

Beautiful Circuit

By: Vigneshwar Premachandran

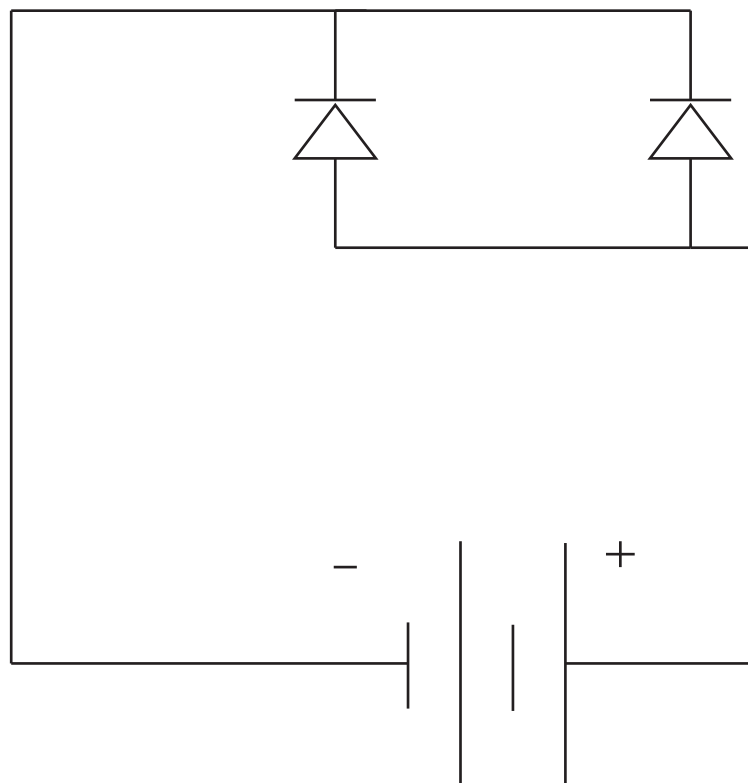
Project Description

The product is a plush toy that lights up. The toy character is modeled after a daikon, a form of radish used often in Japan. The characters cheeks light up when it touches the battery on it's stomach.

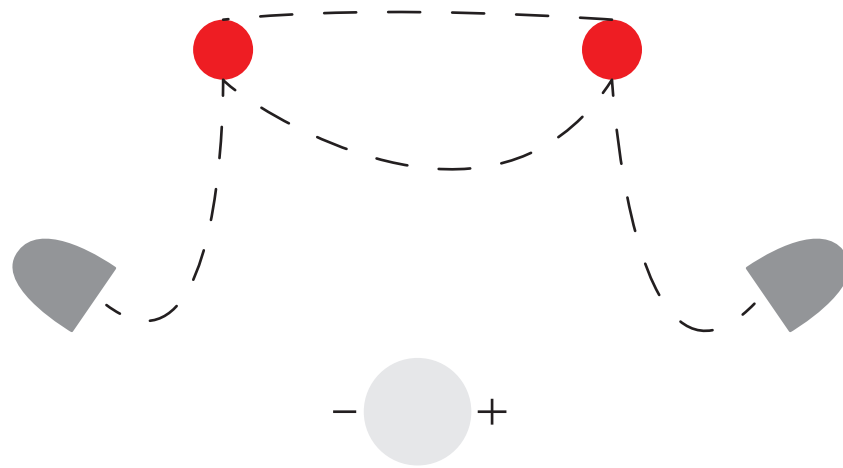
Materials List

- Felt (White)
- 2x Red LED 2-2.2V - Creatron
- Conductive Thread - Creatron
- Assorted Buttons - found
- Camelion 3V Lithium battery
- 3V battery holder
- Black thread - Fabricland

Circuit Diagram



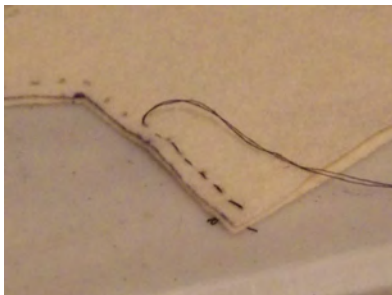
Circuit Illustration



Process:



Began with a paper cutout of the character shape. Template was traced on white felt and cut.



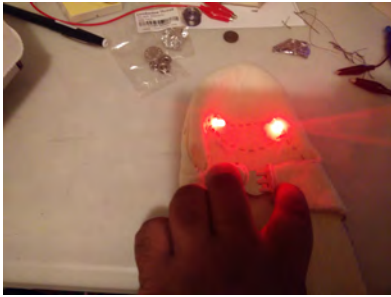
Used back stitch to attach two pieces of felt together.



Reverse the stitched felt to hide the stitch.



Ran into a problem, needed to undo half of the stitch to sew in the circuit, and LEDs.



Circuit completed and tested. Restitched the felt halves together.



Completed first model used only conductive thread on the hands of the plushie to complete the circuit. Takes a lot of positioning to get it to work, not very effective.



Final model, added aluminum foil to the hands for larger conductive area. Added buttons and different coloured felt for aesthetic. Filled plushie with cotton and sealed with blanket stitch.