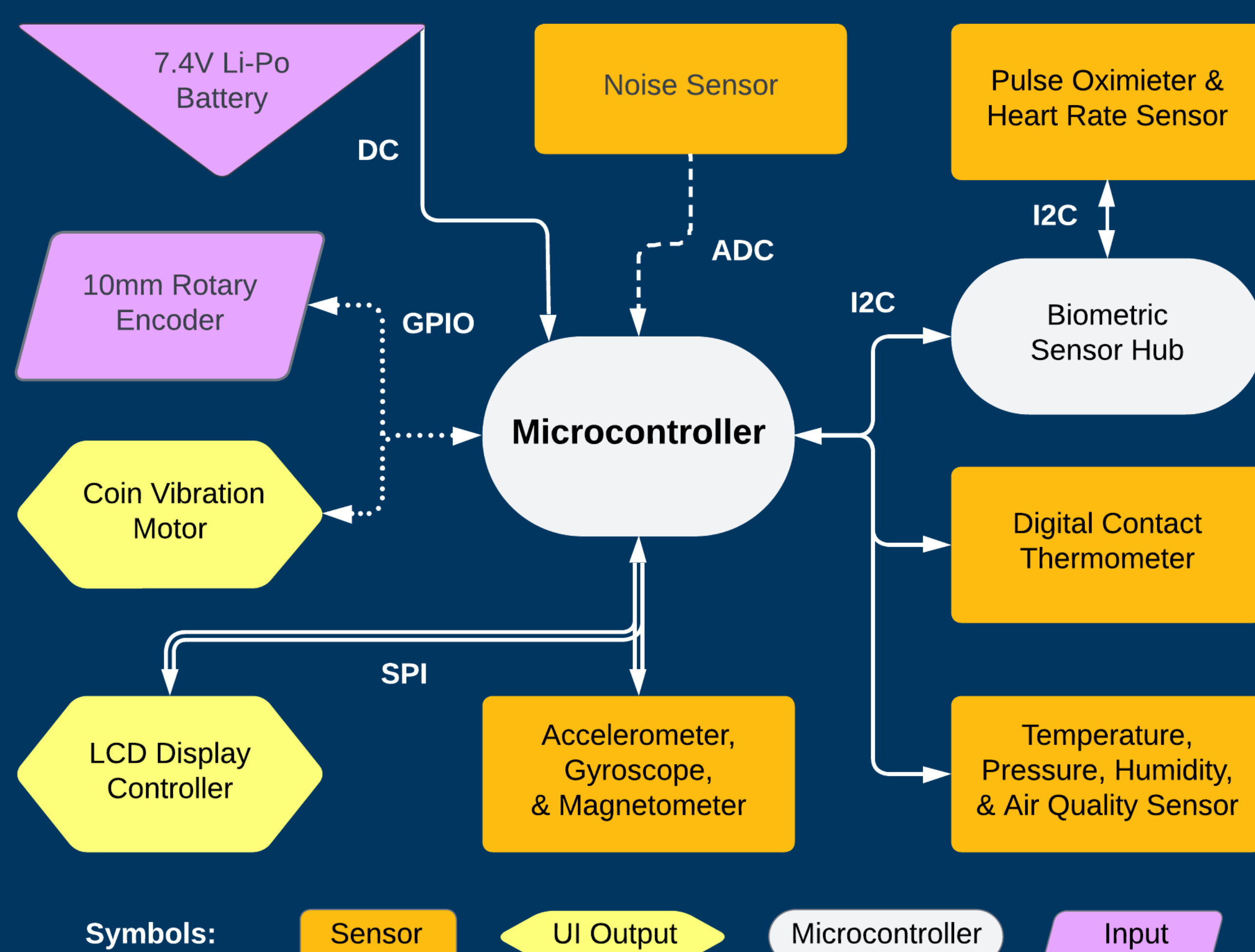
Background

Traditional methods for monitoring the health of residents in group care facilities are often invasive, labor-intensive, and prone to inaccuracies, leading to delays in identifying and addressing health issues. In response, we designed a wearable that provides continuous, real-time health and environmental data to enhance resident monitoring and enable immediate medical intervention when necessary.

