



Cúram



# MY DESIGN PROCESS

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Product Story  
Key Features  
Empathise  
Define  
Ideation  
Prototype  
Test





*We don't stop playing because we grow old; we grow old because we stop playing.*

**-George Bernard Shaw**

When I began speaking to seniors as part of my project research, I was struck by the secondary effects that aging was having on their quality of life. Many spoke of the fear they had of falling both inside and outside the home, a fear which led many to reduce their trips outside the home or their activity within the home. To me, aging should not automatically equate to a loss of freedom and quality of life. As such, I set out to create a product that could empower its users, as they step into the next stage in their life.





# KEY FEATURES



## PERSONAL ALARM BUTTON

Careband features a personal alarm button as well as automatic fall detection to send an alert to the caregiver

## MEDICAL ID

Medical ID listed in case of emergencies

## NON STIGMATISING

Sleek, easy to wear and customisable wristband.

## GPS

Live location tracker in case of emergencies or confusion with location. (Can be disabled)

## REASSURANCE LED'S

Red light indicates the alert has been sent.  
Green light indicates the alert has been received and opened.

## TWO WAY COMMUNICATION

User can speak to their carer through the band

# DESIGN PROCESS

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EMPATHY



DEFINE



IDEATE



PROTOTYPE



TEST

# MISSION STATEMENT

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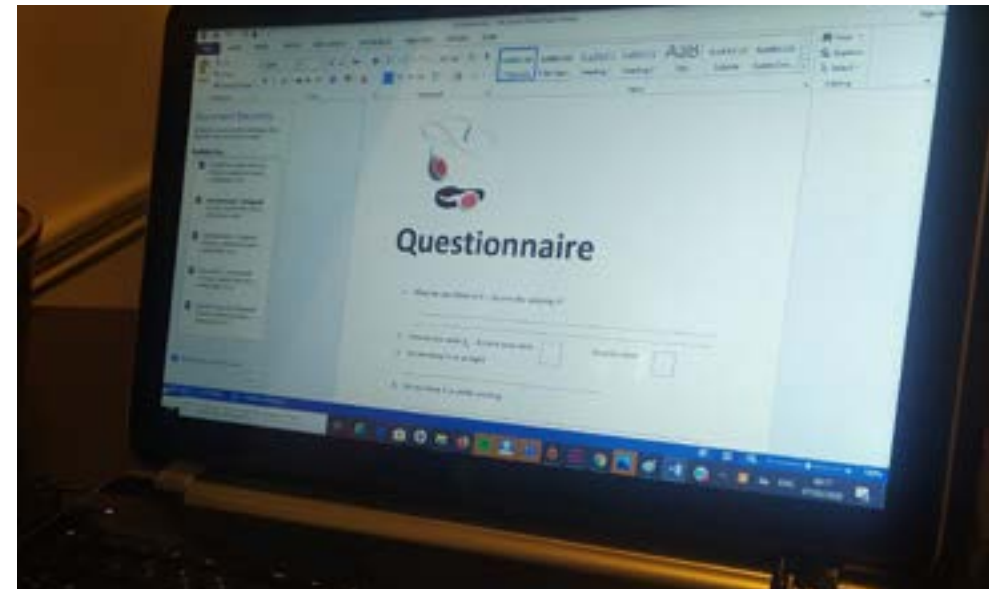
Our mission is to improve the quality of life of individuals and their families, by empowering them with the tools to maintain their independence and decrease their vulnerability.



# USER INVESTIGATION

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My user investigation took the form of various qualitative research techniques. This included one-one-one interviews with both users and carers, case study research and observation. An overarching theme of “loss of independence” quickly began to emerge from my research. Many of the elderly people expressed concern that their loss of independence was significantly affecting their well-being and quality of life, and increasing their symptoms of loneliness.



# KEY FINDINGS

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## Hindrance

Some participants found the necklace pendants to be awkward and in the way. They prefer to keep it in their pocket than around their neck



## Connectivity

All of the users I interviewed had alarm pendants which had to be in close range to the base station in order to function. None of the participants had alarm pendants which could work far from the home.



