VIMO
Vital Monitorization Bracelet
KEEP AN EYE ON YOUR DEAR ONES

GRUPO 24

Problem

In Portugal, 44,100 elderly people live in isolation, making it difficult to ensure their safety.
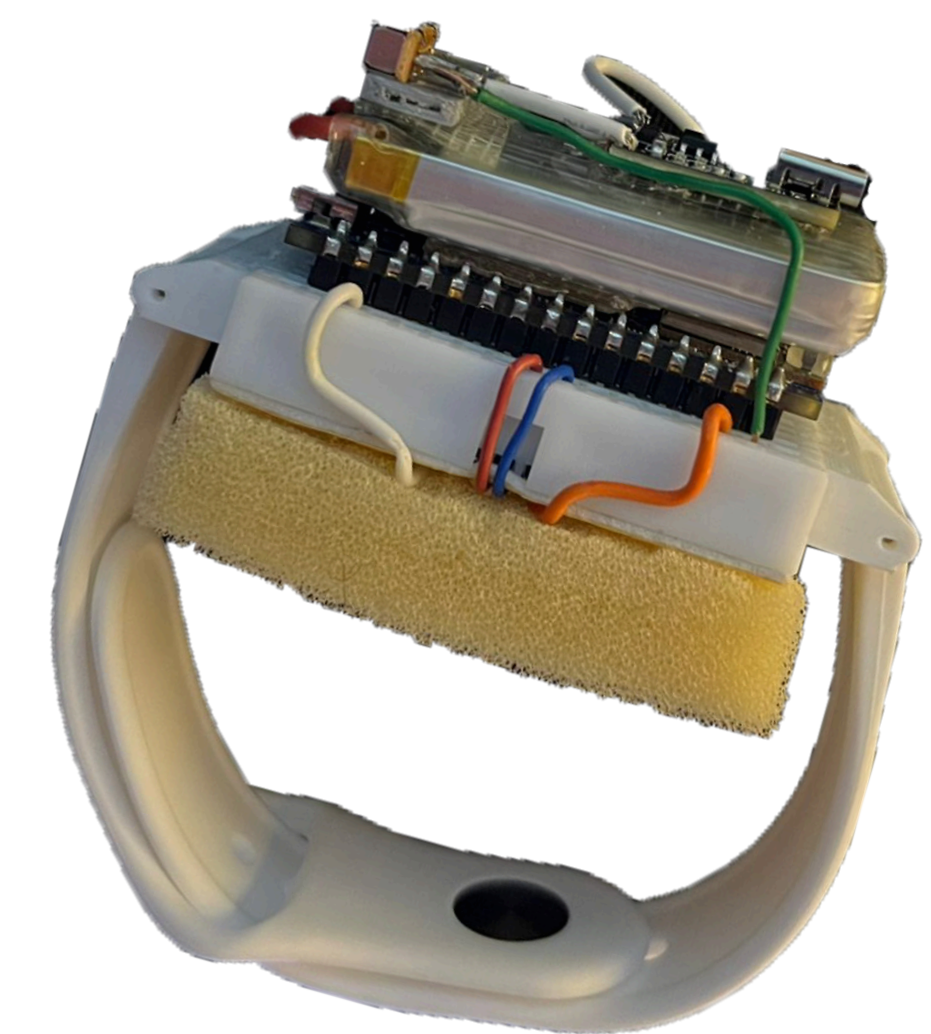

Due to living alone, they are prone to falls and other accidents.

Solution

VIMO is a very simple safety system
It consists of:

A bracelet that monitors the user's heartbeat and movement.

Made with an:
- Heartbeat Sensor
- Accelerometer
- Gyroscope

An App that allows to monitor the bracelet's user from anywhere.

It's intuitive to use.

Sends notifications in case of accidents.

