# CODEAVOUR 6.0 INTERNATIONAL

**Project Name: Lifeguard 360**

**Team Name: Fatima Saeed**

**Group:Track1**

**Theme:** good health and wellbeing.

Codeavour 6.0 International

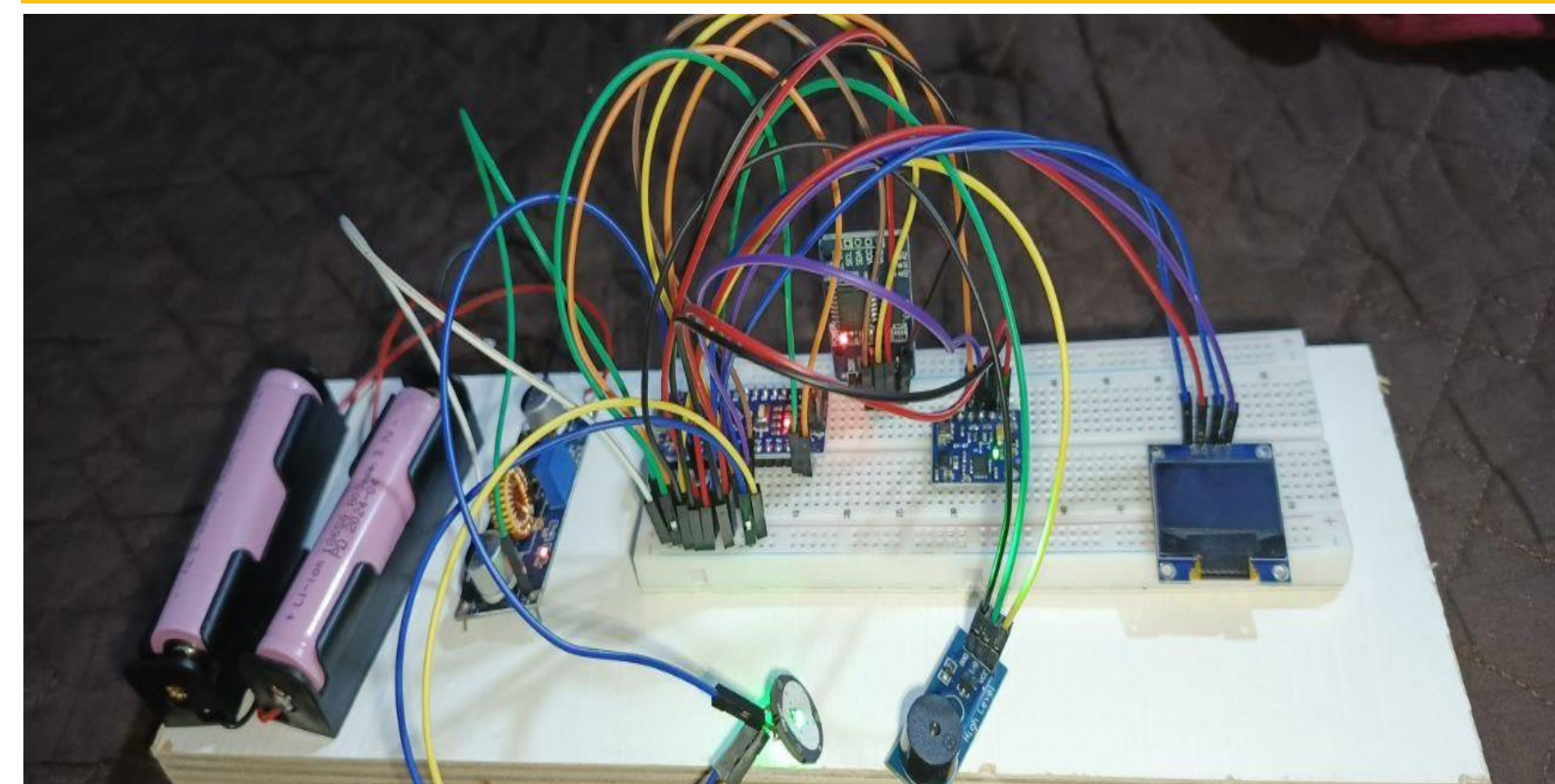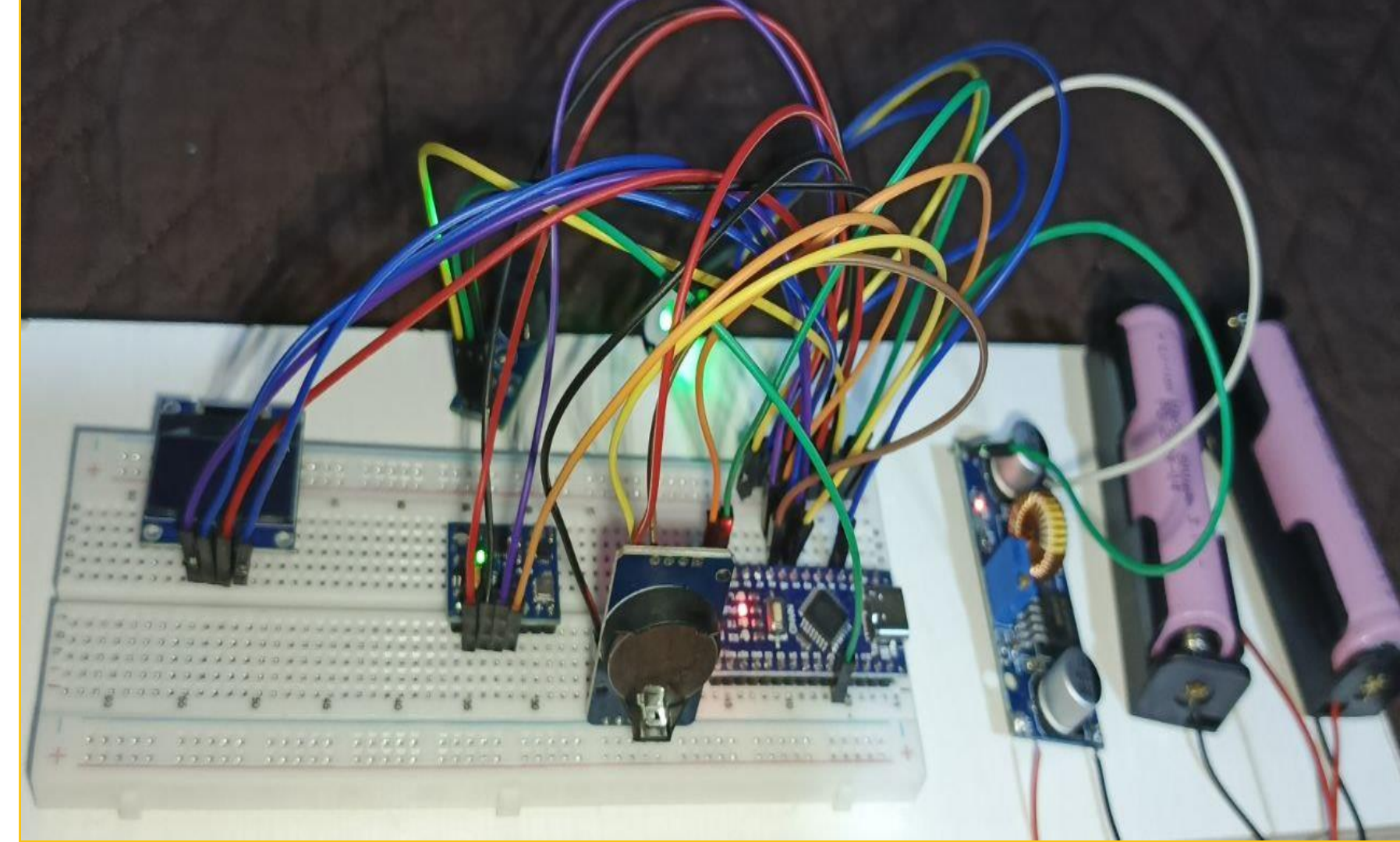**Team Member**: Fatima Saeed

