SE480 – Software Architecture I
Autumn 2020
Homework 5
Due Date: Thursday, November 19 5:30PM
100 points possible. Will be scaled to 10% of final grade.

Submit your answers to D2L by Thursday, November 19 5:30PM. Late homework will not be accepted.

Assignment Details

This assignment is designed to give you practice in thinking about, and modeling, the quality scenarios that drive the architectural design of a system, and to perform an initial high-level architecture.

Research the Disney PhotoPass system from a Disney park attendee's point of view.

Please complete the following:

1. Write one paragraph (2-5 sentences) describing the functionality of the system.

2. Create a utility tree for your system using the following table:

Quality Attribute	Quality Attribute Refinement	Architecturally Significant Requirement (ASR)	Importance	Difficulty

   Your utility tree must include:

   - At least 5 different quality attributes
   - 10 different ASRs (at least one per quality concern)
   - Importance and difficulty identified using high/medium/low (H/M/L) nomenclature

   See Chapter 16.4 (particularly Table 16.5) in your textbook for some examples.

3. Think about a possible high-level architectural design for your system and SKETCH it out using a UML diagram (of your choice). You should think about major components of your system. You only need to provide one view, and you can choose whichever view you are most comfortable with.

   As you are doing this, think about the quality concerns you have identified in your utility tree and how well your solution might meet these needs. (Note: This is an initial effort at architectural design. The purpose is just to start thinking about architectural design solutions.)

   See https://en.wikipedia.org/wiki/Unified_Modeling_Language or http://www.uml.org for more information about UML.

4. Provide a 1/2 to 1-page rationale explaining and/or critiquing your solution. For example, if you feel unable to create a viable solution at this point in the course, then just do your best, but in your textual commentary discuss the areas of your design which you think might be inadequate.

   (Note: You can receive full marks on this assignment for architectural design which are inadequate, as long as you have thought about them and realized their possible shortcomings).

Submit this assignemnt as a Word or PDF document to D2L.