## Aesthetics

All female participants disliked the stigmatising look of their device. One female participant only wore hers at night as she did not like the look of it.

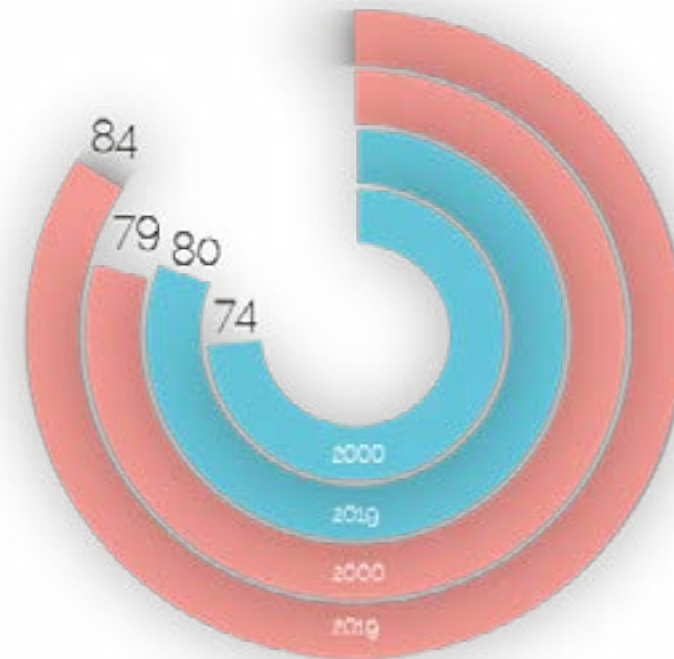


# MARKET RESEARCH

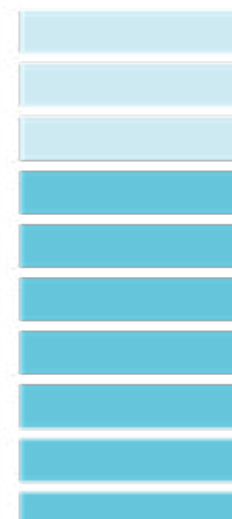
By 2050, virtually every country in the world will experience a substantial growth in the size of the population aged 65 and older. Despite the projections for the exponential growth of this market segment, the world is designed against the elderly. 50% of seniors who buy an emergency alert pendant actually wear them (citing aesthetic, design and functionality issues).

In Ireland, the number of people over 65 is expected to reach 1.4 million by 2040, as mortality rates continue to decrease.

