Important Information
It is especially important to submit this assignment before the deadline, January 13, 11:59 PM PST, because it must be graded by others. If you submit late, there may not be enough classmates around to review your work. This makes it difficult - and in some cases, impossible - to produce a grade. Submit on time to avoid these risks.

Instructions

My submission

This assignment will challenge you to use the ATAM Process to analyze and evaluate a software system based on its architecturally significant requirements.

Discussions

Review criteria less

You will be graded on the completeness and correctness of your submission.

Step-By-Step Assignment Instructions less

Setup instructions

Download, examine and run the code base provided. This is the same code base that you used in the previous Peer Review assignment:

SharingApp_c3_local_storage.zip

To help clarify the scope and features of this version of the app, please view the Capstone 3 User Stories.

Capstone3_UserStories.pdf

Also consider the proposed architecture from the earlier capstone assignments for the component and deployment diagrams.

You will be expected to upload a PDF of your utility tree diagram and explanations. A free online tool you may use to make your diagram is Lucidchart.

Guidelines for the assignment

Review these Lectures to aid you on your assignment:

Lecture 3.3.1 - Quality Attributes

Lecture 3.3.2 - Analyzing and Evaluating Architecture

How to create your assignment

We want to evaluate the architecture and design of the given system to determine the future of its development. It is important to identify the risks our system faces that may hinder the end users or developers. Will the end users of our system want to keep using it? Will it be easy and affordable to continue to develop the system? This will reveal issues we may not have known about our system that may be necessary to change in future releases.

Review the Quality Attributes and Analyzing and Evaluating Architecture Lectures to prepare for this assignment. You will need to reference the ATAM Process and Quality Attribute Scenarios.

You are given an Attribute Utility Tree that points out the Architecturally Significant Requirements (ASRs) of the current version of the system. This is an initial Utility Tree we have created for step 5 of the ATAM Process to gain insight about the system and identify the quality priorities that go into the evaluation of our system.

Attribute Utility Tree - start.png

You are also given several Quality Attribute Scenarios, written from various perspectives, to evaluate the architecture of the app.

Quality Attribute Scenarios.pdf

For each Quality Attribute Scenario provided, identify if it is a risk, non-risk, tradeoff, or sensitivity point in the applications architecture and give a brief explanation (3 sentences or less) for each. This can be put into point form, but each Scenario should be covered.

Once you have finished your evaluation, update the Utility Tree to reflect the Scenarios. You should be able to make 4-5 changes, including adding a Quality Attribute and adding more Attribute Refinements and ASRs to reflect the risks. You may also update the current ASRs to reflect the Scenarios or (if justified in the evaluation) change their priorities.

Once you have finished your evaluation, use the Quality Attribute Scenarios to create an updated Utility Tree that considers the Quality Attribute Scenarios based on the primary ASRs from the previous Utility Tree.