Quiz 5: Service Oriented Architecture I

Due Oct 7, 2016 at 11:59pm **Points** 100 **Questions** 4

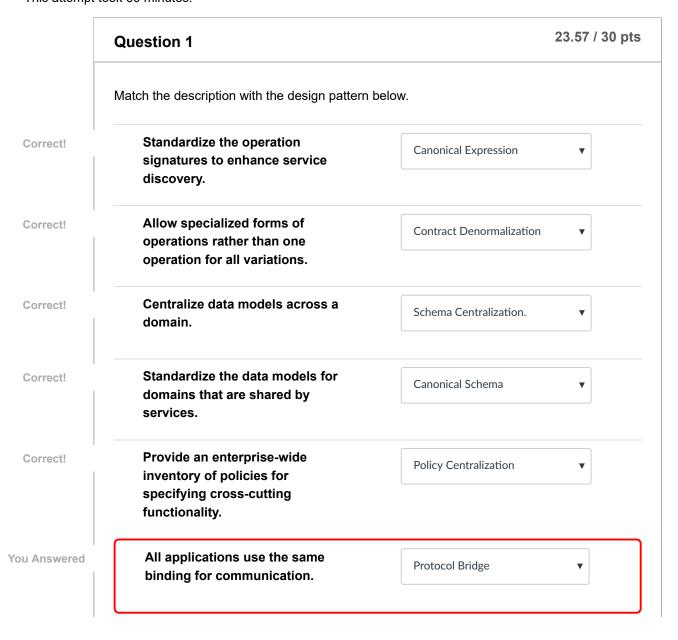
Available Oct 4, 2016 at 8am - Oct 7, 2016 at 11:59pm 4 days Time Limit 60 Minutes

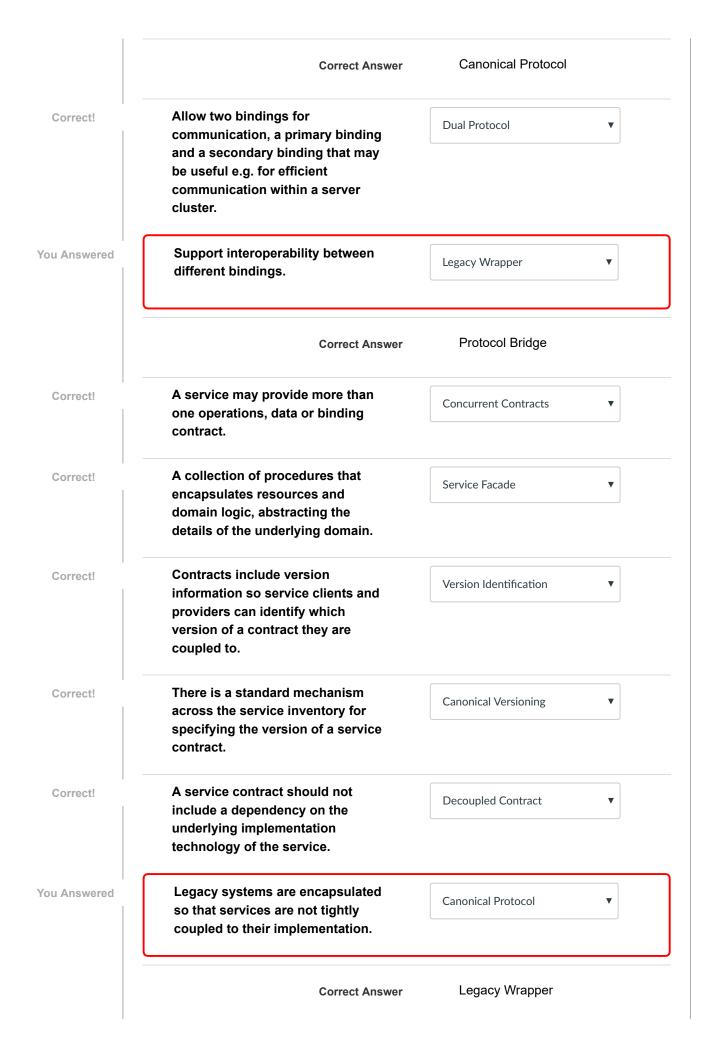
This quiz was locked Oct 7, 2016 at 11:59pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	60 minutes	93.57 out of 100

Score for this quiz: **93.57** out of 100 Submitted Oct 7, 2016 at 6:46pm This attempt took 60 minutes.





Question 2 20 / 20 pts

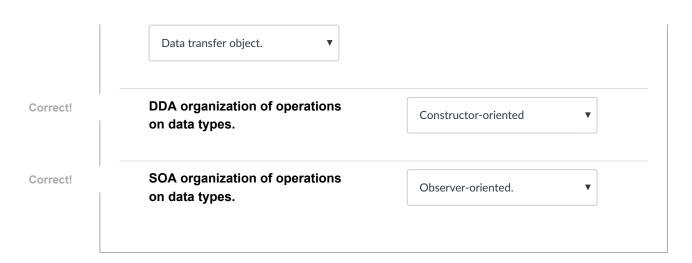
List the principles of service design.

Your Answer:

Here's the list of principles

- 1. Standardized service contract: this is a reiteration of the idea of an interface for a distributed service.
- 2. Service Autonomy: This is an ability to service to execute without its performing being degraded by the execution of other services through replication.
- 3. Server reusability: Service that can be used in a wide range of different application contexts.
- 4. Service statelessness: This principle represents the scalibility of the services.
- 5. Service Discoverability: framework provides global service discovery as well as local service discoveries.
- 6. Service Composability: it's possible to compose software serrvices to perform a business task.
- 7. Loose Coupling: Service should be loosely coupled rather than being in a tight coupling.
- 8. Service Abstraction: Service abstraction is much necessary in business logics.

	Question 3	20 / 20) pts		
	Match the aspect of the architecture design with the appropriate approach.				
Correct!	Entry point for DDA clients.	Gateway pattern ▼			
Correct!	Entry point for SOA clients.	Service facade pattern ▼			
Correct!	Unit of data transfer for DDA.	Persistence data object ▼			
Correct!	Unit of data transfer for SOA.				



30 / 30 pts **Question 4** 1. What is a covariant change in an operations contract? 2. What is a contravariant change in an operations contract? 3. When is it safe to make a covariant change in an operations contract? 4. When is it safe to make a contravariant change in an operations contract? Your Answer: 1. Covariant change: Covariant changes are modification to the data model that produces a compatible data model. It simply means that "Adding of operations to the service interface and change of input data model" 2. Contravariant Change: Contravariant changes are the modification that are required for backward compatibility caused by service which is more restricted by the update. It simply means that "the removal of operations from the client callback interface and change of output data model." Assume a procedure subtyping (T1 -> T2) <= (T1' funtyop T'2), (T1 and T2 are procedure types) is safe only if 3. The subtyping is covariant within the range. 4. The subtyping is contravariant in the domain.

Quiz Score: 93.57 out of 100