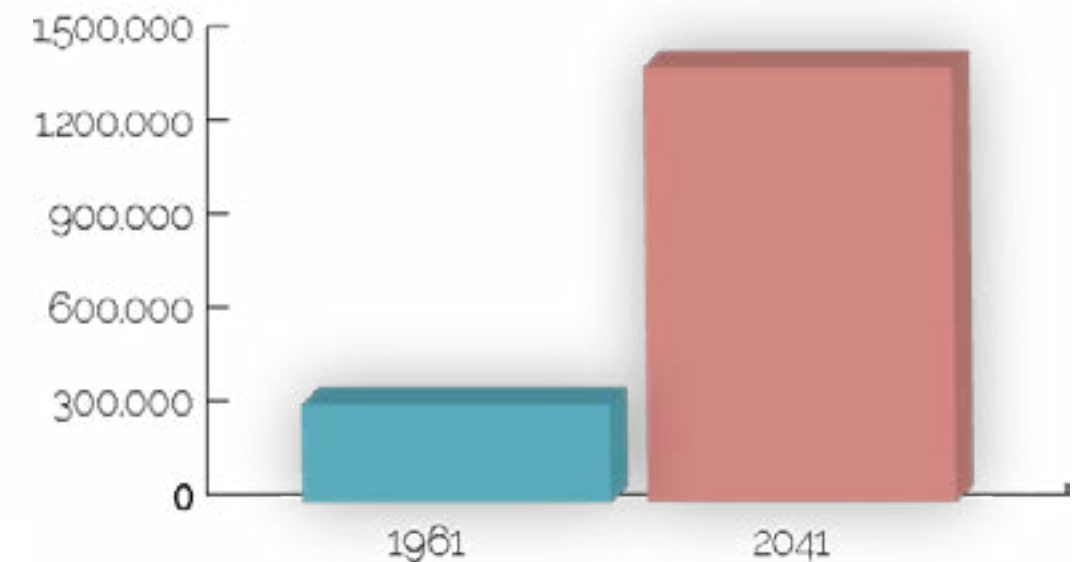
## Life expectancy in Ireland



Percentage of over 50's feeling lonely all or some of the time:  
**70%**



## Number of people in Ireland over 75 by year





# MARKET TRENDS

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Several products already exist in this space, however users have expressed a number of concerns about their functionality and design. Current devices have little thought put into the aesthetics of the user, and many products are quite “clinical” in design. These products do not allow for any self-expression, show no personality and label the user as a “vulnerable” person. The products on the market do not fully take the user into account and are heavy, cumbersome, difficult to use and limited in their functionality.