**Mentors:** Ola.ra.atiyah

Good health and wellbeing

# Lifeguard 360

The smart belt is an innovate device designed to protect users from health risk . it detects falls using the MPU6050 motion sensor and triggers an immediate alert upon detecting a sudden fall .
It also monitor heart rate with a pulse sensor and warns of any critical irregularities . Additionally, it features a medication reminder system based on the DS3231 real-time clock, displaying alert on an OLED screen with an audible buzzer alarm . Designed for accuracy, fast response, and ease of use, this device serves as a reliable health assistant that can help save lives.
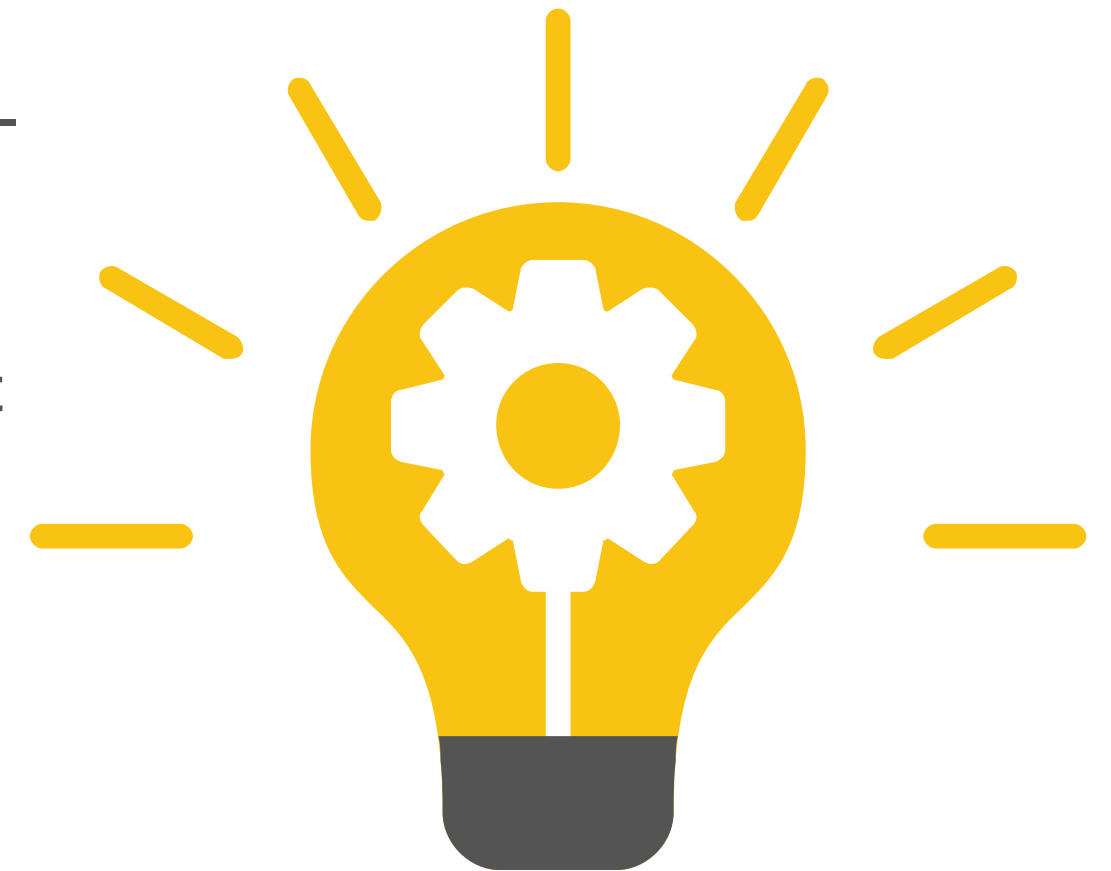
# Problem

