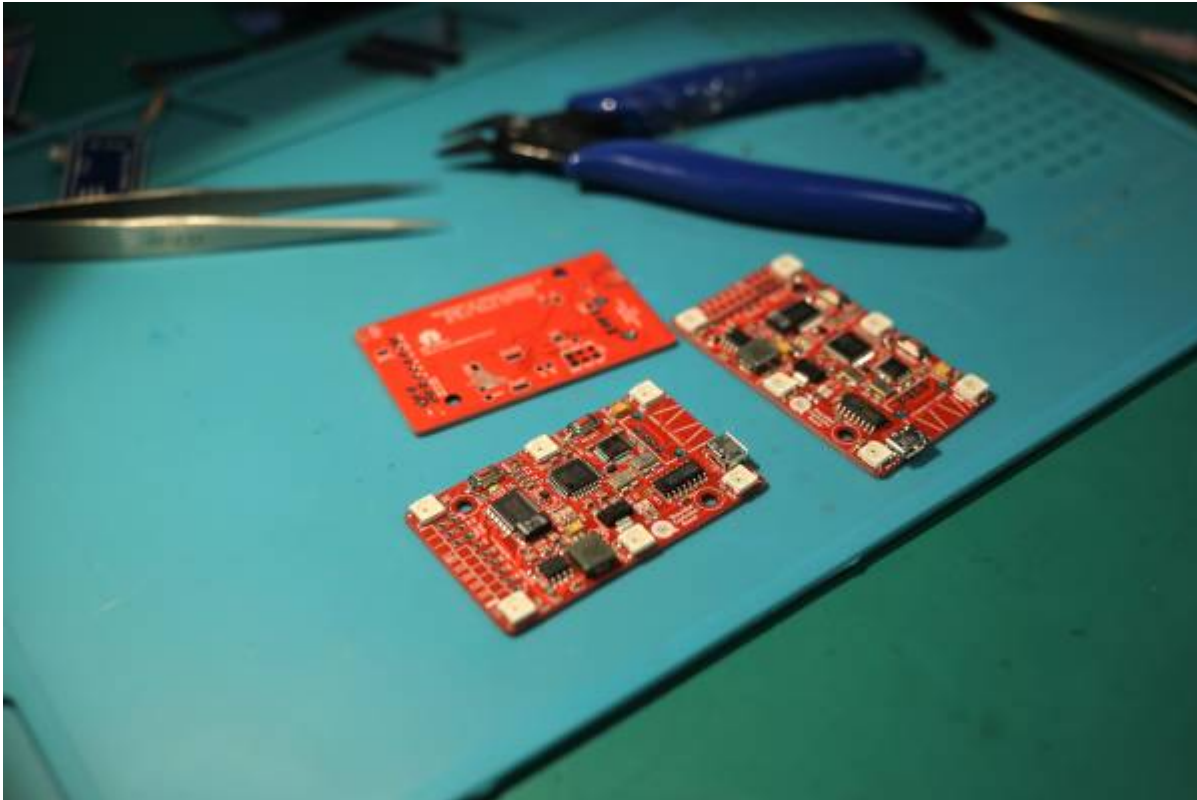




Cheapduino Wearable Nightlight



SLQ Wiki Fabrication Lab 2025/07/18 10:21

Cheapduino Wearable Nightlight



THIS WORKSHOP HAS NOT BEEN RUN SINCE 2017, IS AVAILABLE FOR ARCHIVAL PURPOSES ONLY. ANYONE SEEKING TO ADAPT THIS WORKSHOP SHOULD CONSIDER THE FOLLOWING INFORMATION.

WARNING - This workshop makes use of small coin cell/ button batteries.

 WARNING KEEP OUT OF REACH OF CHILDREN Swallowing can lead to chemical burns, perforation of soft tissue, and death. Severe burns can occur within 2 hours of ingestion. Seek Medical attention immediately.	
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In December 2020, the Australian Government made mandatory safety and information standards for button/coin batteries and consumer goods that contain button/coin batteries (the standards). The standards included an 18 month transition period and became mandatory from 22 June 2022. From 22 June 2022 manufacturers, importers,

wholesalers and retailers of button/coin batteries or consumer goods that contain button/coin batteries supplied to Australia, must comply with the applicable Australian mandatory safety and information standards. Supplying or selling non-compliant products to consumers in Australia is illegal. The four mandatory standards are as follows:

- [Consumer Goods \(Products Containing Button/Coin Batteries\) Safety Standard](#)
- [Consumer Goods \(Products Containing Button/Coin Batteries\) Information Standard](#)
- [Consumer Goods \(Button/Coin Batteries\) Safety Standard](#)
- [Consumer Goods \(Button/Coin Batteries\) Information Standard](#)

Developed by Daniel Flood 2017.

Summary

Workshop has been designed for the BrisMakerFest 2017 for delivery as a part of the program., to cover off on our wearables commitment. The unit price is cheap and based on older work and other people's basic ideas. It might be easily modified to take other sensors and do other things but for the moment we're keeping it simple.

It was inspired by this project in [Make Magazine](#) that did it with a full sized Arduino.

Activity Summary

Participants will assemble and get to know how to code a wearable nightlight comprising of a Cheapduino, Light Dependent Resistor (LDR), LED and some resistors. There's a battery at the moment but once we get a super-capacitor battery in place we will swap it out. Odds are we will use some magnets to get them to pin to people's shirts.

Materials

- 1.5mm Acrylic
- 3x 220 Ohm Resistors
- 1x 10K Ohm Resistor
- 1 x LED (bright white)
- 1 x CR3024 coin cell battery
- 1 x CR3024 coin cell battery

- 1 x Cheapduino
- Some wires
- Some solder

Tools

- Soldering Iron
- Wire cutters
- Hot glue gun

Instructions

Rename the steps as you like, use *italics* or **bold** for emphasis

Step Zero:

Step One:

Step Two:

Step Three:

Step Four:

Step Five: Troubleshooting

Step Six: References

Production notes

Critical Success Factors

[Which of the critical success factors does this Prototype target? For more details see](#)

SLQ-Strategic-Plan-2016-20

Enable Access

- ☐ Provide life skills and early childhood literacy programs

- ☐ Increase free access to digital content
- ☐ Strengthen Queensland library infrastructure and discovery platforms

Engage Community

- ☐ Grow the State's historical collection of Queensland culture and heritage
- ☐ Engage with communities of interest through dedicated centres of engagement
- ☐ Facilitate the community's use of and interaction with content

Build Capability

- ☐ Build capacity within our communities of interest
- ☐ Generate new revenue sources
- ☐ Position our workforce for the future

Delivering of The Edge Promises

Aside from the SLQ Strategic Plan, there is The Edge's commitments to the community and the lens we look at it through. Here are a few more check boxes for you to answer

This empowers creative experimentation across...

- ☐ Art?
- ☐ Science?
- ☐ Technology?
- ☐ Enterprise?

It will inspire...

- ☐ Whimsy?
- ☐ Nostalgia?
- ☐ Curiosity?
- ☐ Awe?

Feedback

1. Feedback:

Solution:

2. Feedback:

Solution:

3. Feedback:

Solution:

4. Other observations:

References

This were you put external links like [LED generator](#)

Files

This is where you put files for laser cutting etc..