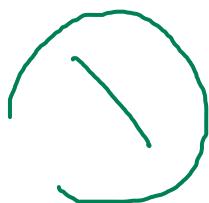


* Note

- ↳ Only done the Questions related to the MID Exam
- ↳ lecturer number written on this document are based on the module outline.

○ - Not sure
(*) / (?) - Dont know / Didn't study / todo



 Online Exams
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Question 5
Not yet answered
Marked out of 1.00
 Flag question

In a TCP application, why is multithreading necessary?

Select one:

- a. To enable fault tolerance
- b. To enable secure communication
- c. To allow the server to simultaneously communicate with multiple clients
- d. To ensure the reliability in communication



Online

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Question 59

Not yet answered

Marked out of
1.00

Flag question

Which of the following is NOT an advantage of the event based architecture?

Select one:

- a. Asynchronous communication ✓
- b. Tight coupling between components
- c. High scalability ✓ use in more scalable systems Decouples
- d. Facilitate publisher subscriber messaging ✓



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on 60
et answered
ed out of
lag question

What of the following is NOT an advantage of having a separate business logic tier in a share market system?

Select one:

- a. Ability to handle miscalculations of computation in servers due to electro magnetic radiation. ✓
- b. Parallelize the computation of large datasets ✓
- c. Sequentially compute a complex scientific computation ✓
- d. Ability to handle abrupt server failures. ✓
- e. Load balancing depending on the number of transactions per second. ✓



Online Exams

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Question 58

Not yet answered

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1.00

Flag question

Which one of the following systems DOES NOT have the appropriate system architecture ?

Select one or more:

- a. Distributed Image sharing platform without any single point of failure - Client Server architecture ← data Centered
- b. Online taxi app - Client server architecture ← event based
- c. Single player distributed mobile game - Peer to Peer Architecture ← no need peer to peer in Single play (Can use if multipay)
- d. Online book purchasing system - Client server architecture





Online Exams

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Question 57

Not yet answered

Marked out of
0.00

Flag question

Which of the following are NOT examples of redundancy being used to provide fault tolerance?

Select one or more:

- a. Using error detection codes to identify message errors
- b. Using backup servers to account for abrupt server failures
- c. Using timeouts and re-attempts of requests to account for response failures
- d. Using encryption to ensure secure messaging
- e. Using authentication to prevent authorized access

↻ 9th lec



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Which of the following systems have the appropriate software architectural styles?

Select one or more:

- a. Online exam web site - Layered architecture
- b. Online gaming platform - Data Centered architecture
- c. Fire alarm system - Component based architecture
- d. E commerce web site - Layered architecture
- e. Teaching material management system - Shared Data space architecture

client server
peer to peer



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Which of the following is NOT a correct statement with respect to failure classification?

Select one:

- a. Crash failure refers to scenarios where the server halts but it works correctly until it halts
- b. Omission failures is where the server fails to respond
- c. Timing failures refer to scenarios where the server does not respond within an accepted time
- d. Arbitrarily failures refer to scenarios where the server responds with arbitrary responses
- e. Response failure is where a server may not respond at all

Online Exams

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Question 53

Not yet answered

Marked out of 1.00

Flag question

Which of the following is the valid reason for having a two phase or three phase commit instead of one phase commits in a distributed system?

Select one:

- a. In one phase commit, there's no way to allow auto scaling
- b. In one phase commit, there's no way to manage load balancing
- c. In one phase commit, there's no way to allow secure messaging
- d. In one phase commit, there's no way for the coordinator to know whether a process has failed

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Quiz navigation

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Which of the following is the valid reason for having a two phase or three phase commit instead of one phase commits in a distributed system?

Select one:

- a. In one phase commit, there's no way to allow auto scaling
- b. In one phase commit, there's no way to manage load balancing
- c. In one phase commit, there's no way to allow secure messaging
- d. In one phase commit, there's no way for the coordinator to know whether a process has failed

*



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Which of the following are NOT correct statements when it comes to fault tolerance?

