

Quality Attribute Specification Assignment

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- 1- You are working in company XYZ required you to develop ticketing system for Cinema, the owner of Cinema is focusing on two things:
- Security system for purchase ticket using Credit Cards.
 - The performance of booking tickets.

Write scenarios for each requirement to get you client signature.

- Security system for purchase ticket using Credit Cards.
 - Source stimulus:** Customers
 - Stimulus:** Make payment using credit cards
 - Artifact:** Ticketing System
 - Environment:** Normal operations
 - Response:** System request for password and validate the customers' identities
 - Response measure:** Only 3 tries are provided
- The performance of booking tickets.
 - Source stimulus:** Customers
 - Stimulus:** Initiate 1000 transactions per minute
 - Artifact:** Ticketing System
 - Environment:** Normal operations
 - Response:** Transaction is processed
 - Response measure:** Process with average latency of 2 seconds

- 2- You are working in governmental sector and your boss required you to develop architecture to remove the overhead of official stamping for the documents without losing security.

Propose a proper architecture tactic to achieve this feature.

In my opinion, a proper architectural tactic that I will propose to achieve the feature that I mentioned above is an architectural tactic that can be used to secure security and are able to resist attacks by authenticating and authorizing actors. In addition, people that can access for the document also need to be limited to avoid overhead of official stamping for the documents. Last but not least, if the documents are attacked by someone, they should be able to recover from the attack.

- 3- You are working in a starting company with limited budget and your boss required you suggest some tactics to reduce the maintainability cost of the software.

Propose three tactics for this objective.

Availability tactics

Testing activities need to be done before the program is deployed to the user. If there are some defects found by the customers, reputation of the company will be damage even lead to loss of future project.

Modifiability Tactics

Reduce the size of the program, modules and the complexity of the source code. The larger the size of a program, the higher the cost of maintainability in the future. Besides, it also will consume much less of time to complete any debugging process or maintenance process.

Security Tactics

Last but not least, the program should be designed to resist attack and also can recover from any attacks. Hence, if there is any data loss, it can be recovered and restored easily by the software developer.

- Submit your answers at in your github host.
- We will pick up randomly 5 students next session to present their answers.