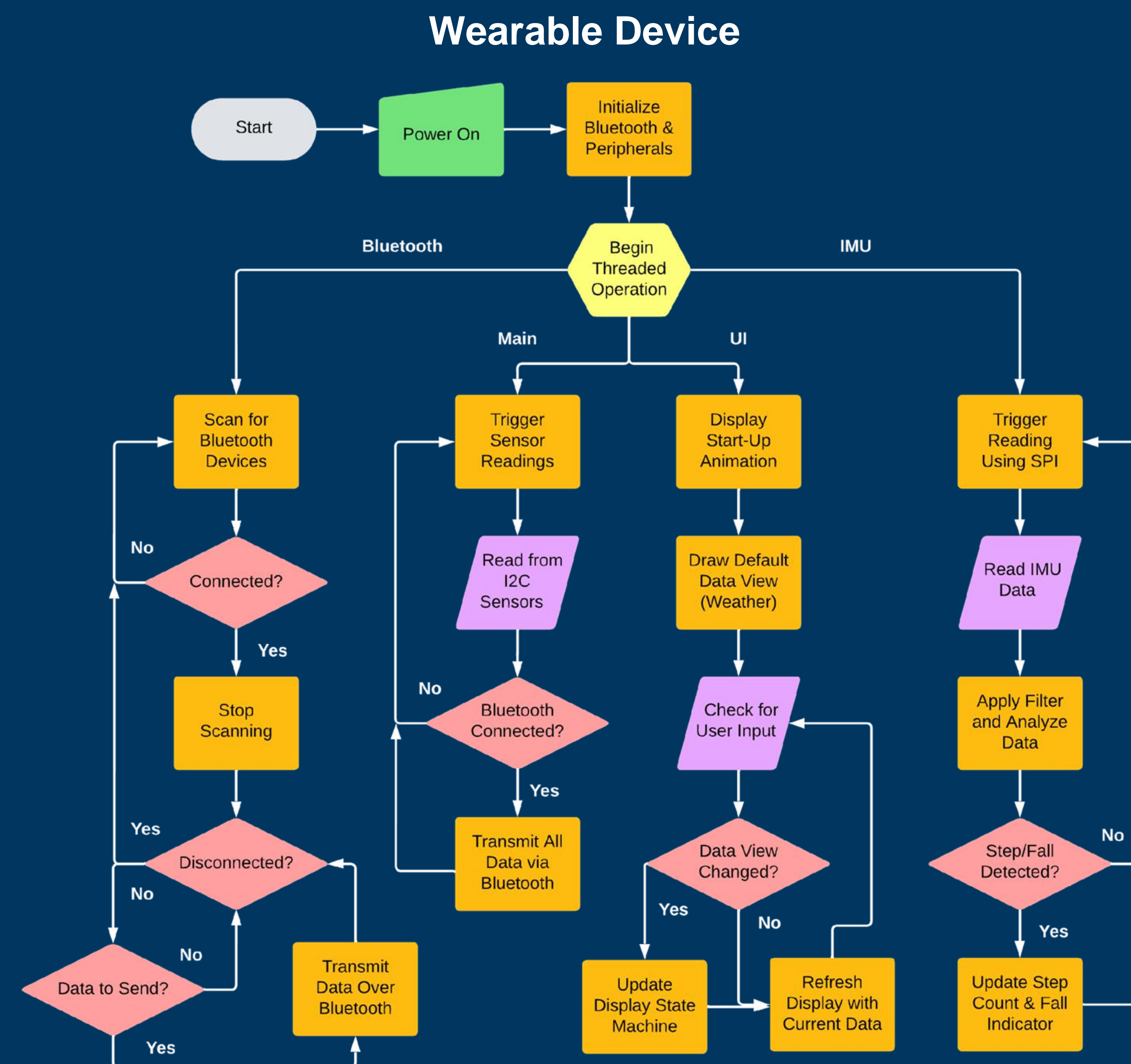
Overview

Our smartwatch is equipped with sensors to track critical health metrics, including heart rate, blood oxygen levels, body temperature, movement, and noise exposure. It also monitors environmental factors that can impact health, such as temperature, humidity, pressure, and air quality. The watch connects to a user's smartphone via Bluetooth, allowing both the user and healthcare providers to access and monitor these data through a dedicated application.