Select one or more:

- a. Reconfiguration is where a faulty component is eliminated from the system and restoring the system
- b. Crash failures account for scenarios where the faulty process gives correct output until it crashes
- c. In a k fault tolerant system, k+1 replicas of processes may be necessary to account for byzantine failures
- d. Fault masking is the process of detecting the faults
- e. Byzantine failures account for scenarios where the faulty process may give incorrect outputs before crashing

Moodle

- → X C | O | A

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Question 53

Not yet answered

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Flag question

Which of the following is the valid reason for having a two phase or three phase commit instead of one phase commits in a distributed system?

Select one:

- a. In one phase commit, there's no way to allow secure messaging
- b. In one phase commit, there's no way for the coordinator to know whether a process has failed
- c. In one phase commit, there's no way to allow auto scaling
- d. In one phase commit, there's no way to manage load balancing

Next page



Question 49

Not yet answered

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1.00

Flag question

Which of the following is NOT an appropriate error handling pattern in Microservice architecture?

Select one:

- a. Circuit breaker pattern
- b. Bulkhead pattern
- c. Process manager pattern
- d. Timeout pattern

lec 8



Online Exams

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Question 52

Not yet answered

Marked out of
1.00

Flag question

Based on the following attributes, what is an appropriate metric to measure availability?

MTTF - Mean time to failure

MTTR - Mean time to recover

MTBF - Mean time between failures

Select one:

- a. MTTF / MTTR
- b. MTTR / MTTF
- c. MTTF / (MTTF + MTTR)
- d. MTTR / (MTTF + MTTR)

* lec 09



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What are the uses of Kubernetes or any other microservices orchestration framework in the microservices architecture?

Select one or more:

- a. Self healing or restarting service instances if there's a service failure
- b. Version control of services
- c. Creating virtual machines to deploy services
- d. Automatically scaling up and down the services, based on user demand
- e. Managing the data storage of the application

lec 8

Next page



Online Exams

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Question 50

Not yet answered

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1.00

Flag question

What are the usages of Docker or other container frameworks in the Microservices architecture?

Select one or more:

- a. Docker allows a virtual machine to be run when deploying a service
- b. Docker facilitates the discovery of services
- c. Docker allows a service to be deployed independently of other services
- d. Docker allows the services to be scaled up or down independently

Lec 8

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Question 46
Not yet answered
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Flag question

Which of the following is NOT correct regarding OpEx (operational expenditure) and CapEx (Capital expenditure) in different types of clouds?

Select one:

- a. Public clouds don't have CapEx but have OpEx
- b. Hybrid clouds have both CapEx and OpEx
- c. Community clouds have both CapEx and OpEx
- d. Private clouds don't have CapEx

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57 58 59 60

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Time left 02:43:44

lec 10



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Question 49

yet answered

Marked out of

1

Flag question

Which of the following is NOT an appropriate error handling pattern in Microservice architecture?

Select one:

- a. Circuit breaker pattern
- b. Process manager pattern
- c. Bulkhead pattern
- d. Timeout pattern

Lec 8

Online Exams

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Which of the following is NOT correct regarding OpEx (operational expenditure) and CapEx (capital expenditure) in different types of clouds?

Select one:

- a. Public clouds don't have CapEx but have OpEx.
- b. Hybrid clouds have both CapEx and OpEx.
- c. Community clouds have both CapEx and OpEx.
- d. Private clouds don't have CapEx.

lec 10



Online Exams

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Which of the following is NOT a weakness of the monolithic architecture?

Select one

- a. Having one unstable service can affect the reliability of the entire application
- b. When changing a service the entire application may have to be redeployed
- c. Can become overly complex over time
- d. Can scale up or down at the service level

not in our lectures / not sure what is
the lecture this belongs



Online Exams

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Question 48

Not yet answered

Marked out of
1.00

Flag question

Which of the following is NOT a design principle of microservices?

Select one:

- a. Align each service with business requirements
- b. Having services that have broad scope
- c. Having fine grained services with limited scope
- d. Having single responsibility for each service

lec 8



Online Exams

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Question 47

Not yet answered

Marked out of
1.00

Flag question

Which of the following is NOT a weakness of the monolithic architecture?

