**Couchbase**

# CAPELLA

## Associate Android Mobile Developer Certification With Capella Exam Study Guide

*Last updated: August 2023*

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# Welcome to Couchbase Associate Android Mobile Developer Certification With Capella!

## What to Expect:

⇒ Use this Study Guide to prepare for the Couchbase Associate Android Mobile Developer Certification With Capella Exam.

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## Information Confidentiality

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Certification Program and Exam Overview

This Study Guide is designed to help you prepare for the Couchbase Associate Android Mobile Developer Certification With Capella exam. The 40-question certification exam is based on fundamental aspects of developing an Android Mobile application using Couchbase Mobile products and services, including Couchbase Capella and various Couchbase SDKs.  As with any certification, the most valuable parts are the learning process which leads to successful concept recognition.

We encourage you to take time to go through the corresponding online modules which are offered free in a self-paced learning environment. These materials are designed to walk you through essential topics, Couchbase database and Couchbase Capella DBaaS features and benefits, as well as how Couchbase 7.0+ knowledge can be applied from the perspective of an Android Mobile Developer. However, taking the course is not a required prerequisite to taking the Certification Exam.

Items to understand:
- ⇒ Topics in this Study Guide and aligned to the exam and are organized by subject area, where each topic contains a description of what you should make sure you know.
- ⇒ The list of topics can be used as a check-list.
- ⇒ The CB140a course can be used for points of reference and explanation of key concepts covered in the exam.
- ⇒ Everything in the exam is covered somewhere in the course materials.

Possible Preparation Path:
- ⇒ Register for and take the 7 courses of CB140a: Couchbase Associate Android Mobile Developer Certification With Capella.
- ⇒ Make notes of key topics and call outs that align with the Study Guide topics listed.
- ⇒ Work through the lab exercises for practice with key concepts. Use labs to experiment with anything you need to spend more time on.
- ⇒ Please keep in mind that you are expected to have good working knowledge of all the topics listed. Most of the preparation questions will be very general; however, you will be asked a few advanced questions.

Certification Exam Logistics

When you are ready to test and validate your product knowledge, please visit learn.couchbase.com/store to purchase an industry-recognized CB140a: Couchbase Associate Android Mobile Developer Certification *With Capella* Exam.

- Certification exams may be taken from a location of your choosing, anywhere in the world, provided you meet the basic system and test environment requirements. *Please read these instructions thoroughly*. See here for requirements. *Mac users should pay specific attention here as setting changes may be required*. All users will need to bring a photo ID to the exam.

- For help with your exam purchase, exam registration process, credentials verification, or other questions related to our certification program, process, and procedures, please visit couchbase.com/academy/certification.

- The exam itself is computer-based and must be purchased from Couchbase.

- As of August 1, 2023, this exam will no longer require a proctor.

- You have up to 60 minutes to answer the 40 multiple choice questions. You must answer at least 32 questions correctly (80%) in order to pass the exam.

- Read each question carefully, and provide the best answer. Questions can be skipped and returned to as you have the ability to review all selected answers before submitting the exam.

- One exam attempt is available per purchase.


Certification Exam Pass/Fail Scenarios

If you earn a passing score, you will be granted the Couchbase Certified Associate Architect badge which is granted by Credly, our badging vendor.

- This badge can be socialized on LinkedIn, Twitter, Facebook, WhatsApp, or within your email signature.

- The skills you show with this certification have been validated as appropriate for the Associate-level Android Mobile Developer, and have been attested to by many Subject Matter Experts within Couchbase, Inc.

If you do not earn a passing score, you are encouraged to:

- Review the CB140a: Couchbase Associate Android Mobile Developer Certification With Capella Course and Study Guide at no additional cost.

- *Purchase a new exam on the Couchbase Academy Store.*

Certification Exam Frequently Asked Questions (FAQs)

1. **Is there anything in the exam, which was not covered in the course?**

    No, everything in the exam is derived from the course materials and associated lab exercises.

2. **Do I have to know class names and method signatures?**

    No, however we expect you to be familiar with the basic method structure of the APIs in question and to evaluate if the given methods are written correctly or not.

3. **Do I have to write, complete or rearrange source code?**

    No. The only thing you should be able to do is read a snippet of code and understand what it's doing.

4. **Who is eligible to take a certification exam?**
    Our certification exam is available to individuals seeking to attain the Couchbase Associate Android Mobile Developer certification. We offer a corresponding course to help you prepare you for our certification exam. However, you may purchase and sit for a certification exam any time you like.

5. **Can I get certified without taking the training course?**
    Our training course is the best way to gain the knowledge tested in our certification exam. However, course attendance is not a required step in the certification process.