**The missing ingredient? Dignity.**







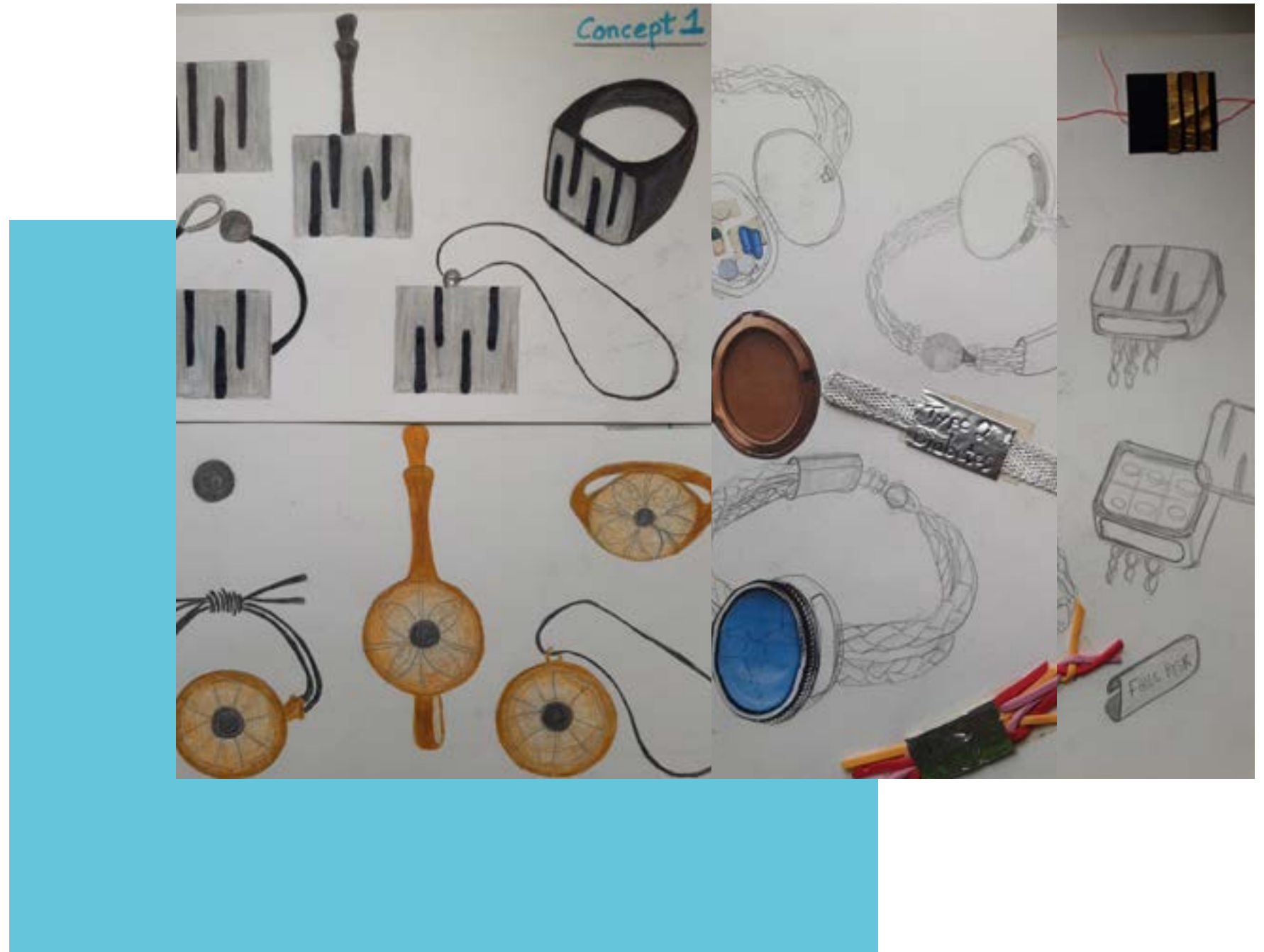
IDEATION



# CONCEPT DEVELOPMENT

My first concepts consisted of a range of fashionable safety alert jewellery that could be worn as bracelets, necklaces, rings, hairclips.

I developed the bracelet further and added extra features such as storage to hold pills in the bracelet, medication reminders and a medical ID plate.





# FEEDBACK & FURTHER DEVELOPMENT



From here i created user scenario's and went back to visit the participants from the interview. Through a survey based around features I was able to get an insight into what the target users wanted.

**“Are all those features necessary?”**

**“Would older women wear that jewellery?”**

**“Do seniors even want to carry pills in their bracelet?”**

**“Why can't men also benefit from the solution?”**



# Cúram

Cúram is a care platform designed to support seniors and their caregivers.

It consists of a modern non stigmatising care band ( Available in a range of colours) , a family of home motion sensors and a mobile phone application for the caregiver.