Select one:

- a. When changing a service, the entire application may have to be redeployed
- b. Having one unstable service can affect the reliability of the entire application
- c. Can scale-up or down at the service level
- d. Can become overly complex over time



Online Exams

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Question 46

Not yet answered

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1.00

Flag question

Which of the following is NOT correct regarding OpEx (operational expenditure) and CapEx (Capital expenditure) in different types of clouds?

Select one

- a. Hybrid clouds have both CapEx and OpEx
- b. Public clouds don't have CapEx but have OpEx
- c. Private clouds don't have CapEx
- d. Community clouds have both CapEx and OpEx

lec 10



Online Exams

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Question 45

Not yet answered

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1.00

Flag question

Which of the following is NOT a feature of distributed systems?

Select one or more:

- a. Message passing ✓
- b. Resource sharing ✓
- c. Having a global clock ← No global clock
- d. Distributed failures ✓
- e. Having a global state ← No global state



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Question 44

Not yet answered

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1.00

Flag question

Which of the following definition is NOT correct regarding cloud computing?

Select one:

- a. Under-provisioning - Not having enough resources in the cloud
- b. Horizontal scaling - Adding more CPU or memory to an existing virtual server
- c. Multi-tenancy - Having multiple users sharing the same set of resources in the cloud, without interfering each other
- d. Over-provisioning - Allocating more resources in the cloud than required

lec 10



Question 43

Not yet answered

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0

Flag question

Which of the following are NOT the appropriate types of cloud to be used for the given scenarios?

Select one or more:

- a. Usage of a cloud based word processing application - SaaS
- b. Usage of a cloud based data server - Software as a Service (SAAS)
- c. Usage of cloud based application server - Platform as a service (PAAS)
- d. Usage of a cloud based GPU for training a Machine learning algorithm - Infrastructure as a service (IAAS)
- e. Usage of a cloud based human resource management software - Platform as a service (PAAS)

lec 10



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Identify the INCORRECT type of Cloud to be used for each scenario given?

Select one or more:

- a. An organization that wants to have some systems hosted locally but wants to use the public cloud when the load goes beyond limit - Hybrid cloud
- b. A bank that doesn't want to save their data in another country or with another party. - Private cloud
- c. A group of universities that needs to allow cloud access only to its members - Community cloud
- d. The defense ministry that wants to store their data locally but wants to use cloud computing - Public cloud
- e. A startup company that wants to use cloud based virtual servers - Hybrid cloud

lec 10



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Question 41

Not yet answered

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1.00

Flag question

Which of the following are NOT features of cloud computing?

Select one or more:

- a. Auto-scaling of resources
- b. Multi-tenancy
- c. Usage of desktop clients
- d. Virtualization of resources
- e. Manual administration of servers

lec 10



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What are the usages of Docker or other container frameworks in the Microservices architecture?

Select one or more:

- a. Docker allows a virtual machine to be run when deploying a service
- b. Docker facilitates the discovery of services
- c. Docker allows the services to be scaled up or down independently
- d. Docker allows a service to be deployed independently of other services

Next page

Lec 8



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Question 39

Not yet answered

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1.00

Flag question

In developing a hotel reservation system, which of the following statements are NOT true, in a BPEL process?

Select one or more:

- a. 'flow' operations are used to simultaneously call the taxi and room reservation services
- b. 'switch' operation is used to select the payment option based on user preference
- c. 'switch' operation is used to call the external services
- d. 'sequence' operations are used to simultaneously call the taxi and room reservation services
- e. 'invoke' operation is used to call the payment service

Not in for mid



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Question 40

Not yet answered

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1.00

Flag question

Suppose an organization is managing 50 web services related to healthcare industry. Which of the following is NOT a reason to involve in the governance of the services?

Select one:

- a. Maintaining documentation of web services
- b. Integrating multiple services from different platforms
- c. Managing different versions of web services
- d. Show who is responsible for managing each service
- e. Monitor the usage and any errors caused by the services

Lec 8



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36
Answered
out of
question

Which of the following is NOT a reason to do enterprise integration?

