(KEY) HW: System Diagram Practice

OBJECTIVES

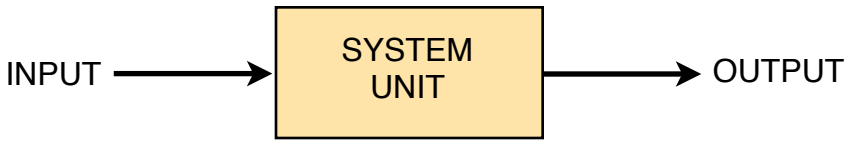
- Expand upon introduction to system diagrams, through practice exercises

ASSIGNMENT

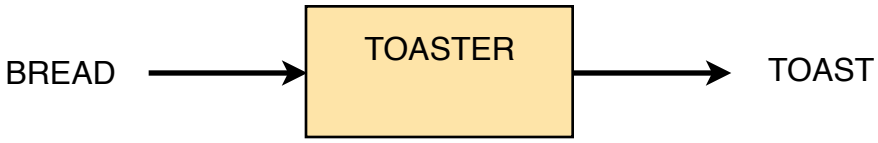
Background

In Tuesday's class, you were introduced to a high-level system diagram for DriveBot.

Remember that the basic unit of any system diagram (SD) follows this structure:



For example, consider wanting to make a piece of toast for breakfast. The input, as we call it, is a slice of bread. We put the bread into the system unit, a toaster. What we get out, or the output, is a piece of toast. Voila! Take a look at this system's SD:



Goal

Your **goal** is to practice thinking about and illustrating concepts through system diagrams. You will try your hand at this through three exercises.

Instructions

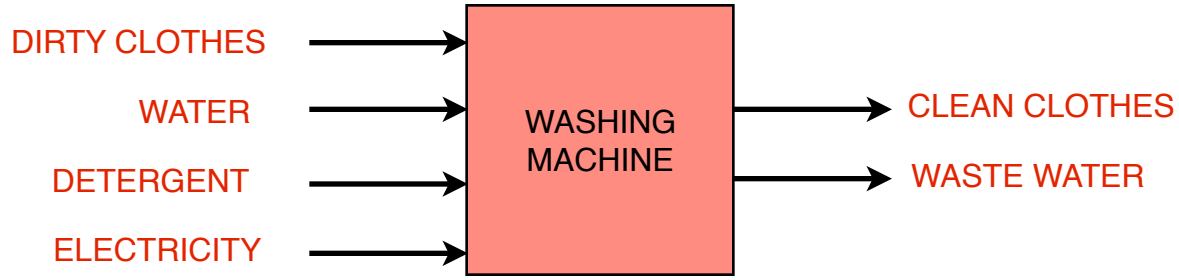
1. Listed below are three items, whose functions can be represented by system diagrams. They are listed in order of increasing difficulty and we are asking you to draw a system diagram for at least one of the items. *Optional: try your hand at the most challenging option - and feel free to try out all three!*

