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Quality Attribute Specification Assignment

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. Security system for purchase ticket using Credit Cards.
      Stimulus source: Customer

      Stimulus: Tries to purchase ticket using credit cards

      Artifact: Ticketing system

      Environment: Under normal operation

      Response: Undergo credit card validation

      Response measure: Within 10 seconds

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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 tactic to achieve security is the system should be able to resist attacks by authenticating and authorizing actors. The system can implement two-step verification to complete the login process. Next, hashing algorithm can be applied to the official stamping to ensure data confidentiality .

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.

(a) Decrease coupling, so that each component is not so dependent on one another. This can reduce the maintainability cost because when there are changes on one component, it is not likely to have consecutive changes on other components.
(b) Increase cohesion, so that each component is designed to focus on its own function. When changes are required, only the components that are involved are needed to undergo modification. Thus, the maintainability cost is reduced because the developer does not need to modify other not related components.
(c) Reduce module size, because a larger module size will require a longer time to make changes and thus increase the maintainability cost.

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