

BlueStamp Engineering

Build Plan

Name: Timothy H

Location: Palo Alto

Instructor: Laura Kambourian

Starter Project: #1, Minty Boost

Main Project: #212: RC Robot Tank

<http://bluestampengineering.com/portfolio-view/indigo/>

Major Steps to complete the project:

1. Make sure all parts have arrived as planned
2. Draw a schematic that shows every wire that will need to be connected.
3. Design the mechanical parts that will be needed in Google Sketchup. Have a staff member check them and ask to get the parts made.
4. **Milestone:** Assembling Chassis

Assemble the parts together to create the tank. Connect the required parts to the Arduino.

5. **Milestone:** Testing DC Motors

Program the Arduino with required code. Make sure the buttons work with the code and that it accomplishes what it needs to do.

6. **Milestone:** Connecting to PS2 Controller and Receiver

Make the robot able to be able to detect the distance to another object and allowing it to turn away from an object without colliding into it.

7. Make sure the system is working as expected. Problem solve and fix any code that doesn't seem to be working.
8. Create full documentation, write a blog post describing the system, record videos about milestones, and post everything on my webpage.

Potential Modifications:

1. Autonomous
2. Ultrasonic Sensors to detect obstacles