Back Final Quiz
Graded Quiz • 1 min

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Congratulations! You passed!
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    Grade
                              Latest Submission
                                                                    To pass 80% or
    received 95%
                              Grade 80%
                                                                    higher
1. Which factor drives the data model in a NoSQL database?
                                                                                                                        1/1 point
      The schema

    The complexity of the joins

     The queries you intend to make

    Relationships among entities

         Expand
     ⊘ Correct
         Correct! In NoSQL it's not the data that drives your data model or schema. It's the way your application
         accesses the data and the queries you are going to make.
2. What is one way that a distributed NoSQL database usually shards data?
                                                                                                                        1/1 point

    By distributing all records that share the same key across multiple servers

    By grouping all records that have the same key on the same server

    By grouping all keys numerically

    By grouping all records that have the same data on the same server

         Expand
     ⊘ Correct
         To store large chunks of data, distributed systems either group all keys lexically or group all records that
         have the same key on the same server.
3. In the BASE model what does it mean for data to be in a "soft state"?
                                                                                                                        0 / 1 point
     The data store is accessible at all times.
      The data store values availability over consistency.

    Different replicas do not need to be mutually consistent all the time.

      The availability of data is ensured by partitioning it.
         Expand
     ⊗ Incorrect
         Incorrect. Review the ACID vs BASE video.
4. Which of the following makes NoSQL databases most appropriate for use with cloud computing?
                                                                                                                        1/1 point
      They are denormalized.
     Their distributed nature makes them easily deployed and operated on clusters of servers.

    They support complex queries.

     They have intuitive data structures.
         Expand
     ⊘ Correct
         Correct! The distributed data nature of NoSQL databases means that they can be deployed and operated
         on clusters of servers in cloud architectures, thereby massively reducing cost."
5. Which term refers to offloading of database administration and maintenance from the end user?
                                                                                                                        1/1 point
      NoSQL as a Service

    Administration as a Service

      Software as a Service
      Database as a Service
         Expand
     ⊘ Correct
         Correct! A fully managed service model, otherwise called database-as-a-service (or DBaaS) offloads the
         administration and maintenance from the end-user and allows developers to focus on building
         applications with these modern databases.
6. In MongoDB, which of the following common aggregation stages takes the outcome from the previous stage and
                                                                                                                        1/1 point
   stores it in a target collection?
      $project
      $count
      $sort
     $merge
         ∠ Expand
     ⊘ Correct
         The "$merge" aggregation stage takes the outcome from the previous stage and stores it in a target
         collection.
7. True or False: MongoDB supports rapidly changing schemas.
                                                                                                                        1/1 point
     True
     False
         Expand
     ⊘ Correct
         Correct! MongoDB utilizes an evolving schema.
8. Which statement about MongoDB is true?
                                                                                                                        1/1 point

    You can design complex data structures easily.

      It requires third-party software for complex queries.

    Documents are linked by primary keys.

    Data in the same document must be of the same data type.

         Expand
     ⊘ Correct
         Correct! You can design complex data structures easily in MongoDB without worrying about the
         complexity of how it is stored and how it should be linked.
9. Which of the following is a distinguishing characteristic of a compound index in MongoDB?
                                                                                                                        1/1 point

    When a single index structure holds reference to more than one field

      When an index helps you to quickly locate data without looking for it everywhere
      When the index is stored in a particular order
      When you create an index for the most frequent queries
         Expand
     ⊘ Correct
         MongoDB stores data being indexed on the index entry and a location of the document on disk.
10. Which is an advantage of sharding?
                                                                                                                        1/1 point
      It provides fault tolerance.
     It increases throughput by directing queries to relevant partitions.
      It creates redundancy.

    It prevents you from accidentally deleting your database.

         Expand
     ⊘ Correct
         Correct! When you partition your data across shards, you increase your throughput by directing your
         queries only to relevant shards.
11. What are the three data types in a collection?
                                                                                                                        1/1 point
      Lists, Dictionaries, and Arrays
      Blobs, Bigints, and ASCII

    Built-in, User-defined, and Lists

     Lists, Maps, and Sets
         Expand
     ⊘ Correct
         Correct! Within the collection data types category there are three data types: lists, maps, and sets.
12. Which of the following statements is true about the default WRITE statements in Cassandra Query Language
                                                                                                                        1/1 point
   (CQL)?

    Data is optimized using compaction after a WRITE operation.

      They are slower than INSERT and UPDATE statements.

    Every WRITE operation creates a new file called SSTable.

     It doesn't locate and read data before executing a WRITE.
         Expand
     ⊘ Correct
         Correct! By default, Cassandra doesn't locate and read data before executing a WRITE statement.
13. Select three key features used by relational databases but not by Cassandra.
                                                                                                                        0 / 1 point

    consistency, distributed, scalable

      join support, aggregation support, scalable
      join support, aggregation support, transaction support
      distributed, scalable, fault tolerant
         Expand
     ⊗ Incorrect
         Incorrect. Review the Overview of Cassandra video.
14. When would you be more likely to select MongoDB instead of Apache Cassandra?
                                                                                                                        0 / 1 point
      When the need for consistency outweighs the need for high availability and scalability
      When there is no need for joins or aggregations
      When use cases require fast data storage and easy data retrieval by key

    When the application is write-intensive

         Expand
     ⊗ Incorrect
         Review the Apache Cassandra in the NoSQL Space video.
15. What does "decentralized" mean?
                                                                                                                        0 / 1 point
         Clusters can be run on multiple machines while to the users and applications everything appears as a unified whole.
         Each computer in the Cassandra cluster can act as a server for the others, allowing shared access without the need for a central server.

    Each node in a Cassandra cluster is identical to the other nodes.

      Stored data in Cassandra is separated into pieces that run on different servers.
         Expand
     ⊗ Incorrect
         Incorrect. Review the Key Features of Cassandra video.
16. When you create a new IBM Cloudant database, what do you need to select?
                                                                                                                        1/1 point

    The number of documents

    The replication type

    The curl command line tool

     The partitioning type
         Expand
     ⊘ Correct
         When you create a database, you must select whether you want the database to be partitioned or non-
         partitioned.
17. What is the default HTTP method used in curl if the method is not specified?
                                                                                                                        1/1 point
     O PUT
     OPOST
     GET
      ○ DELETE
         Expand
     ⊘ Correct
         Correct! Curl defaults to using the 'GET' HTTP method unless you specify another method using the "-X"
         command-line switch.
18. What is the maximum number of databases can an IBM Cloudant cluster hold?
                                                                                                                        1/1 point
     O 10
     O 100
     0 1000
     Unlimited
         Expand
     ⊘ Correct
         Correct! A cluster can hold any number of databases.
19. What does IBM Cloudant use ping timing to do?
                                                                                                                        1/1 point

    Access role application

         Geographic load balancing
     Data center routing
      Offline data updates
         Expand
     ⊘ Correct
         Cloudant routes users to the data center closest to them in terms of time by using ping timing.
20. What is the IBM Cloudant Query equivalent of the WHERE clause in SQL?
                                                                                                                        1/1 point
      selector
      X switch
     -find
      ok":true
```

Expand

Cloudant Query's language is based on the MongoDB query language, which uses queries expressed in

query. This is the equivalent of the WHERE clause in SQL.

JSON formatted objects. These use a "selector" attribute to define the subset of data to be returned by the

⊘ Correct