Select one:

- a. Diverse business requirements that may change in the future
- b. Having a simple homogeneous client server application that is unlikely to change in the future
- c. Have to use products from multiple vendors
- d. Need to support multiple message formats
- e. Need to integrated legacy systems with newer products and APIs

lec 8



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Question 38

Not yet answered

Marked out of
1.00

Flag question

Select one:

- a. Content based routing
- b. None of the above
- c. Aggregator pattern
- d. Enricher pattern
- e. Process manager pattern

Suppose you want to access a weather service and want to add some additional location information from a data source to the response.
Which of the following integration pattern appropriate for this purpose?

≡ Quiz navigation

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Question 37

Not yet answered

Marked out of

0.00

Flag question

Select one:

- a. Aggregator pattern
- b. None of the above
- c. Process manager pattern
- d. Polling pattern
- e. Enricher pattern

Suppose there is a service that needs to query the stock price of a company from multiple stock services deployed around the world at different stock exchanges. What is the enterprise integration pattern that is suitable for this?

lec 8



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Question 36

Not yet answered

Marked out of
1.00

Flag question

Which of the following is NOT a reason to do enterprise integration?

Select one:

- a. Having a simple homogeneous client server application that is unlikely to change
- b. Have to use products from multiple vendors
- c. Need to integrate legacy systems with newer products and APIs
- d. Need to support multiple message formats
- e. Diverse business requirements that may change in the future

lec 8



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Question 34

Not yet answered

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1.00

Flag question

Which of the following are NOT reasons for distributing the computing?

Select one or more:

- a. Controlling the access to a system
- b. Economies of scale ✓
- c. Increasing the availability ✓
- d. Parallelization using multi-core architecture
- e. Functional separation ✓

Moodle

Online Exams

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Question 35

Not yet answered

Marked out of 00

Flag question

Which of the following are NOT appropriate REST urls and HTTP methods for the given operations?

Select one or more:

- a. Add user - HTTP GET - <http://wso2.com/general/dbusers/user/1/sam>
- b. Remove user - HTTP DELETE - <http://wso2.com/general/dbusers/user/1>
- c. Update user - HTTP PUT - <http://wso2.com/general/dbusers/user/1/nimal>
- d. Get user details - HTTP POST - <http://wso2.com/general/dbusers/user/1>
- e. Add user - HTTP POST - <http://wso2.com/general/dbusers/user/1/sam>

* Not in the slides
Did for fun ..

OK

Next page



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tion 33
et answered
ed out of
lag question

Which of the following technologies has NOT been greatly advanced with the advent of SOA and web services?

Select one:

- a. Cloud computing
- b. Supercomputers
- c. Web APIs
- d. Messaging middleware

* Lec 8



Online Exams

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Question 32

yet answered

skipped out of

flag question

Which of the following are NOT appropriate scenarios to use SOA?

Select one or more:

- a. A client server web application that may use third party APIs
- b. A standalone GUI application
- c. A set of service that is currently used by a web client but may be used by other types of clients in the future
- d. A web api that may be used by multiple types of clients
- e. A client and server intranet application that needs high performance over interoperability

lec 8



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Question 31

Not yet answered

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1.00

Flag question

Which of the following are NOT characteristics of SOA?

Select one or more:

- a. Composable
- b. Uses vendor specific message formats
- c. Reusable
- d. Tight coupling
- e. Standard based

* Lec 8

Marked out of
1.00[Flag question](#)

```
<?xmlstylesheet type="text/xsl" href="stocks.xsl"?>
<investments>
  <item type="stock" exch="nyse" symbol="ZCHM" company="Zack corp."/>
  <item type="stock" exch="nasdaq" symbol="ZFFX" company="Zaffss Inc."/>
  <item type="stock" exch="nasdaq" symbol="FMMS" company="Freeman"/>
</investments>
```

Select one:

- a.

```
<xsl:for-each select="investments/item[@type='stock']">
  <stock>
    <stock_price>
      <xsl:value-of select="@price"/>
    </stock_price>
  </stock>
</xsl:for-each>
```
- b.

```
<xsl:for-each select="investments/item[@type='price']">
  <stock>
    <stock_price>
      <xsl:value-of select="@stock"/>
    </stock_price>
  </stock>
</xsl:for-each>
```
- c.

```
<xsl:for-each select="investments/item[@type='stock']">
  <stock>
    <stock_price>
      <xsl:value-of select="price"/>
    </stock_price>
  </stock>
</xsl:for-each>
```
- d.

```
<xsl:for-each select=">
  <stock>
    <stock_price>
      <xsl:value-of select="price"/>
    </stock_price>
  </stock>
</xsl:for-each>
```

