Midterm Proposal

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Children needs a fun and realistic toy for upcoming Christmas Day. Adults want to give a fantasy feeling to their children to celebrate their holiday. This project is about both fun and interactive "Tinker bell Jar." This Tinker bell Jar is coming with a music reactive LED light inside which increases the fairy tale mood. The background music of Tinkerbell will plays and the light will be follow the rhythm. Moreover, you can change your color of the light in mobile app. Kids can choose whatever color they want and display Tinker bell jar with different colors. Let Tinker bell presents children a fantasy!

Tinkerbell Jar



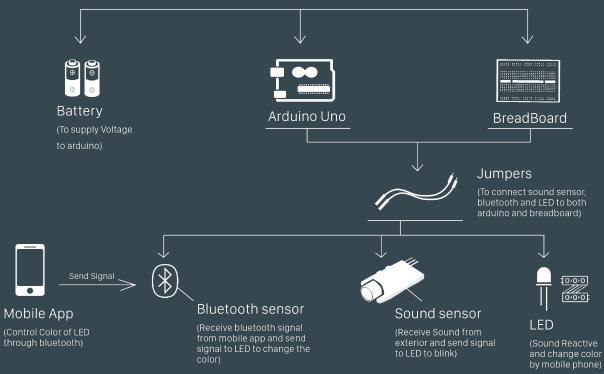


- A laptop computer
- Arduino Uno R3
- USB cable
- 5V power supply
- RGB LED >> NeoPixel LED
- Sound Sensor
- Bluetooth HC-05
- Joint Cables
- Glass mason jar & other elaborative papers

Connectivity

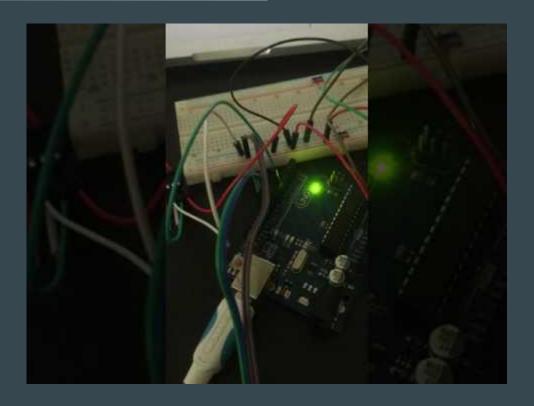






Trial >> Sparkle Effect





"But this sparkle effect didn't give a feeling of tinkerbell flying in the jar."

LED for tinkerbell flying







Sound Reactive LED

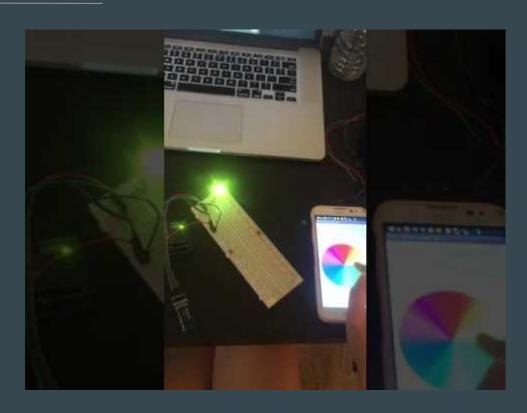






Color change_LED



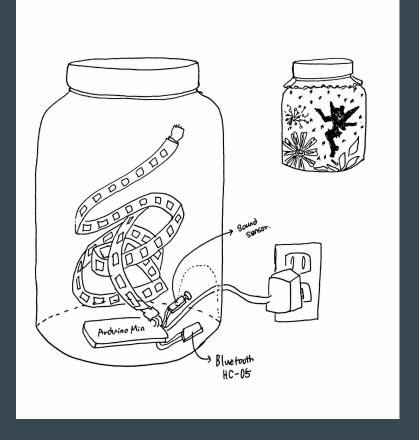


Restriction



As this is should be a children's toy, it should be mobile and handy. Now, it has to be connected to laptop to get power from USB and arduino uno is too big to fit in the jar. The outfit of the toy is having a problem. Probably, replacing the USB port to battery and smaller size for arduino would make this product better.

Final Product - rough sketch





Thank You **