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Quinn Damerell (/quinndamerell) • Marilyn Welniak (/marilynw)

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Glow

Home Decor (ish) - Ambient Lighting (ish) - Real World Information (ish)

🔒 Beginner(/projects?difficulty=beginner) 📖 Full instructions provided 👁 7,789



2

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(https://www.kickstarter.com/projects/147449099/tooldance-x1-smart-desktop-cnc-with-industrial-capability?utm_source=hackster&utm_medium=display&utm_campaign=tooldance_x1&utm_content=content)

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Things used in this project

Hardware components

Raspberry Pi 2 Model B

(/rasberry-pi/products/raspberry-pi-2-model-b?ref=project-f9adae)

× 1

17

/products/bw/183702

s=BAhJIhIxMDQ3OSxGcm9qZWNoBjUGRUY%3D%0A)

Adafruit 24-Channel 12-bit PWM LED Driver - TLC5947

Note: all you really need is the TLC5947 chip, but this board gives a nice interface to it.

× 1

Bright LED - RGB Diffused Common Anode

You need one LED for each object you want to light. In this project I needed 5; one for each ball.

× 5

4 Channel 22 AWG Wire

You can use whatever here, but this is the best I could find to match my white walls. This one wire has 4 wires running in it, so you can run one wire to each LED and control all of the colors.

× 1

Jumper wires (generic)

It is always helpful for playing around to have some jumper cables. For example
<https://www.adafruit.com/products/826/>

× 1

17

/products/bw/437422

s=BAhJIhIxMDQ3OSxGcm9qZWNoBjUGRUY%3D%0A)

Official Raspberry Pi WiFi

Dongle

You only need this if you want to use WiFi on your Pi. Note: currently Windows IoT only supports this adapter, so if you want Windows IoT is one!

× 1

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Software apps and online services

Microsoft Windows 10 IoT

Core

(/microsoft/products/windows-10-iot-core?ref=project-f9adae)

<https://dev.windows.com/en-us/iot-core>

Hand tools and fabrication machines

Soldering iron (generic)

Story

Glow

Glow is a simple home décor (ish), ambient lighting (ish), real-time information (ish) system. The idea came from some paper lanterns we had hanging in our house as decoration for our engagement party. I thought it would be cool to put RGB LEDs in each ball and see what I could do with color. I wanted the whole project to be very smooth, flowing, and animated -- which I discovered was rather difficult to achieve with a Pi -- so I wrote a number of software libraries with the Pi 2 and RGB LEDs.

Since Glow is also smart and connected to the internet, we can do interesting things like show the weather on the objects, flash for notifications, or whatever you can think of.

Glow is really just a simple platform to smoothly control LEDs with a Raspberry Pi and a Windows based device -- once you have it setup the possibilities are endless!



Glow - A Windows Universal IoT Raspberry Pi Maker Project!

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✓ **Read more**

Code

Windows Iot Led Driver

The Windows IOT Led Driver is used to control the TLC5947 PWM chip and the LEDs attached. It provides a nice abstraction in the software to the LEDs and also provides the base of the animation logic.

<https://github.com/QuinnDamerell/WindowsIotLedDriver>

4 QuinnDamerell (<https://github.com/QuinnDamerell>) / WindowsIotLedDriver
1 (<https://github.com/QuinnDamerell/WindowsIotLedDriver>)

No description — Read More (<https://github.com/QuinnDamerell/WindowsIotLedDriver#readme>)

Latest commit to the master branch on 11-13-2015 [Download as zip](https://github.com/QuinnDamerell/WindowsIotLedDriver/archive/master.zip) (<https://github.com/QuinnDamerell/WindowsIotLedDriver/archive/master.zip>)

Glow

This is the main code that powers Glow. The repo has a single windows universal project that builds a single app that runs as the server on the Raspberry Pi can a client on a desktop, tablet, or phone.