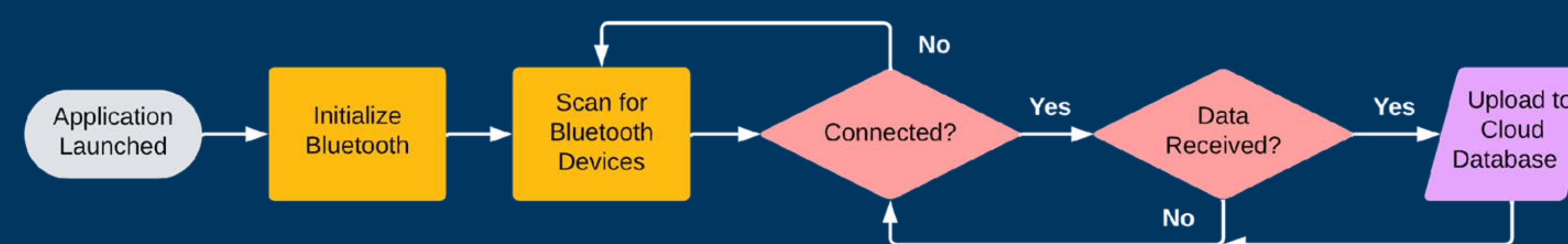
Block Diagram



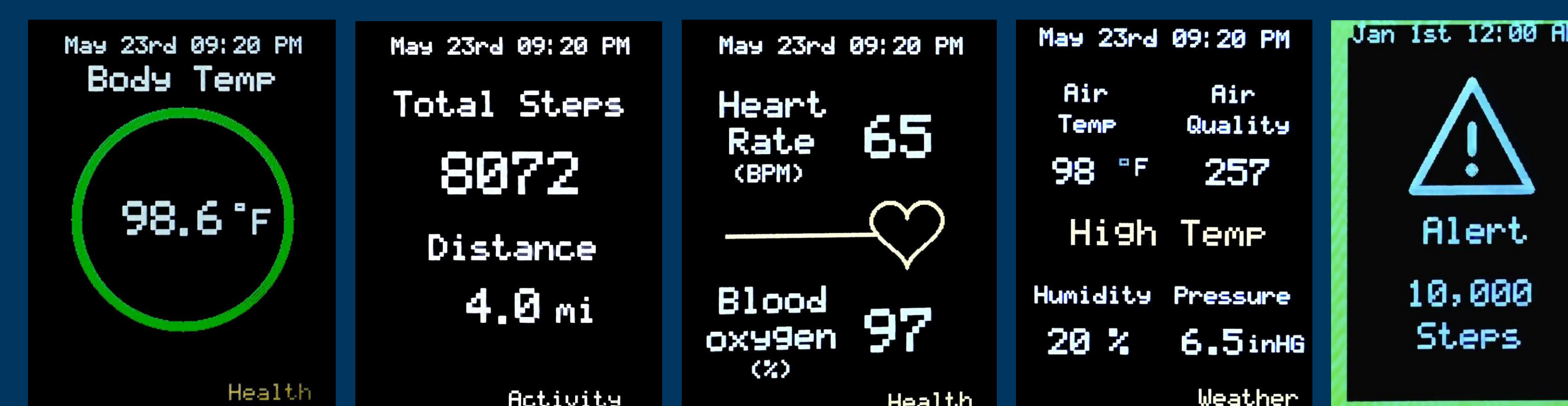
Software Flow



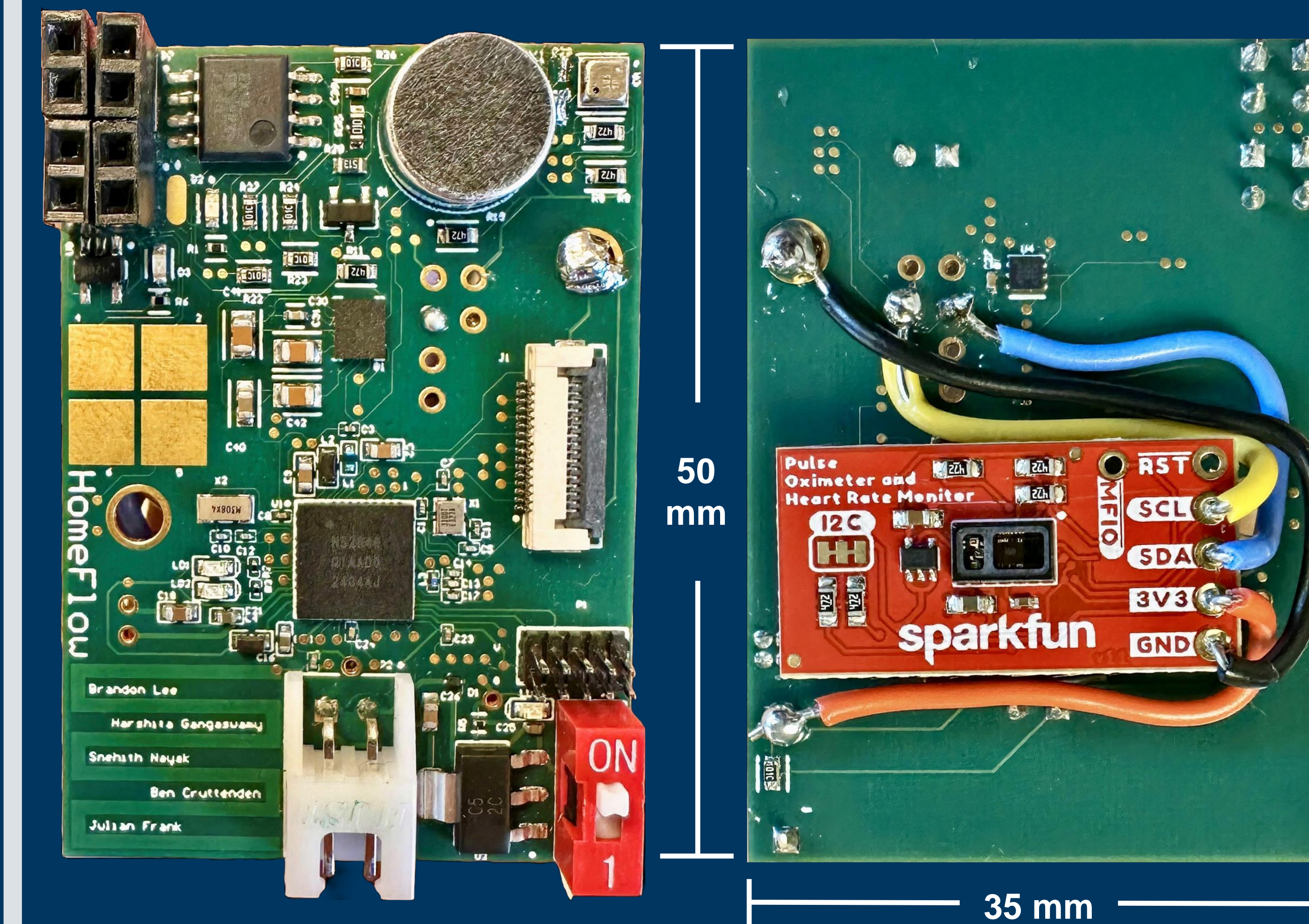
