

ECE 4180 Final Design Project Proposal
GTA Approval required– One Form per Team

Approved by GTA: _____

Team Members (from 2 to 4) List Sections and Names:

_____ Jubral Holloway _____ Section ____ B ____

_____ Seth Wobig _____ Section ____ A ____

_____ Jaeyoung Choi _____ Section ____ A ____

_____ Shayahn Mirfendereski _____ Section ____ B ____

Brief Description of Design Project:

CORE

- Create the shadow chassis robot
 - o 2 wheels DC motors
- Have Bluetooth control
- Have 2 modes
 - o One manual (controlled via Bluetooth)
 - o One automatic (uses lidar sensor to detect if close to a wall)
 - Acts like a roomba

ADDITIONS

- Use the stepper motor to show which way the robot is moving / cardinal directions
- LCD on robot, displaying the distance, speed with an accelerometer, and which mode it is on
- Speaker that beeps when close to an object or makes some sort of warning noise

List any closely related projects (URLs) and describe how your project will be different or improved.

https://learn.sparkfun.com/tutorials/assembly-guide-for-redbot-with-shadow-chassis?_ga=1.167965857.1619691232.144081192

If you need any parts or software not available in the lab or in your parts kit, what is your plan to obtain the parts quickly (within 10 days)? – With the current virus issues, I would recommend using only what is already available in the lab this term, since ordering and shipping may be disrupted.