- Imagine living alone or having a loved one who suffers from serious health issues, such as sudden falls, heart irregularities, or even forgetting to take essential medication. In just one moment, a medical emergency could occur without warning, and no one might be nearby to help immediately . How many lives have been lost due to just a slight delay in response? This is where the urgent need for a smart solution that can save lives becomes undeniable.
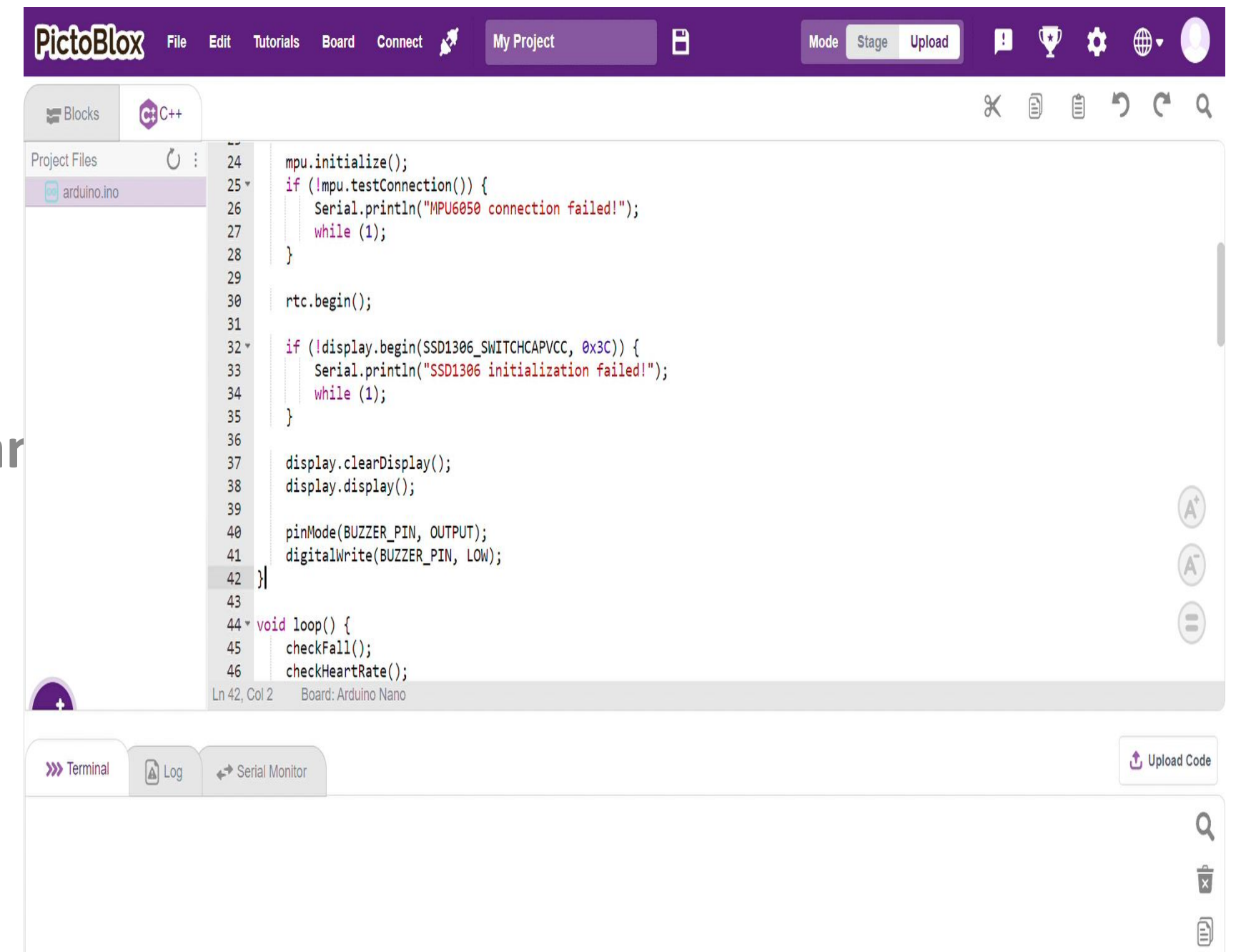
# Solution

The solution is a revolutionary smart belt designed to monitor health in real-time and provide instant alerts in emergencies. This belt is equipped with advanced fall detection technology, a heart rate sensor to identify irregularities, and a medication reminder system. If a fall occurs, if the heart rate becomes abnormal, or if it's time for medication, the belt immediately triggers an alarm, displays a warning message, and alerts the user or caregivers. By providing instant awareness and response, this device can help prevent medical emergencies from becoming fatal.

# Solution

**Solution: The Smart Belt – Your Personal Health Guardian**

1. Detects falls and triggers an alarm for quick assistance.

2. Monitors heart rate and alerts in case of irregularities.

3. Reminds users to take medication on time.

4. Displays clear alerts for quick response.

5. Provides safety and peace of mind in daily life.

**THANK YOU!**