<https://github.com/QuinnDamerell/Glow>

QuinnDamerell (<https://github.com/QuinnDamerell>) / Glow2 (<https://github.com/QuinnDamerell/Glow/forks>)
(<https://github.com/QuinnDamerell/Glow>)

No description — Read More (<https://github.com/QuinnDamerell/Glow#readme>)

Latest commit to the master branch on 9-1-2015 [Download as zip](https://github.com/QuinnDamerell/Glow/archive/develop.zip) (<https://github.com/QuinnDamerell/Glow/archive/develop.zip>)

Credits



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(/quindamerell) Developer by day; Hacker by night. :)

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(/marilynw)

Marilyn Welniak (/marilynw)

1 project • 4 followers

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Comments

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(/starbuck-blue-11)

Michelle Wall (/starbuck-blue-11)

11 years ago

We want this! 🤩 Very cool!



(/gregzetko)

Greg Zetko (/gregzetko)

11 years ago

I appreciate the template 10 🤩 Cool project though!



(/rishabhbanga)

Rishabh Banga (/rishabhbanga)

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Is it possible to use RGB LED's available with the Grove Kit instead of the Anode LED's?

http://www.seeedstudio.com/depot/Grove-Starter-Kit-for-Arduino-p-1855.html

(http://www.seeedstudio.com/depot/Grove-Starter-Kit-for-Arduino-p-1855.html)



(/tetsuo-newton-14)

tetsuo-newton-14 (/tetsuo-newton-14)

11 years ago

Cool! I kinda like how it animate between the LED. It kinda cool to have it when it glow on sad night.



(/johnwpowell)

John Powell (/johnwpowell)

11 years ago

Where can I get those 4 pin connectors?



(/javier-munoz-saez)

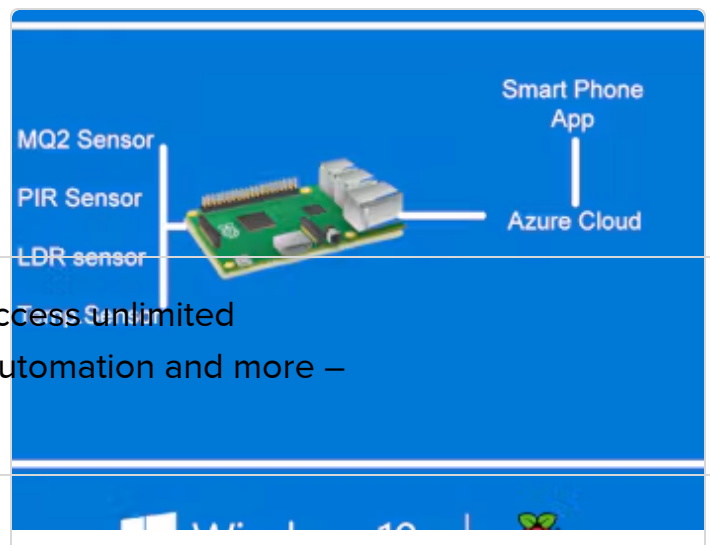
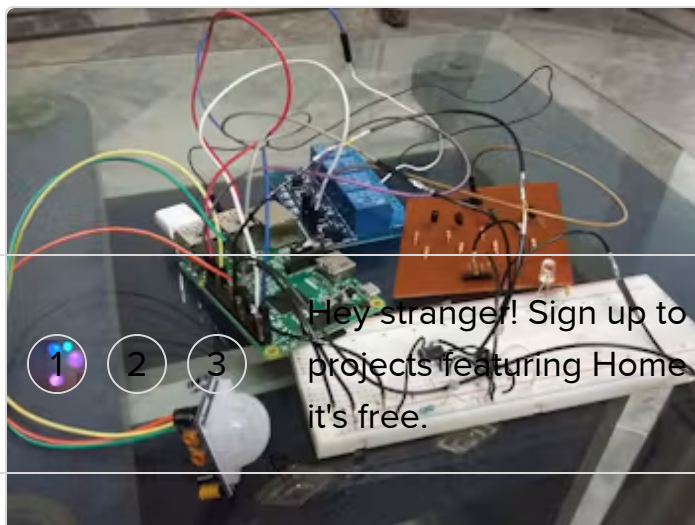
javier Muñoz Sáez (/javier-munoz-saez) ✓

10 years ago

i did something similar, mind using 433mhz 1\$ transceivers to build a remote or an internet->microcontroller link

https://www.hackster.io/javier-munoz-saez/20-rf-smart-controlled-rgb-leds-for-bikes-613eea?ref=user&ref_id=85424&offset=0 (https://www.hackster.io/javier-munoz-saez/20-rf-smart-controlled-rgb-leds-for-bikes-613eea?ref=user&ref_id=85424&offset=0)

