

# 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:

- a. Security system for purchase ticket using Credit Cards.
- b. The performance of booking tickets.

Write scenarios for each requirement to get you client signature.

- a. A customer inserts credit cards into the machine under normal operation; the security system will validate the customer's identity within 15 seconds
- b. When customers book tickets under normal operation, all these bookings need to accept not more than 150 transactions per booking and are processed with an average latency of 10 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.

The developed architecture should be able to maintain security quality attributes. This can be done by authenticate user, and only allow authorize users and limit the access of the official stamping. This is to maintain integrity and ensure no security breach to the system. To achieve the goal of the architecture, we can apply encryption on the official stamping. Encryption is applied to every official stamping so that it is protected.

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.

Maintainability is one of the quality attributes that incur the most cause because preventing changes to software is almost impossible. Software will always change. Hence to reduce the cost we shall increase the modifiability of our product.

- Review the semantic coherence of each module and component
- Increase cohesion and reduce coupling between the modules in the system
- Defer binding between components