* incomplete
question



Online Exams

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Which of the following instance will throw a validation error, provided the given schema definition segment?
`<xs:element name="StockPurchase" minOccurs="1" maxOccurs="10"/>`

Select one or more:

- a. No StockPurchase elements in the xml file that uses the above schema definition segment
- b. 10 StockPurchase elements in the xml file that uses the above schema definition segment
- c. 7 StockPurchase elements in the xml file that uses the above schema definition segment
- d. 1 StockPurchase element in the xml file that uses the above schema definition segment
- e. 12 StockPurchase elements in the xml file that uses the above schema definition segment



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Question 26

Not yet answered

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Flag question

What is the purpose of using namespaces in XML?

→ eg: <table>

Select one:

- a. Enable unique identification of each xml element
- b. Enable checking for well-formedness
- c. Enable transforming the xml into an html
- d. Enable checking for validity

≡ Quiz nav

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Question 25Not yet answered
Marked out of
1.00

Flag question

Which line of the following xml file has a well-formed error (ignore the line numbers) ?

1. <?xml version = "1.0" encoding="ISO-8859-1"?>
2. <!-- my first XML doc --> ✓ ← comment
3. <courselist xmlns="http://www.university.com" >
4. <course>
5. <lecturer>
6. <firstname> H.T. </Firstname> ← "F" capital
7. <lastname> Shen </lastname>
8. </lecturer>
9. <title>SOA</title> ← closing tag missing
10. <code>INF53204</code>
11. </course>
12. </courselist>

Select one or more:

- a. There is no error X
- b. Line 2 ✓
- c. Line 5 ✓
- d. Line 9 ✓
- e. Line 6 ✓



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on 24

et answered

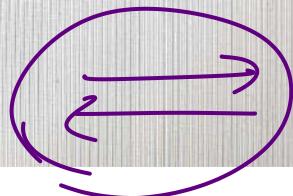
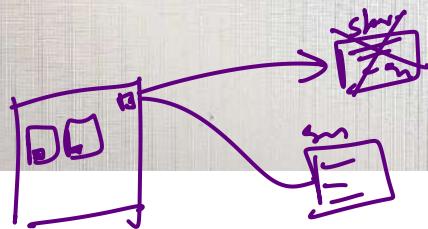
ed out of

g question

Which of the following is a scenario where a Stateful session bean is more appropriate to be used than a Stateless session bean?

Select one:

- a. Online bookshop where a user can order multiple books
- b. Online supermarket where the user count needs to be taken at a given time
- c. A payment gateway where each transaction is handled independently of each other X
- d. A SMS service where each message needs to be processed independently X



Question 25

Which line of the following XML file has a well-formed error (ignore the line numbers)?

Not yet answered

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1.00

Flag question

1. <?xm version = "1.0" encoding="ISO-8859-1"?>
2. <!-- my first XML doc -->
3. <courseList xmlns="http://www.university.com" >
4. <course>
5. <lecturer>
6. <firstname> H. T. </firstname>
7. <lastname> Sher </lastname>
8. </lecturer>
9. <title>SO </title>
10. < code>INF53204</code>
11. </course>
12. </courseList>

done
: previously

Select one or more:

- a. Line 9
- b. Line 2
- c. There is no error
- d. Line 5
- e. Line 6

☰ Quiz navigation

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Question 23

Not yet answered

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1.00

Flag question

Which of the following are NOT a result of the prevalence of Distributed systems?

Select one or more:

- a. Traditional pharmacies that dispense medicine
- b. Online job listing web sites ✓
- c. Outsourcing of the IT projects to global teams. ✓
- d. Mobile app based taxi services ✓
- e. Postal service being used to send utility bills



Moodle

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Question 22

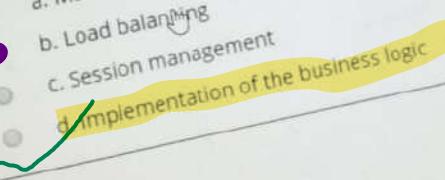
Not yet answered

Marked out of 1.00

Flag question

Which of the following is NOT provided by most application servers to the application developers?

