

piRover Builds with K2

Python Investigation

Rev 1.0

Overview:

The purpose of this lesson is to provide you with an introduction to using the Python programming language to control a robot. The instructor will use an online simulation to present an overview of the Python coding process. Both the language and tools will be discussed. You'll be mastering the basic of Python as we complete the course. This demonstration is only a first look. The online tutorial does include some great simulations. Students are encouraged to investigate additional modules.

Prerequisites:

Prior to beginning the instruction provided in this lesson you must have completed the following:

1. Introduction to Raspberry Pi

Performance Outcomes:

1. Interact with a Web app that simulates tools to come.
2. Edit and run code.
3. Introduce structure, data, and functions.

Resources:

1. [Python3 for Robotics](#)
2. python.org
3. [Python Fiddle](#)

Materials:

4. [None](#)

Directions:

1. The instructor will use the Robot Ignite Academy site to present Python concepts, processes, and tools. See the Python 3 for Robotics link in the Resources section.
2. We'll be working on our Python coding for most of the course, but at this point we're just looking for an introduction to editing and running code.
3. Continue on your own by investigating additional modules in the tutorial or by reviewing code on the Python.org or Python Fiddle sites.

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Assessment:

1. Complete Robot Ignite lessons as an in-class activity.
2. At the end of the allotted time, grab a screen capture of your current window showing your status. Save this file as PythonForRobotics.jpg
3. Submit the image along with responses to the reflection questions to the Moodle assignment link.