**Requirements**

REQ1

* Phone will move robot

REQ2

* Robot will avoid obstacles

REQ3

* Robot will drive autonomously

REQ4

* Robot will draw a floor plan map

REQ5

* Robot can be charged through micro-USB

REQ6

* Robot can map surroundings autonomously avoiding obstacles and provide floor plan map to user

REQ7

* Robot will send map to phone

**User requirements**

**User can:**

* use the robot from their mobile phone via bluetooth.
* move the robot by application of the Arduino Car.
* place the robot somewhere in the room and the robot will move across the room and create a map of the floor plan to a micro-SD card.
* charge the robot by placing a micro-USB to the device's charging port.
* see robot, battery charge, and mapping status from LEDs that are placed in the robot.