

Project Pitch - Open window anywhere for mobility challenged people - HUNG TRAN


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Project Pitch - Open window anywhere for mobility challenged people

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Project Overview

Open-Window-Anywhere is a great home automation solution for the disabled. Basic principles used in creating the Open-Window-Anywhere project are using mobile phones to send signals over the internet to open windows. The creator has put great attention to detail in creating the project pitch.

He is using a mobile interface to send Open/Close windows. He uses a Raspberry Pi as a central control hub of a star topology of Arduino microcontrollers. These microcontrollers are connected with stepper motors to control the actuation of the windows. He is planning on using an event-driven model to reduce processor usage. There is great attention to detail for testing, fault tolerance and debugging.

Positives

- Robust system design
- Testing and evaluation methodologies
- Evaluation of the effect of environmental factors on the system performance
- Simple yet effective system model.

Negatives

- Wiring multiple windows in a larger house to a central hub would be costly. Maybe exploring wireless communication. (Wifi, Bluetooth Low Energy)
<https://store-usa.arduino.cc/products/arduino-nano-33-ble>