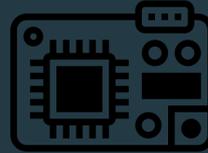


# Red Link

Group E24's Solution For Saint Vincent Hospital





# The Problem

# SVH's Dilemma

*SVH specializes in continuing care which aims to provide support and treatment for patients with complex physical disabilities*

- Unique devices
- Systems disconnected from devices
- Existing solutions = time consuming + expensive
- Relatively small budget

# Big Picture

- >5.3 million Canadians live with a disability that inhibits their mobility
- Patients rely on others and a network of devices to function
- number of devices > ways to connect them

*People with disabilities are hindered from interacting independently with their environments, and their devices can't bridge the gap with every technology they may wish to use.*



# Our Solution

# Existing Solutions

## “IoT Device for Disabled People”

*B. Shubankar M. Chowdhary M. Priyaadharshini*

- Relies on mobility of patients
- Theoretical
- Good proof of concept for IOT used for communication

## VIZIYON

- Specific to visual impairment
- Implements IOT well to communicate information
- Not commercially available

# Design Goals

- Connects an accessibility device to another system
- Have the solution be versatile (IE many input/output devices)
- Have the solution be easy to use
- The solution is inexpensive

# Design Specifications

- Use Wio Link and Node Red software
- Cost less than \$50
- Can be used as a nurse call button

# The Design

← Wio Link 2

DIGITAL 0 ANALOG SELECT

DIGITAL 1 UART SELECT

DIGITAL 2 IC2 SELECT

New setting only applies after updating firmware

GPIO INPUT OUTPUT EVENTS

Patient

Menu Help

Device

CALL NURSE

Wio link Setup

Menu Select device type

TECHNICAL HELP

PROXIMITY SENSOR

BUTTON

Information



# The Prototype

Thank You