Select one:

- a. Managing the EJB object created
- b. Load balanc
ing
- c. Session management
- d. Implementation of the business logic



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In a student management system, some student related operations may take a long time and therefore run in a non-real-time fashion. Which of the following EJB would be appropriate for that?

Select one:

- a. StudentAdministration - Stateful session bean
- b. Student - Entity bean
- c. StudentOperations - Message Driven bean
- d. StudentManagement - Stateless session bean

(Msg driven is asynchroness)

DELL

Online Exams

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In a student management system where student details are stored and subject details are stored. Which of the following are NOT valid EJBs?

Select one or more:

- a. Student - Message driven bean 
- b. StudentManagement - Stateful session bean 
- c. Student - Entity bean 
- d. Subject - Entity bean 
- e. SubjectManagement - Entity bean 

not
sure
about
this

Next pa



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Question 19

Not yet answered

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Flag question

Which one of the following is NOT a feature of CORBA?

Select one or more:

- a. Using a naming service to register and locate remote components
- b. Interface definition file to declare a remote interface
- c. Using a message service for asynchronous messaging
- d. IIOP protocol to exchange messages across components developed using different technologies

DELL



Online Exams

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Question 18

Not yet answered

Marked out of

1.00

Flag question

Which of the following is NOT a potential application of JMS?

Select one:

- a. A monitoring application that allows asynchronous messaging
- b. A highly scalable enterprise application with multiple components implemented with different technologies
- c. A client server intranet java application
- d. An online message forum



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Which of the following is NOT a component of the JMS specification?

Select one:

- a. Message registry ✓
- b. JMS Session ✓
- c. Message Producer ✓
- d. Message consumer ✓
- e. Reduce the scalability of applications

[next page](#)



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Which of the following are NOT benefits of using message queues?

Select one or more:

- a. Enable tight coupling between components
- b. Manage transactions in the business logic ✓
- c. Persistence of messages ✓
- d. Prioritize messages based on the requirement ✓
- e. Reduce the scalability of applications ✓

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Which of the following are NOT applications of Asynchronous calls (both local and remote)?

Select one or more:

- a. Reduce the waiting time of a client application due to a long running database read. ✓
- b. Having remote Asynchronous calls in a web application to reduce the amount of data exchanged and to im
- c. Block the client application till a remote validation is made
- d. Having local asynchronous calls to maintain UI responsiveness ✓
- e. Execute a function that doesn't consume much computational time, to create a thread and return the cont main thread in the server ✓



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Question 14

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Which of the following remote method mechanism are NOT appropriate to the given scenario?

Select one or more:



- a. Getting an alert if the temperature of a server room exceeds a certain limit - Asynchronous remote callback ✓
- b. Validating the login details of a user - Asynchronous Remote callback blocking
- c. Validating the credit card details of a transaction - Blocking ✓
- d. Checking the share market price periodically - Message Polling ✓
- e. Checking the humidity of a remote weather station periodically - Asynchronous Callback



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Question 13

Not yet answered

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Which of the following is NOT a strength of RMI?

Select one:

- a. Platform interoperability ✓
- b. Language Interoperability ↗ only Java
- c. Enables the secure access of system resources through policy files ↗
- d. Can use the object oriented principles and design patterns in Java ↗



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Question 12

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Which of the following are NOT examples of heterogeneity in distributed systems?

Select one or more:

- a. Multiple users accessing the system concurrently
- b. Messages being encrypted
- c. Multiple hardware platforms being used by the servers
- d. Multiple encryption algorithms used by different parts of the system
- e. Multiple Operating systems being used by the clients



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Which of the following combination of object activation are NOT appropriate?

Select one or more:

- a. Remote SMS Server object, where each message may create an SMS object - Per call instantiation ✓
- b. Remote timetable object, where each client share the same timetable - Per call instantiation ✗ singleton
- c. Remote Weather object, where each client sensors share the same object - Singleton instantiation ✓
- d. Remote Supermarket basket object, where each client may use a basket - Per client instantiation ✓
- e. Remote credit card object, where each client has a creditcard object created - Singleton instantiation ✗ per client



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Which of the following is NOT a function of the skeletons and stubs in RMI?