# FINAL CONCEPT



Automatic Fall  
detection



Medical ID



GPS live  
location



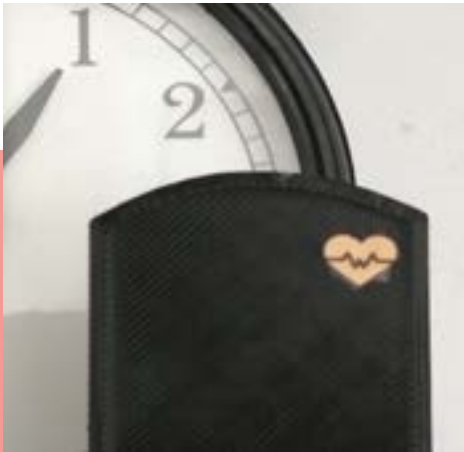
Two way  
communication



Reassurance  
LED

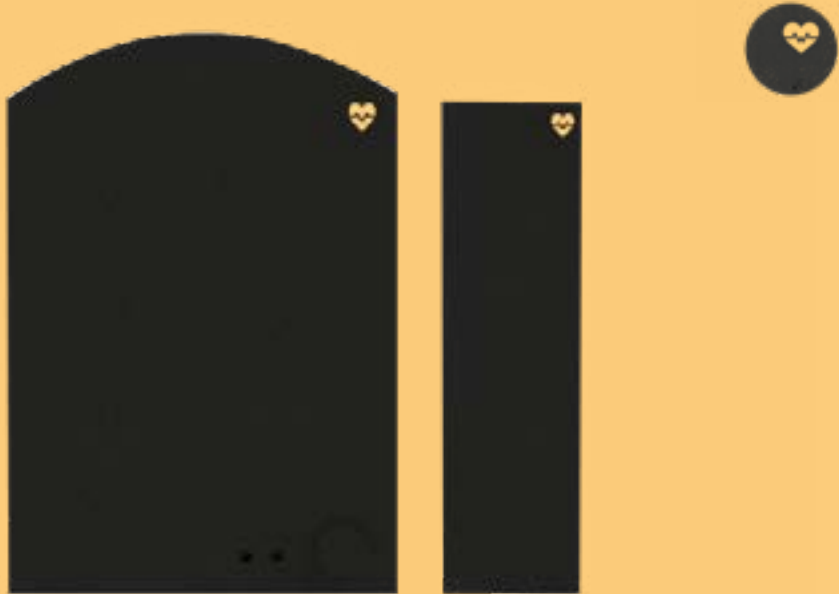


Range of different  
colours

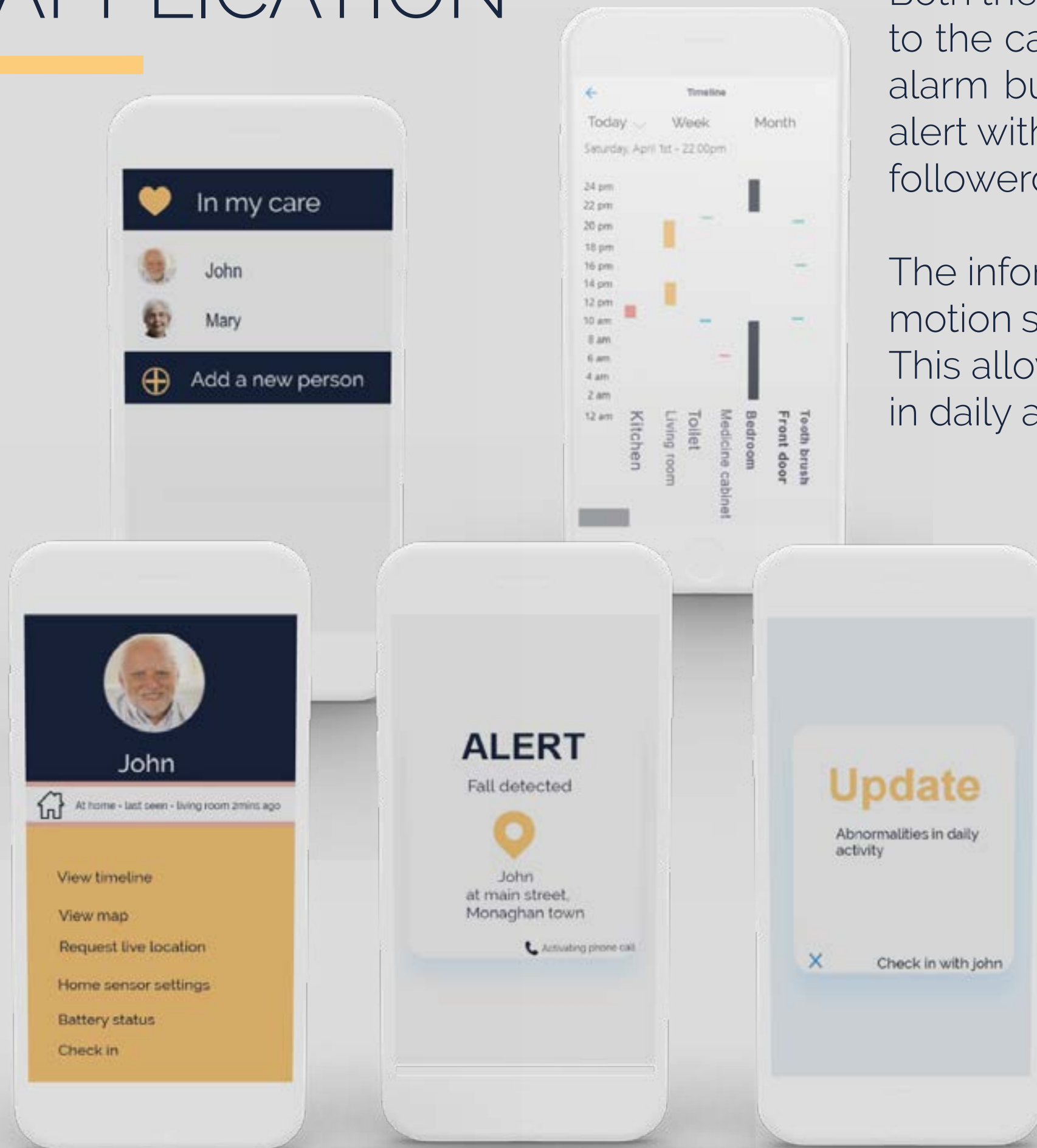


Non intrusive home monitoring motion sensors

Non stigmatising care wristband



# APPLICATION



Both the careband and the home sensors connect to the caregivers app. When the user presses the alarm button or when it detects a fall it sends an alert with their location to the caregivers phone, followed by a phone call.

The information on activity recorded by the motion sensors can be viewed on a chart in the app. This allows the caregiver to spot abnormalities in daily activity.

The app allows the caregiver to create custom updates to be alerted when a specific sensor is activated or has not been activated by a specific time.

The caregiver can see the users live location on the map when they leave their home - (This feature can also be disabled)

