# Raspberry Pi Project Research Rev 1.0

## Resources:

1. Zoom breakout room

## Task:

In a typical RAM205 course you build a Raspberry Pi project of your choice during the final sprint of the class. We are unable to complete this activity due to the addition of missed RAM155 content from last semester and due to the NMC campus and the Makerspace being shut down after Thanksgiving.

The process of selecting and organizing a project is an important skill especially as you move into the EET260 systems class, so we will complete some of the initial tasks for project selection and definition. This activity is the first step – brainstorming possible projects.

You have been assigned to random classmates with the goal of brainstorming possible Raspberry Pi projects. This is a continuation of some of the first exploration that you completed in RAM155. You goal is to identify possible project that could be completed in several weeks at a cost of around $100 in materials not counting the Raspberry Pi and SD card.

Using the Zoom breakout room, first discuss possible Raspberry Pi projects based on RAM155 and additional searching completed during this activity. This is brainstorming at this point, so any idea is good. List these projects in item 1 below.

As a group select one or two that are likely candidates and discuss further. Keep in mind the time and cost constraints. In item 2, identify the project that you selected. In item 3, list the hardware required and provide an estimate of cost for each item. Include the Raspberry Pi but again, this cost does not count toward the $100 constraint. In item 4, discuss the software that is required. Is this a Python project? Are you just downloading and installing code, or will you be required to create a custom solution?

Enter details from your group’s discussion in items 1 through 4 as directed. Be prepared to discuss when we reconvene as a class. The instructor will inform you when group time is up. Submit this completed document with your week 1 assignments.

1. List Raspberry Pi projects that your group discussed in the space below.

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1. Which project did you select from the list in item 1?

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1. For the selected project, list the hardware required including the Raspberry Pi. Estimate the cost of each component or materials

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1. Discuss the software requirements below. Is it a Python project? What version – Python 2 or Python 3? What version of Pi - 3 or P 4? Custom code required?

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Be prepared to discuss with the class. Submit your completed document by zipping it along with other assigned work and post to the Moodle site using the weekly assignment link provided at the bottom of the week’s section.