Android Application



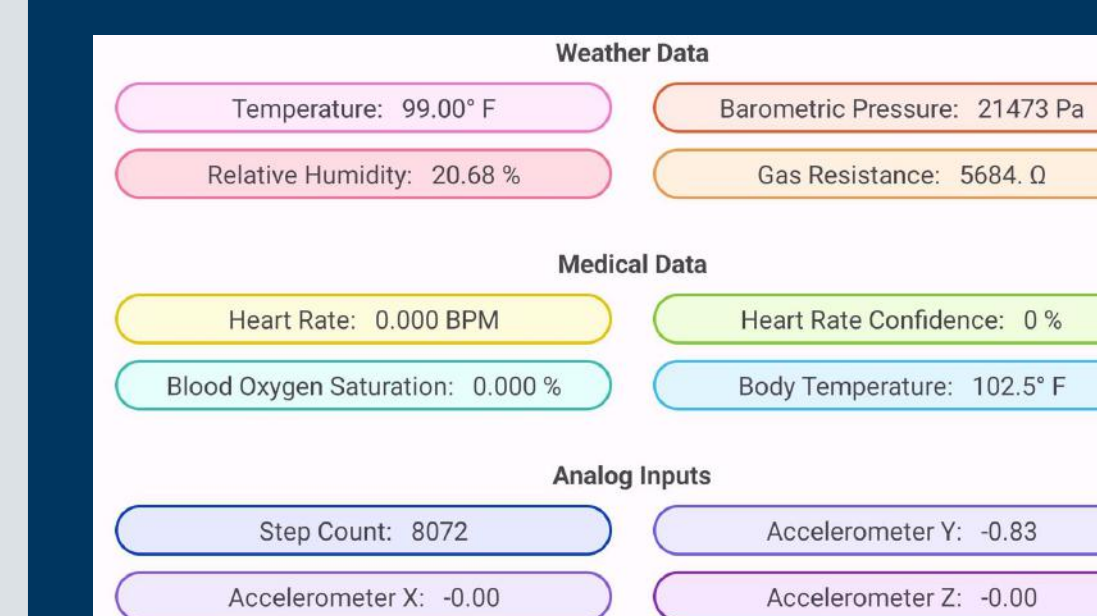
User Interface



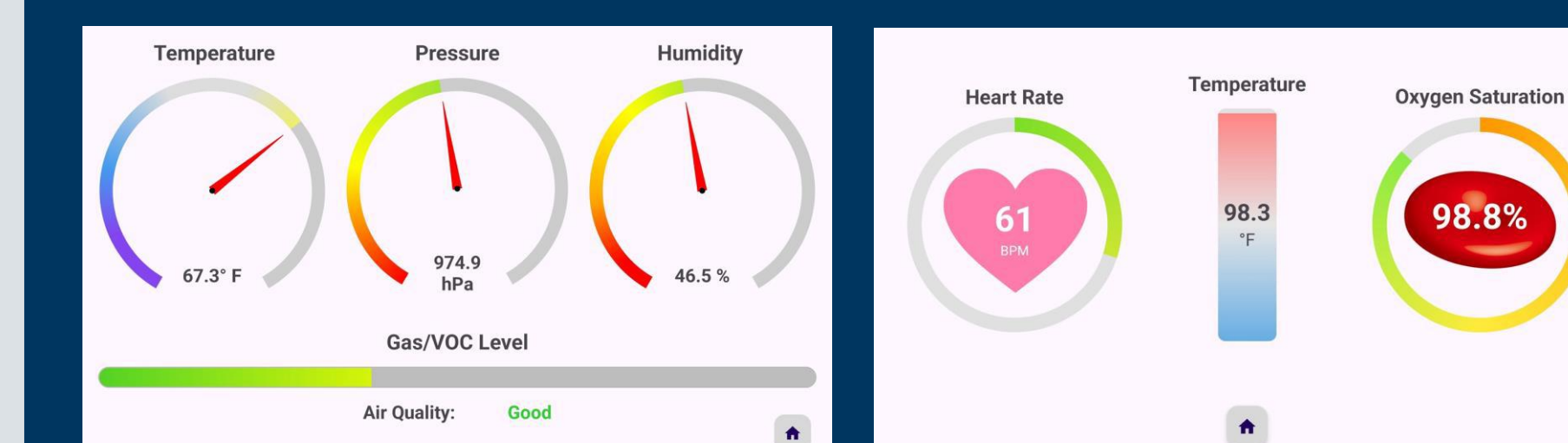
6-Layer PCB



Android Application