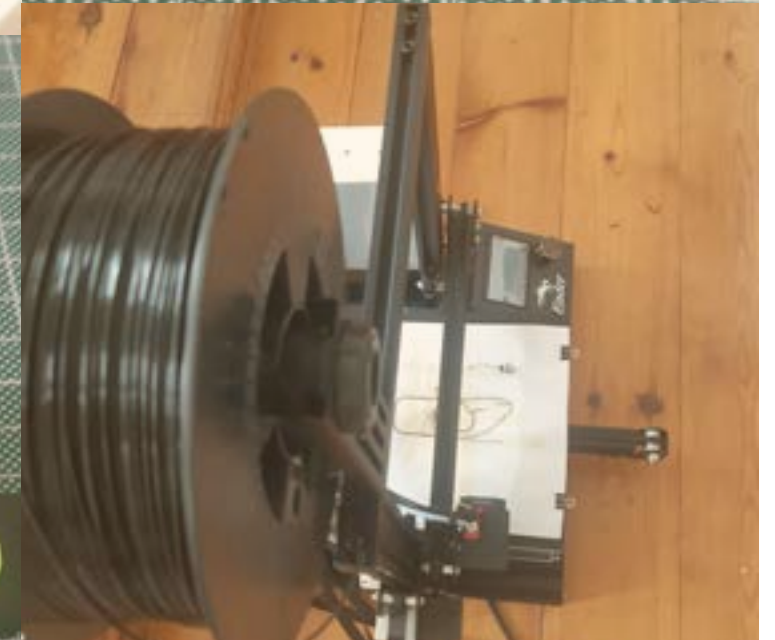


# PROTOTYPE & TESTING

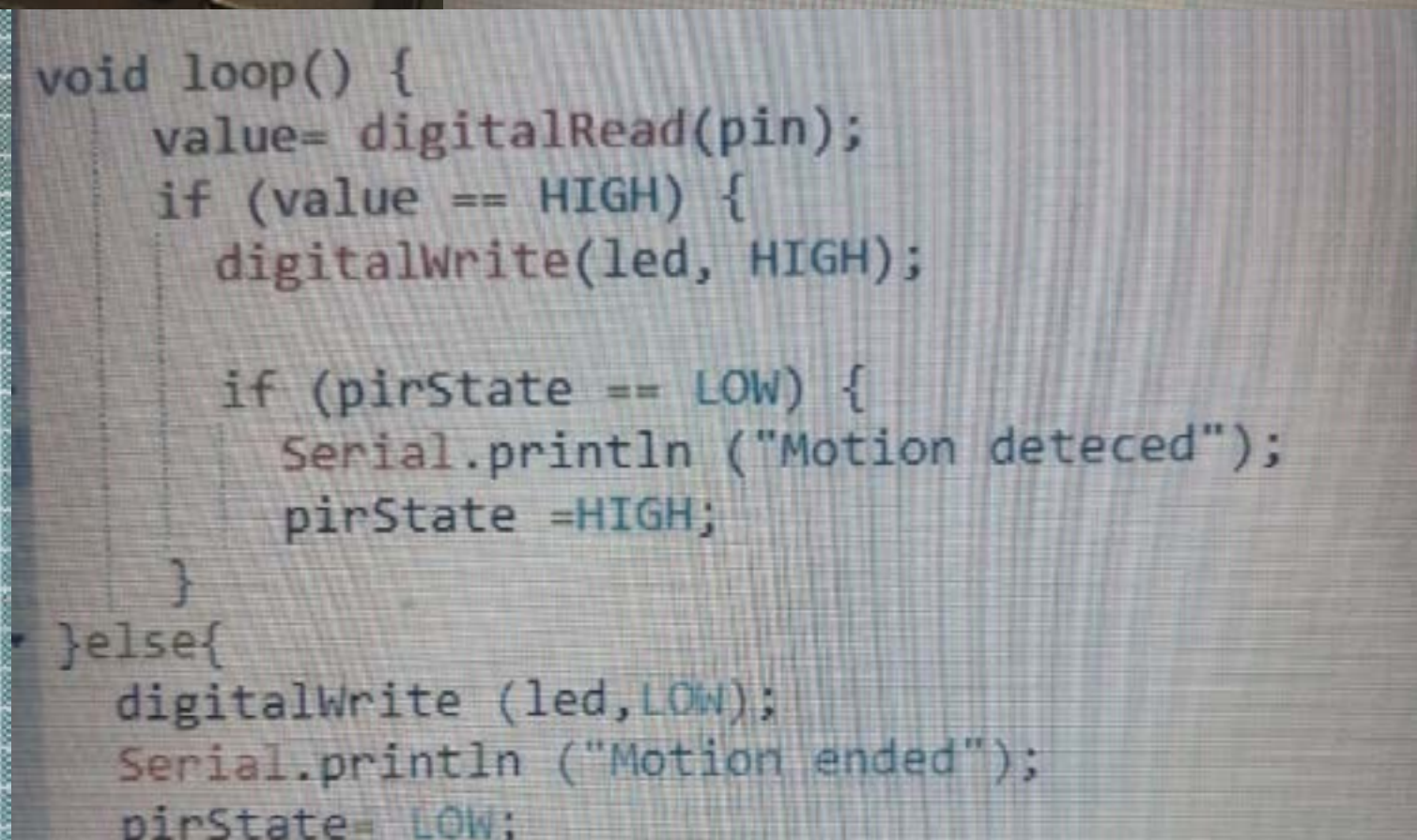