Allows to monitor:
- Falls
- Average hearth rate
- Sleeping quality

Sleeping hours and Sleep Quality

7 Hours

80% quality

Average BPM

120 BPM

Solution Schematic

A local router that processes the data and checks on the user's condition
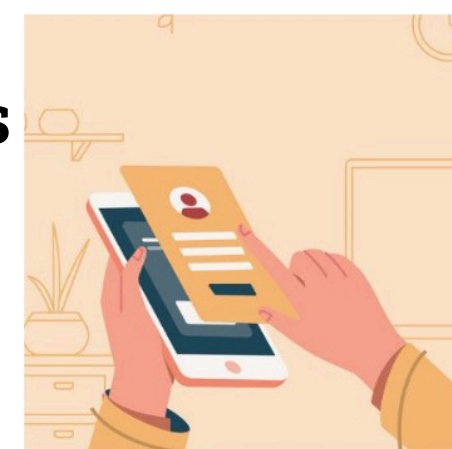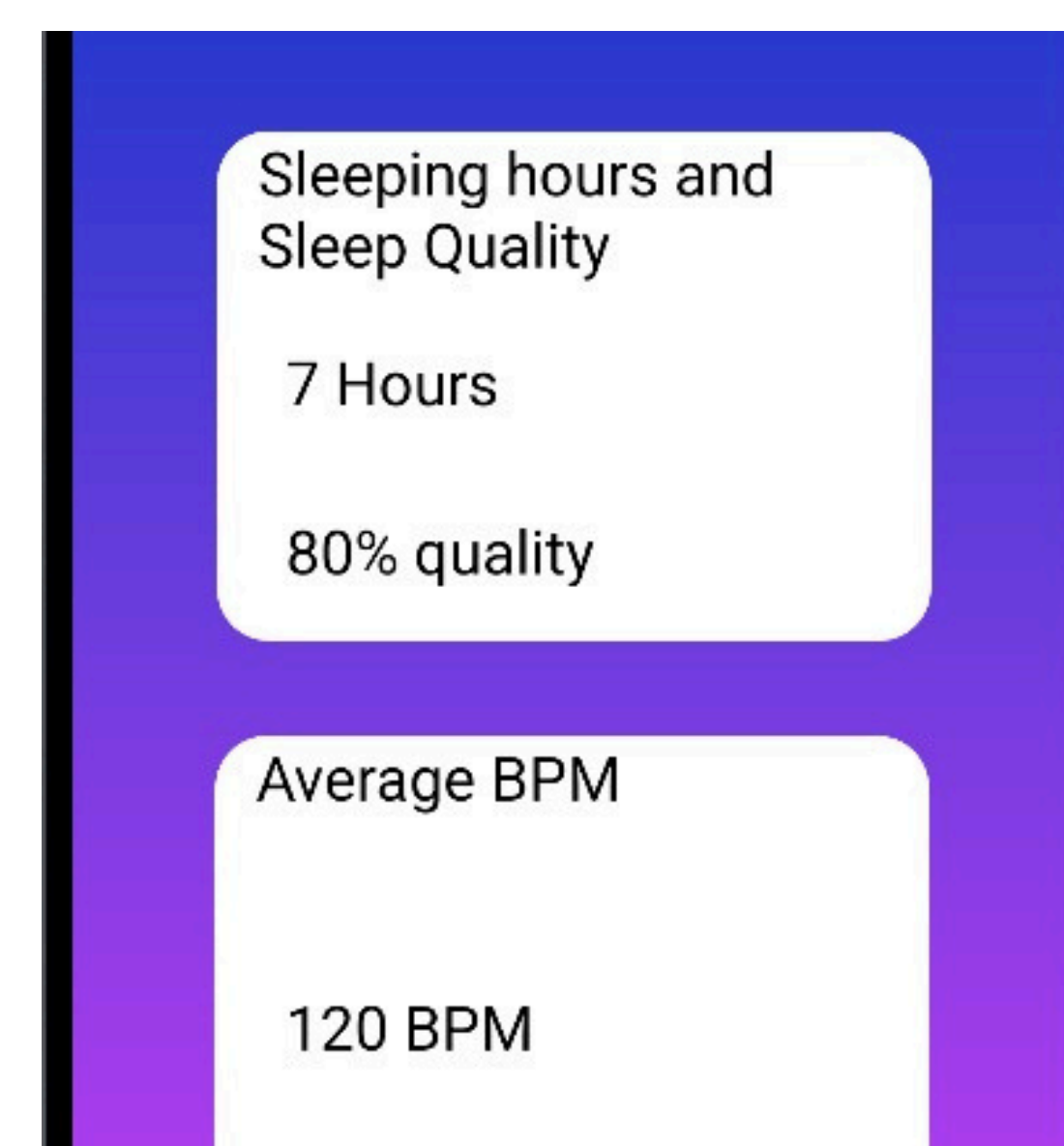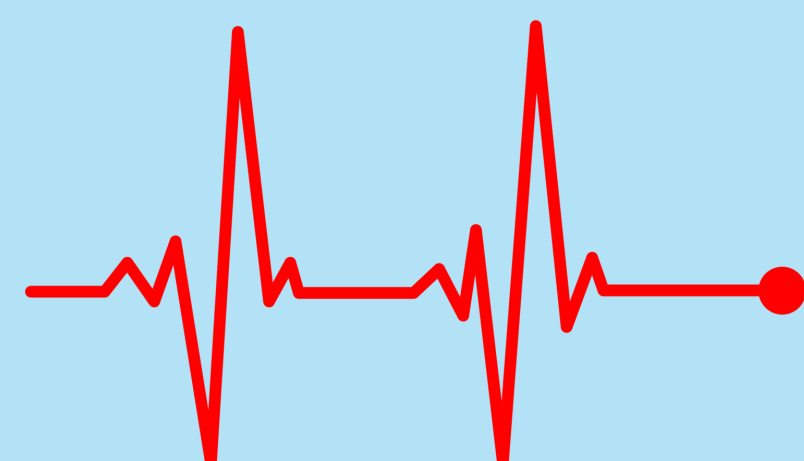
The data is stored in a server

