

 FINAL PROJECT PROPOSAL

**Names: Dylan Howe, James MacMillan**

**Project: Arduino Bluetooth Robot**

**Part A: Project Ideas & Objectives**

**We would like to create a robot that could be driven around smoothly using a ps4 controller. This robot would also either be able to live stream video to our phone (either standard video or VR video) or have a fully functional robotic arm that could be controlled by the second stick on the PS4 controller. Also, we could add a light to our robot if we choose to use video so that it could explore all kinds of places.**

**Part B: Electronic Resources**

[**https://www.sparkfun.com/categories/31?page=all**](https://www.sparkfun.com/categories/31?page=all)

[**http://www.unb.ca/fredericton/engineering/depts/ece/outreach/redbots/**](http://www.unb.ca/fredericton/engineering/depts/ece/outreach/redbots/)

**Part C: Materials, Design**

* **Original Redbot**
* **Arduino bluetooth Shield**
* **Female and male wires**
* **Small camera**
* **Smart phone**
* **Bluetooth dongle**
* **PS4 controller**
* **Raspberry pi**
* **Bread board**
* **Batteries**
* **Items we could eventually need (** [**https://www.sparkfun.com/categories/31?page=all**](https://www.sparkfun.com/categories/31?page=all) **)**
* **4WD Redbot Multi-Chassis**
* **360 Fly**
* **Dual Motor GearBox (Will require front steering)**
* **More functional small robotic arm**