Project 2 (Option B)

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Choose a system (that contains some software) for which you know, or can easily figure out, the general physical decomposition. This may be the same system you modeled in SE4150 System Architecture and Design or SE4151 Systems Integration and Development, or may be your capstone project system. You may submit your work in any MS Office tool, or legibly hand-draw and scan it as a PDF.

1. (1 pt) Draw a general Component Hierarchy for your system solution, to include both hardware and software elements. (You may have one already that you can use directly.) Select and highlight one software element for further decomposition.
2. (2 pts) Draw a context diagram for the selected software element that shows its inputs and outputs to and from other hardware or software components (see Figure 7.1 in Pressman for an example).
3. (5 pts) Develop a data flow diagram (Pressman Figure 7.2), activity model (Pressman Figure 7.11) or state chart (Pressman Figure 7.6) for the chosen software component.
4. (5 pts) Write a narrative that walks through the logic of the diagram in part c.
5. (2 pts) What insights have you gained from walking through the steps above? These insights can be about your system, about the system architecting process, and/or about software behavioral modeling.