

For this project, you will work with your partner from the robot buggy project and use the robot you constructed with that partner. You can remove the line-following sensors from the robot and return the components to the teacher. You will need a Pi-4 to run your robot buggy and ANOTHER Pi to run your AIY Voice kit. AIY Voice Kit V1 uses another Pi-4 (NOT the same one attached to the robot). AIY Voice Kit V2 uses a Pi-Zero (included in the kit). Follow the directions on the "AIY Projects Voice Kit remote control" tab of the "Remotely control your buggy" project instructions at RaspberryPi.org: <https://projects.raspberrypi.org/en/projects/remote-control-buggy/4>

NOTE: As you encounter obstacles (such as blocked URL's, manual instructions that did not work as intended, downloaded code that doesn't work as intended, etc.) report it in the comment section of the Schoology assignment page. If you already figured out a solution, post that as well. When you encounter a problem posted without a solution, post your fix when you come up with one. Extra credit is available for students who participate in constructive ways!

Please upload the following files to the assignment dropbox. You can upload them one at a time, or zip (compress) them in a folder and upload the zipped folder.

1] Upload documentation of coding practice:

- Upload a Word Document in which you (1) identify the source of the code/commands/processes you used in this project, (2) explain any modifications you made to that code, and (3) give credit to any people who helped you. For example:
 - "I hand typed all terminal commands from the manual, but the one on page 17 caused an error. Holly suggested I replace xyz with *abc*, which worked. "
 - "I downloaded files from github because suggested code in manual did not work. I modified line 16 from xxx to yyy because I used different GPIO pins."
- If you MODIFIED/CUSTOMIZED code that was written by someone else, make sure to comment the code in the first line to credit the original author(s) or source. You must also comment the code wherever modifications or additions are made that explain what you changed and why. Upload the code file(s) to Schoology as documentation.
- If you WROTE ORIGINAL CODE beyond what was in the instructions, downloads, and/or pre-installed on the Pi, make sure to comment the code in the first line to credit yourself as the author, credit anyone who assisted you in writing it, and cite any sources you used as a reference. Upload the code file(s) to Schoology as documentation.

2] Upload .jpeg images of your assembled AIY Voice Kit, both outside and inside the box, to document how the physical computing components are connected.

3] Upload .jpeg images of your robot buggy to document how the physical computing components are connected.

4] Upload a video of yourself using verbal commands to control your robot buggy.

5] To earn full credit for the Conception & Design and/or Project Execution categories of the rubric, upload a Word Document explaining in detail:

- What creative or innovative solutions did you come up with to overcome obstacles during the project? How did you develop the solution? If you did not come up with the idea entirely on your own, be sure to reference your sources and/or give credit to anyone who assisted you and explain how YOU contributed to the solution.
- In what ways did this project demand meaningful growth in your coding skills? If you did not write your own code, how did you exceed the minimum requirements to challenge yourself?
- In what ways did this project demand meaningful growth in your physical computing skills? If the required build was easy, how did you exceed the minimum requirements to challenge yourself?