Final Project

Motivation: The projects we have done in class are all designed to teach K-12 students STEM concepts using robotics. By completing the projects, you have learned how to use the Finch bots and, through your homework assignments, have reflected on how the lessons connect to science standards. For your final project in this class, you will design your own lesson utilizing the Finch bots to teach some kind of STEM lesson.

Expectations: Your lesson plan for the robots should be designed to be completed in **at least two 50 minute class slots** on consecutive days. Your final "deliverables" for this project are:

1. A lesson plan, written for a teacher. This plan should include:
    a. An overview of the project with basic information such as the age range it's designed for, a list of materials needed for the lesson, and a list of the *specific standards* from the Next Generation Science Standards that are taught in this lesson.
    b. Any background reading or expected knowledge students should have *before* completing these lessons (with links/printouts).
    c. Clear step-by-step instructions on how to complete the lesson, with explicit descriptions of how the various parts tie into the standards that you cited in the introduction.
    d. Enough guidance with using the Finch bots and Snap such that a relative novice can understand how to use the bots.
    e. A rough estimated "schedule" for how long each part of your lesson should take.
2. Resources for students, such as a worksheet with clear instructions that a teacher can hand out. You should ensure that the instructions are "scaled" to the age of your target audience. Think carefully about things like reading level and expected math skills.

Important Dates:

Friday, March 20, 10:30am: Initial Project proposals due. These are a ~1 page written description of what you want to do and the standards it addresses. We will break into groups during class to discuss and provide feedback. Bring **4 (four!) printed out copies with you to class.**

Friday, March 27, 10:30am: Projects due for Peer Review (a complete lesson ready for evaluation by others in the class).

Friday, April 3, 10:30am: Final Projects due.