

*1. What characteristics of a software design problem would make it a good match for a process control solution style?*

I think a software where its inputs are dynamic, constantly changing, unpredictable, indirect and dependent on other external factors like weather, object detection, or vibrations/disturbance would be a good match for a process control solution style. I also think that any software that has more than one component where at least one of these components involves pressure, level, temperature, distance, or flow would qualify as well for process control solution. Lastly, I think a software that has multiple different levels or stages of a process can be a good match too. For example, a software that operates a solar system would be a good match because the inputs of this software i.e. temperature/sunrays are constantly changing and usually unpredictable where you will need to process control solution style to be able to detect and process its inputs to get the required output i.e. electricity.

*2. Looking at the designs in the readings and how each attempts to be flexible, what kinds of potential change/adaptability can you identify for the cruise control design problem?*

I think one change that would potentially affect those different designs is adaptive cruise control especially state-oriented design where it will affect the existing operational modes and conditions that cause transitions from one state to another like braking and speed. I think adaptive cruise control will also affect the real-time design since the events and the order in which they occur would change because of the extra attributes adaptive cruise would add to the system like constantly changing front vehicle's speed and its distance from the passenger's vehicle. Another change that could also cause the same changes to those two designs is if we added a lane departure feature to the cruise control design but instead of relying those changes' attributes on another vehicle, we would rely it on lane lines.