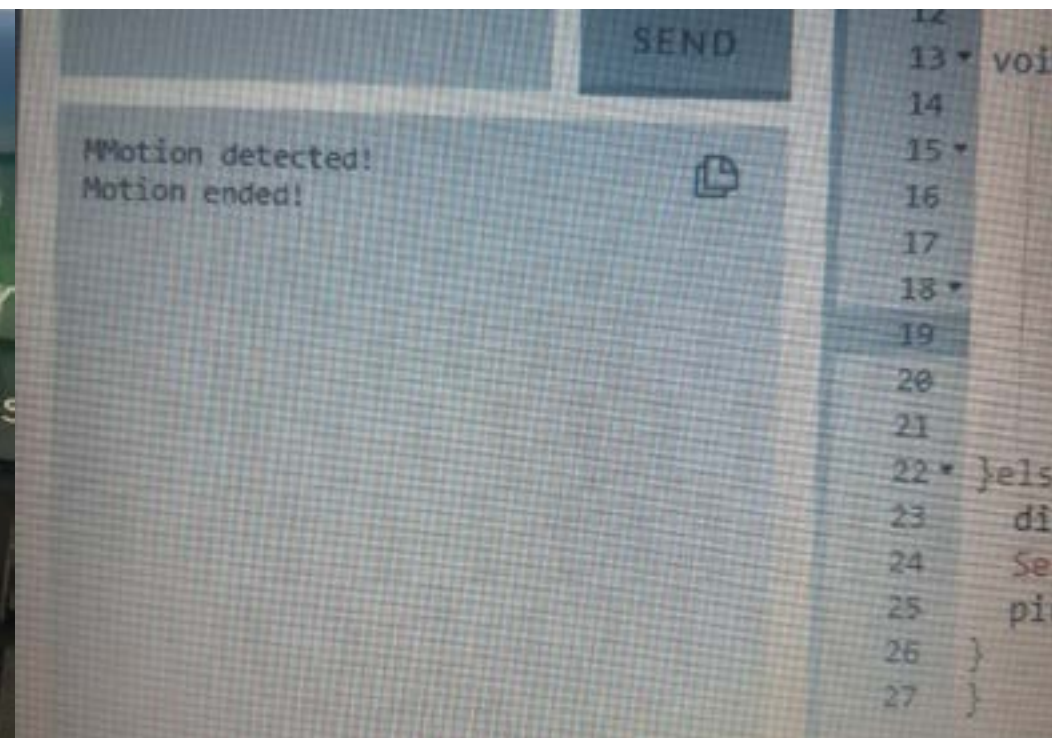
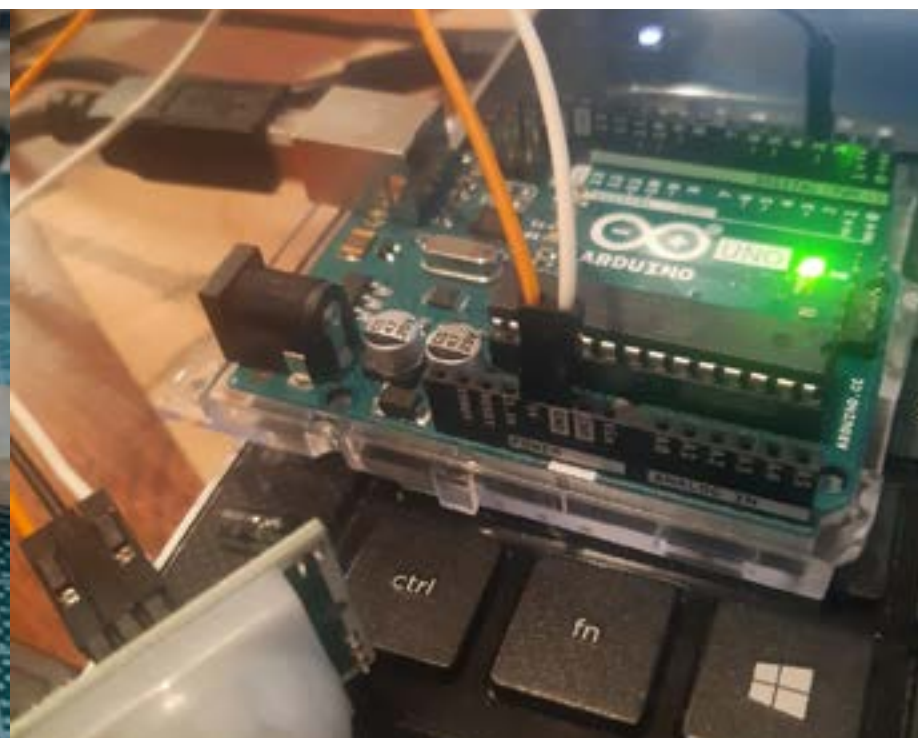
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