(a) Blender (b) Washing machine (c) Computer

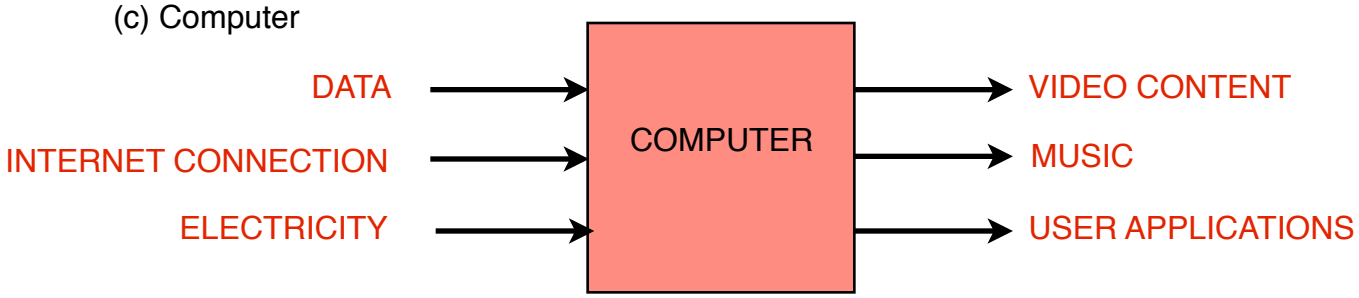
Increasing Difficulty

(a) Blender

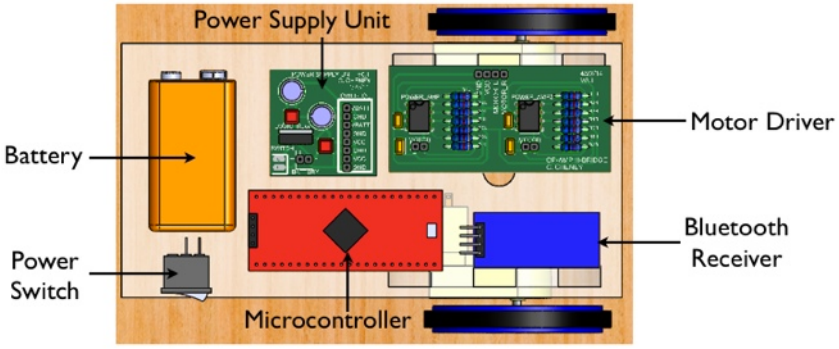
(b) Washing machine

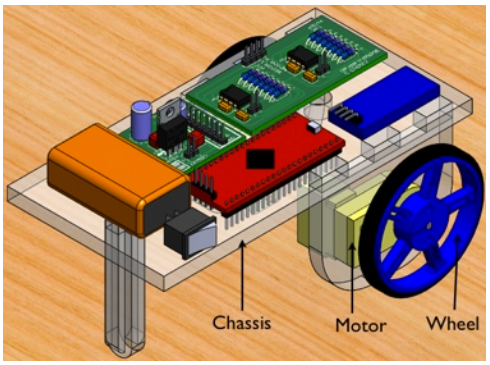


(c) Computer

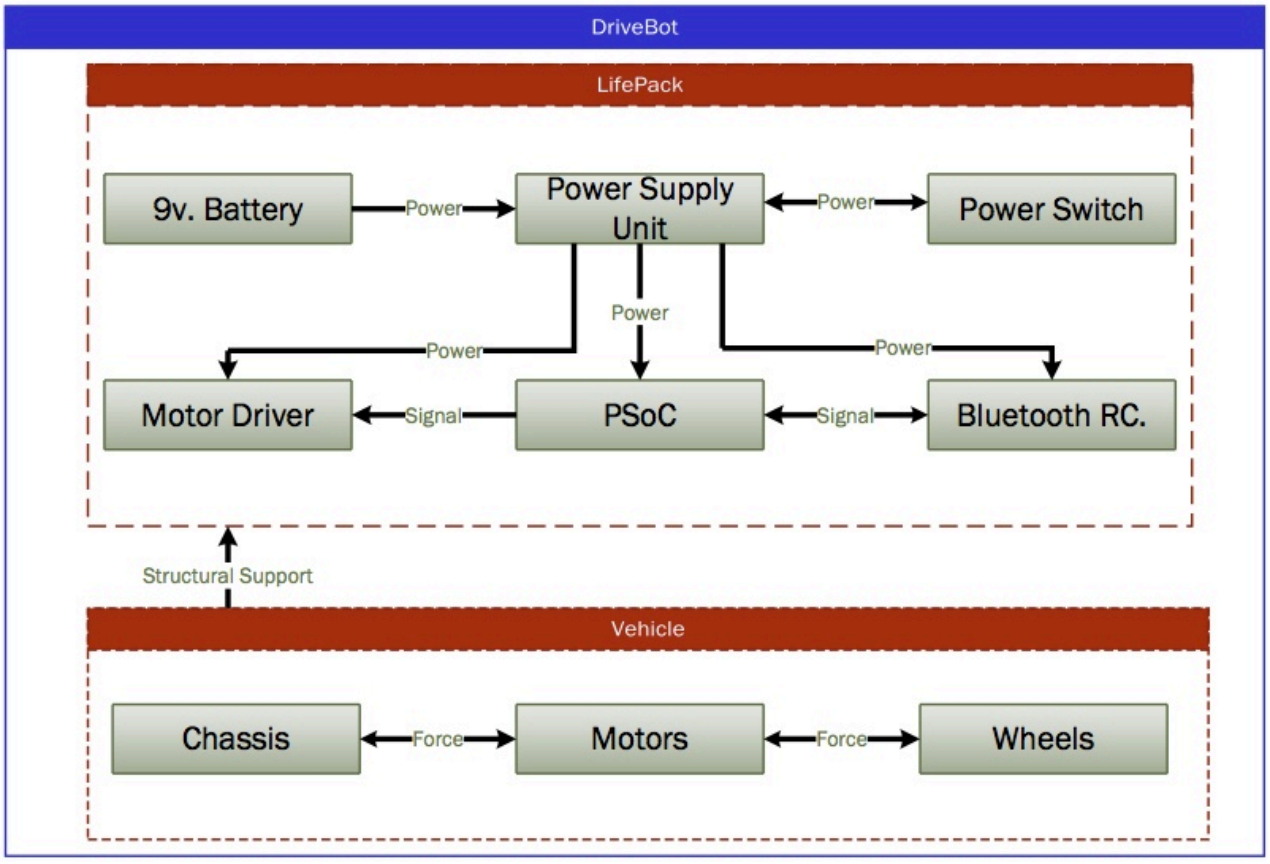


2. Draw the SD for DriveBot, using the following labeled diagrams as a guide for what components are involved (all named components in the diagrams should be included in *your* system diagram).





-----SOLUTION-----



3. List three additional items you could system diagram, relating to any field that interests you. You may simply list the names of these items (you do not have to draw more system diagrams for this assignment). *Example fields: transportation, health, technology*

    1. nuclear reactor
    2. airplane
    3. ski lift