The bracelet gathers information

The app accesses the server and shows the relevant data

Functionalities
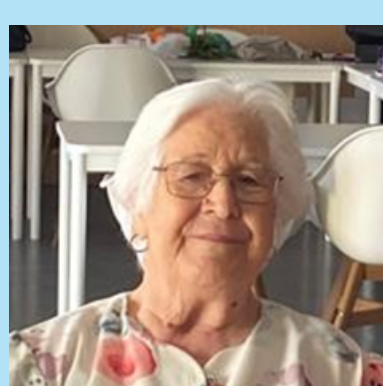

Fall detection

Real time heart rate monitoring

Sleep tracking

Testimonials

Ivóne,
87 anos

"Acho que é ótimo para as nossas idades. Eu tenho 87 anos, vivo sozinha e se eu cair o gato não consegue avisar ninguém."

Lúzia,
87 anos

"Aconselho a todas as pessoas que vivem sós, que usem. Projetos deste género fazem falta."

Results

Entire System

- Real life tested
- The algorithms and thresholds implemented are reliable
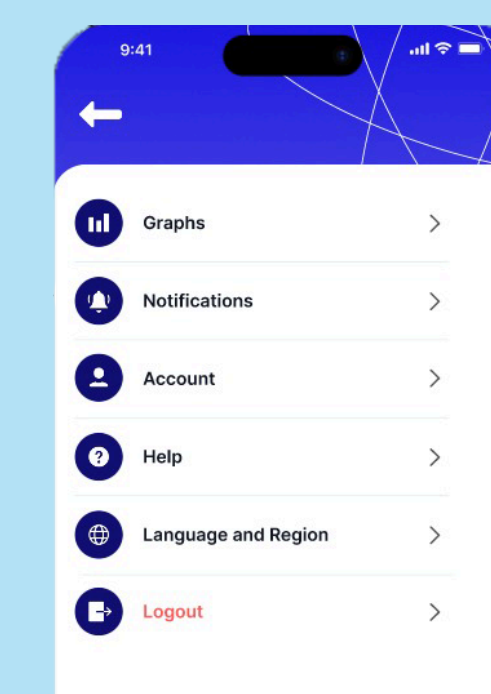- Works in a wide range
- Super efficient battery usage

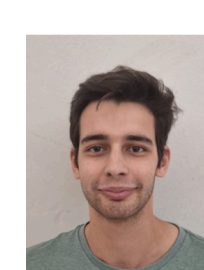| Bracelet	App	Local Router
- Accurate data collecting - Strong connection with the local router - Comfortable and robust	- Android compatible - Able to access the Firebase server - Shows real-time data - Capable to send notifications	- Runs the algorithms with good performance - Capable of uploading to the Firebase server - Reliable connection to the internet

Website   Video   Partners   Team

TÉCNICO LISBOA
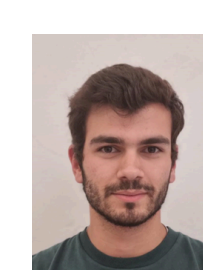
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