Select one:

- a. Enable the client to call a remote function without having to manually handle socket communication ✓
- b. Marshalling, which converts the method parameters in the remote function into a transferable format ✓
- c. Ensuring the security of the messages transferred
- d. Serialization, which converts the objects that needs to be transferred to the remote function, into a transferable format ✓

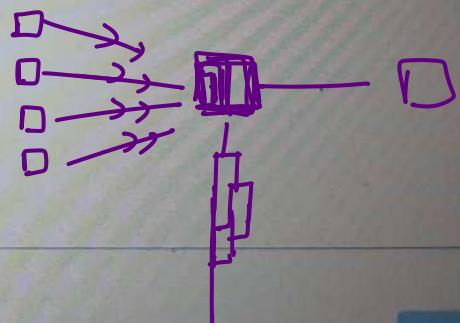
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In a TCP socket application that is used to update a weather status by gathering data from sensors. The sensors update the weather object simultaneously. How can the server object can be protected from integrity errors that can occur from race conditions?

Select one or more:

- a. Using synchronized methods to update the weather object X
- b. Using synchronized blocks in code blocks that does shared updates X
- c. Do all the updates on the weather object at the client X
- d. Using an encrypted channel to handle the communication
- e. Using a multi-threaded application to do the updates



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How can a TCP server handle the sudden crash of a client gracefully and close the server side socket?

Select one:

- a. Setting the server side socket variable to null
- b. Closing the server side socket as well
- c. Handling the IO Exception from the server side and closing the server side socket
- d. By handling the Socket Exception at the server side and closing the respective socket at the server side



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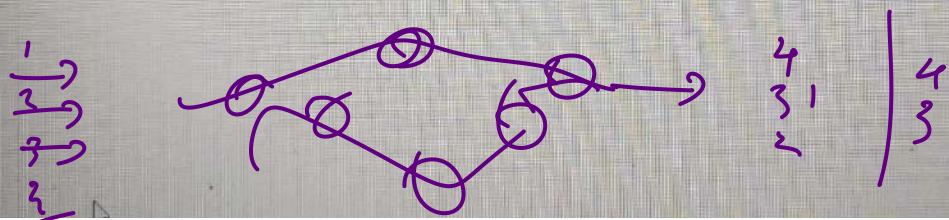
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What is the main reason for using the same DatagramSocket class both at the client and server side of a UDP application?

Select one or more:

- a. The same socket class is used to ensure secure communication
- b. The usage of the same socket class can make the implementation simpler
- c. The same socket class is used to handle multiple connections simultaneously
- d. There's no continuous connection, so the identical sockets can be used to facilitate communication at either end.



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What is the reason for using Inputstream/OutputStream classes in Java for socket communication?

Select one:

- a. As reading from/writing to sockets is similar to reading from/writing to a file. Both as input/output operations
- b. They are used to ensure secure communication
- c. These classes are used to allow peer to peer communication
- d. These classes are used to facilitate multithreading



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Question 5

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In a TCP application, why is multithreading necessary?

Select one:

- a. To ensure the reliability in communication
- b. To enable fault tolerance
- c. To enable secure communication
- d. To allow the server to simultaneously communicate with multiple clients

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Which of the following is the purpose of having a welcoming socket in TCP?

Select one:

- a. To block server communication until a new client is created
- b. To manage multiple client connections simultaneously ← UDP
- c. To close a client connection
- d. To make the initial connection with each new client



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Select an application that may require UDP protocol over TCP protocol?

Select one:

- a. A file transfer application
- b. A cloud based human resource management system
- c. A chat application
- d. An audio streaming application that may require performance over reliability



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Which one of the following is NOT a disadvantage of introducing a new tier in a system?

Select one:

- a. Less vulnerability for packet sniffing attacks
- b. Increased complexity in the system
- c. Increasing communication overhead
- d. Higher possibility of message transmission errors



Question 1

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Out of the following, what are the characteristics of a distributed system?

Select one or more:

- a. Restricted access X
- b. Distributed memory
- c. Shared memory X
- d. Message passing