Contact Information

Eagle Scout candidates should know who is involved, but contact information may be more important to unit leaders and others in case they want to talk to one another. While it is recognized that not all the information will be needed for every project, Scouts are expected to provide as much as reasonably possible. Approval representatives must understand, however, that doing so is not part of the service project requirement.

Eagle Scout Candidate

Name: Austin Jewell Motz	Birth date: June 21, 2000
Email address: austinmotz2@gmail.com	BSA PID number*:

Address: 8263 Little Harbor Drive	City: Cincinnati	State: Ohio	Zip:	45244

Preferred telephone(s): (513)417-4779	Life board of review date: 8/24/15

* BSA PID No., found on the BSA membership card

Current Unit Information

Check one: ☐ Troop ☐ Team ☒ Crew ☐ Ship	Unit Number: 281
Name of District: Blue Jacket	Name of Council: Dan Beard

Unit Leader   Check one: ☐ Scoutmaster   ☐ Varsity Coach   ☐ Crew Advisor   ☐ Skipper

Name: Doug Sedenburgen	Preferred telephone(s): (513)260-2160		
Address:	City:	State: OH	Zip:
Email address:			

Unit Committee Chair

Name:	Preferred telephone(s):		
Address:	City:	State:	Zip:
Email address:			

Unit Advancement Coordinator *(If your unit has one)*

Name:	Preferred telephone(s):		
Address:	City:	State:	Zip:
Email address:			

Project Beneficiary *(Name of religious institution, school, or community)*

Name: Nagel Middle School	Preferred telephone(s): (513)474-5407			
Address: 1500 Nagel Road	City: Cincinnati	State: Ohio	Zip:	45255
Email address:				

Project Beneficiary Representative *(Name of contact person for the project beneficiary)*

Name: Rose Arnell	Preferred telephone(s):		
Address:	City:	State:	Zip:
Email address: rosearnell@foresthills.edu			

Your Council Service Center

Contact name:	Preferred telephone(s):		
Address:	City:	State:	Zip:

Council or District Project Approval Representative
(Your unit leader, unit advancement coordinator, or council or district advancement chair may help you learn who this will be.)

Name:	Preferred telephone(s):		
Address:	City:	State:	Zip:
Email address:			

Project Coach *(Your council or district project approval representative may help you learn who this will be.)*

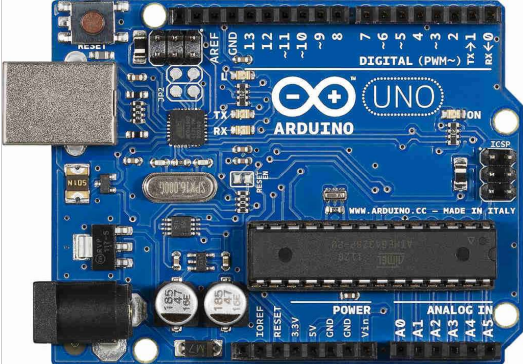|			
Name:	Preferred telephone(s):		
Address:	City:	State:	Zip:
Email address:			

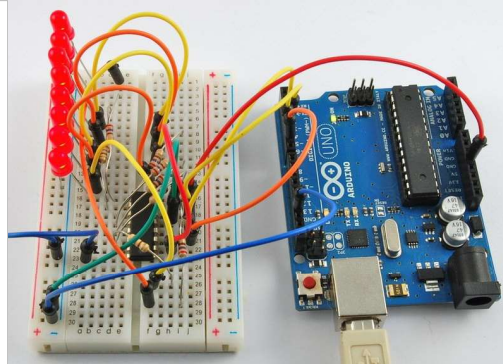# Project Description and Benefit

Briefly describe your project.

My Eagle scout project will be to create a set of 10 classroom projects to learn uses and methods of implementing Arduinos (small, cheap microcontrollers) into interesting projects. These activities will teach students programming, breadboarding, circuitry, and problem solving skills. Projects will range from beginner tasks such as turning on an LED after making the circuit and programming it to creating a small robot arm.

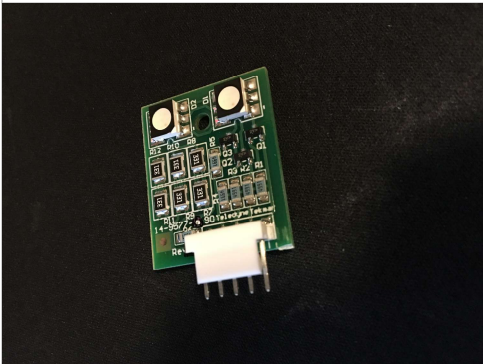Attach sketches or "before" photographs if these will help others visualize the project.

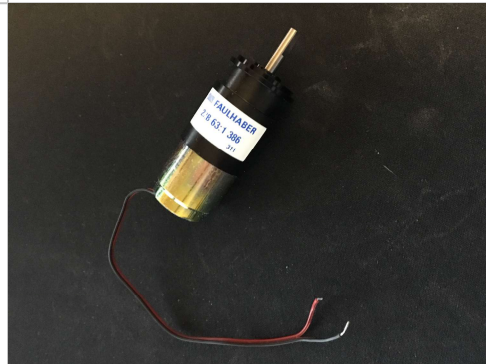Please click below to add images (**JPEG, JPG, BMP, GIF, TIF, PNG, etc.**)

Arduino platform to be used.

Arduino with a breadboard; the main circuit-building platform of the class.

RGB LED for different colored lights

Small Motor to be used for a robot

Tell how your project will be helpful to the beneficiary. Why is it needed?

This project will be helpful to use already existing tools at Nagel middle school to create a way to use them because they are currently going unused because of lack of knowledge about the Arduinos. This will teach students skills in rapidly growing STEM fields and expose them to computer hardware and programming. This will make students more prepared for the rising world of technology and build a base for them to go on into programs in high school such as robotics and computer science.

When do you plan to begin carrying out your project?   Mid May 2017

When do you think your project will be completed?   August 2017

Giving Leadership

Approximately how many people will be needed to help on your project?   15

Where will you recruit them (unit members, friends, neighbors, family, others)? Explain:

I will recruit friends from my robotics team with basic skills in STEM, 3D printing resources, circuit board makers, and people with knowledge of how to make a circuit on a breadboard. In addition to creators I will also need tester to do the projects to make sure they are realistic.

What do you think will be most difficult about leading them?

The most difficult part about leading them will be creating a team that can work to create a project from different areas, from making sample code for reference to making a circuit to work for it to creating any needed hardware for the project. I will have to coordinate different groups that may never meet face to face to create multiple projects to build something to learn from.

Materials

Materials are things that become part of the finished project, such as lumber, nails, and paint.

What types of materials, if any, will you need? You do not need a detailed list or exact quantities, but you must show you have a reasonable idea of what is required. For example, for lumber, include basic dimensions such as 2 x 4 or 4 x 4.

Breadboards, resistors, photo resistors, servos, pine wood sheet, potentiometers, wires, motors, text display, and a touch sensor.

Supplies

Supplies are things you use up, such as food and refreshments, gasoline, masking tape, tarps, safety supplies, and garbage bags.

What kinds of supplies, if any, will you need? You do not need a detailed list or exact quantities, but you must show you have a reasonable idea of what is required.

Electrical tape.