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Lights IoT (/phantom-hawking-11/lights-iot-ba637e)

Maryam Zafar Choudri (/phantom-hawking-11)

👍 10

👁 5.3K



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👍 13

👁 3.8K



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Smart Doorbell with Azure, Windows10 IoT & UWP App (/Kishore10211/smart-doorbell-with-azure-windows10-iot-uwp-app-0e4e4d)

Kishore Gaddam (/Kishore10211)

👍 115

👁 33K



(/iddi/windows-iot-automate-your-power-outlets-b1ba1e)

Windows IOT - Automate your power outlets (/iddi/windows-iot-automate-your-power-outlets-b1ba1e)

Syed Sanoor (/iddi)

👍 57

👁 27K



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(/ThereIsNoTry/personal-home-safety-agent-2068ea)

Personal Home Safety Agent (/ThereIsNoTry/personal-home-safety-agent-2068ea)

Philippe Libiouille (/ThereIsNoTry) ✓

👍 89 👁 26K

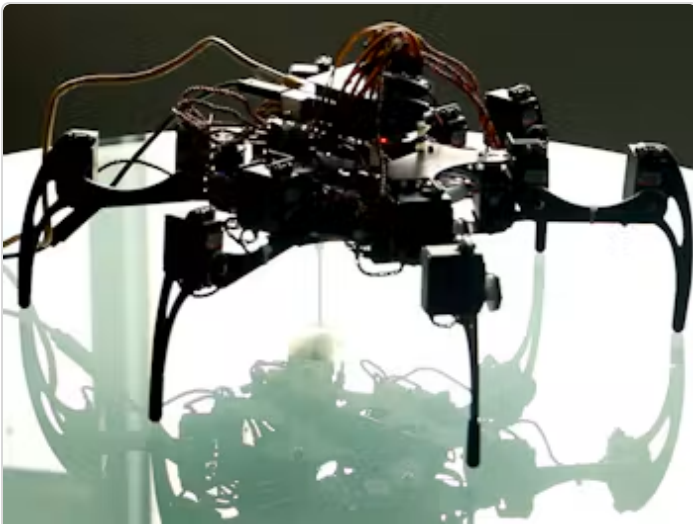


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Kevin D Wolf (/cyborg-gibson-11)

👍 65 👁 22K



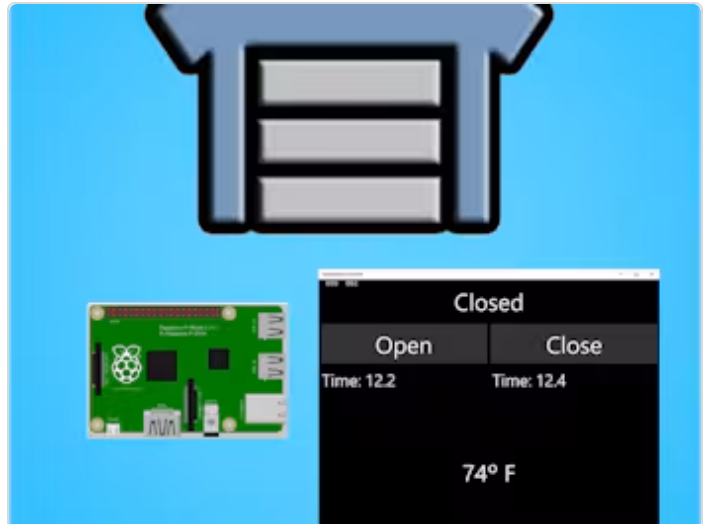
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Hexapet (/peejster/hexapet-fa998f)



Prasantha Jayakody (/peejster)

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(/mlinnen/garage-door-powered-by-win-10-and-raspberry-pi-b2ed94)

Garage Door powered by Win10, AllJoyn and Raspberry Pi (/mlinnen/garage-door-powered-by-win-10-and-raspberry-pi-b2ed94)

Mike Linnen (/mlinnen) ✓

👍 75

👁 13K



👍 39

👁 12K



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