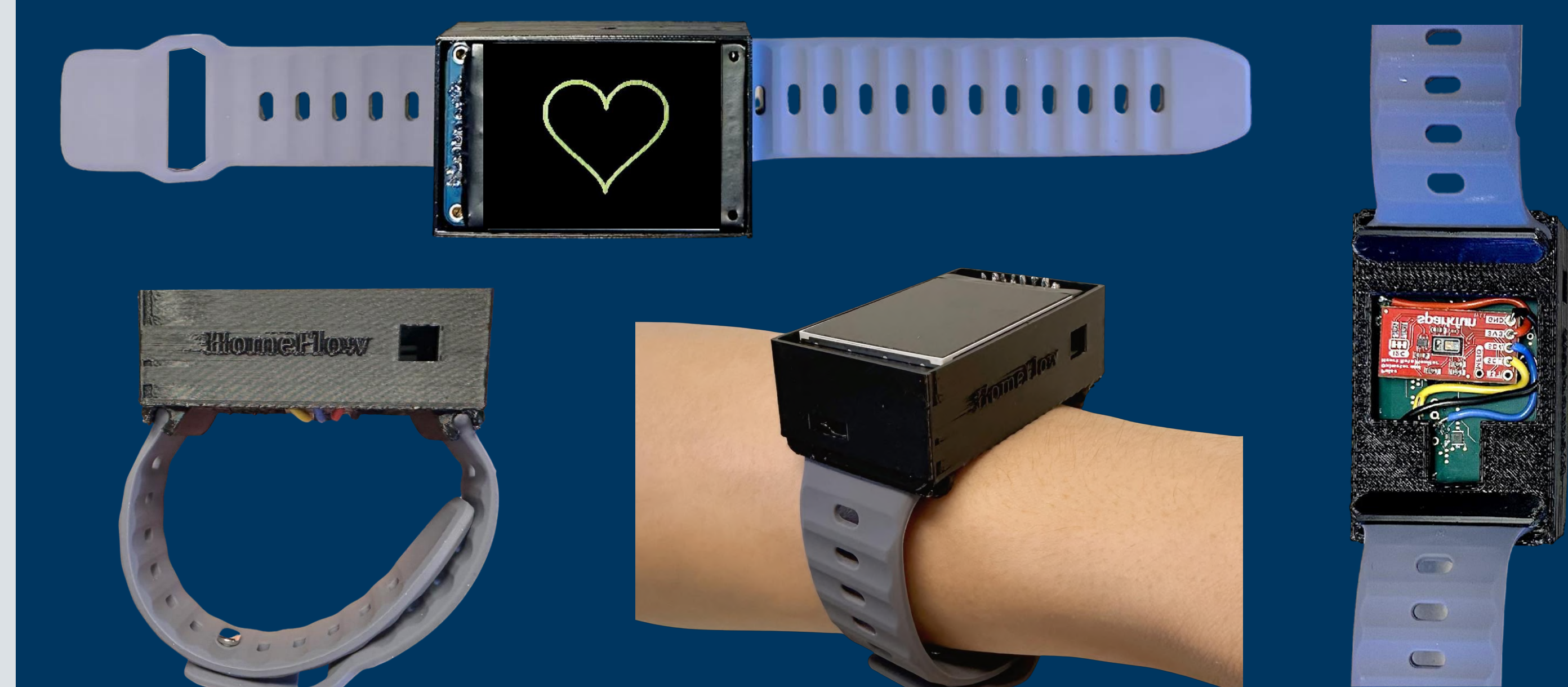


- Provides intuitive displays for health and weather data.
- Alerts users when medical emergencies are detected.



- Logs data for further analysis and review by medical staff.

Final Product



Acknowledgements:

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