6. **How do I purchase a certification exam?**
    Exams are available for purchase on our Couchbase Academy Store. Locate the exam and add to cart (*CB140a: Couchbase Associate Android Mobile Developer Certification With Capella Exam*) where you will be directed to log in if you have not already done so. Once logged in, you will complete the checkout. Once purchase has completed, you can begin your exam in the Couchbase Academy.

7. **How long is my exam purchase good for?**
    Once you have purchased the exam from the Couchbase Academy store, take your exam within 90 calendar days or the exam expires. Once this exam has expired, you must purchase another if you wish to continue with the exam. Therefore we encourage you to prioritize taking the exam.

8. **What happens if I pass the exam?**
    Within 72 hours of passing the exam, you will receive a notice to claim your digital badge through Credly. Once you accept your badge, you can share via LinkedIn, Twitter, and/or place in your email signature.

9. **What happens if I do not pass the exam?**
    ONE exam purchase offers you ONE opportunity to take the exam, whether you pass or fail. If you need another opportunity to take the exam, you may purchase again from our store. We encourage you to refresh your knowledge with the material in the associated course before re-attempting the exam.

10. **Do I have to create an account to take the exam or get the badge?**

    In order to accept your badge, you ARE required to create an account with Credly, our badging vendor.

Setting Up Your Mobile Application

1. Define Couchbase Lite, Couchbase Capella, Couchbase App Services, Couchbase Server, and Sync Gateway.

2. How can a Developer use the Couchbase Mobile SDKs to interact with Couchbase Lite?

3. Which services are required when creating a Mobile application with Couchbase Lite? Which services are recommended and why?

4. What dependencies must be enabled in Android Studio in order to use Couchbase Lite and at which levels (app, field, document) are the dependencies added?

5. What does `build.gradle` allow when working with Android Studio?


Key/Value Operations in Couchbase Mobile for Android

6. Describe how CouchbaseLite.init(context) interacts with Android Studio in order to perform K/V operations.

7. When are unique identifiers required in the integration of a mobile application's database?

8. What character identifies a Null Safe Operator?

9. How do Null and the Null Safe operator function when processing results from Key/Value operations?

10. Define a document and which kinds of data it can contain.

11. Define the toMutable() function and what it allows a Developer to do.

12. What does @Serializable enable, what is its source, and when is it used?

13. Define Logcat and identify best practices when testing code.

Querying With Couchbase Mobile and Android

14. Define SQL++/N1QL, Query Builder, and Live Query.

15. What are the benefits of using indexes in queries? What are some of the disadvantages?

16. Identify the Configuration Factory code and explain what it enables.

17. What are essential statement requirements for querying with Query Builder?

18. How does a backtick work when writing queries with Query Builder.

19. Explain how to use parameters in Query Building and SQL++.

20. Define the benefits and disadvantages of using parameters.

21. How are square brackets ([ ]), curly braces ({ }), and underscores (_) used in querying?

22. Regarding Live Query, explain the role of the consumer, intermediary, and producer and how each impacts using Live Query.

23. Explain how query Results function, what they are similar to, and how setting dictionary attributes change result sets.

Couchbase Capella and App Services

28. What are the advantages of using a Couchbase Capella database for your mobile application?

29. Describe the process of setting up a Trial account in Couchbase Capella.

30. What is included in a new Trial Capella database?

31. As of January 2023, what are the public cloud platforms that can be connected to a Couchbase Capella database?

32. What is a Bucket, and how is a Bucket important to creating a Capella App Service?

33. Define the Authentication Provider options available in Couchbase App Services.

34. What is an App Endpoint, and how does it function within App Services?

35. Define an App User, App Role, and a Channel.

36. What is Offline First Data Sync and what benefits does it provide?

Couchbase Mobile Synchronization with App Services

37. What is the structure of an App Endpoint? From where does it get its data? To where does it send its data?

38. What are the default settings when a new App Endpoint is created?

39. How does the name of an App Endpoint impact the URL?

40. What is a Linked Bucket and how does it interact with App Services?

41. Define Delta Sync and its advantages.

42. What are the required components when synchronizing a mobile application with Capella?

43. Regarding Access Controls, what does an exclamation mark "!" indicate?

44. What are some of the advantages and disadvantages to Public Channel access?

45. How do Channels impact document access?

46. Explain the code needed to allow data replication and syncing of information from your mobile application to the Capella database.

47. At which levels do Access Control functions READ and WRITE?

**Next Steps**

Now that you have completed this
Study Guide, we hope you feel
prepared to take the Couchbase
Associate Android Mobile Developer
Certification With Capella exam.

**Exam**

The exam must be purchased at the Couchbase Academy Store your exam will contain 40 questions. You
will be given 60 minutes to complete the exam, and no feedback will be provided at the question level.
Once you have completed the exam, you will be given your score.

**Questions? Concerns?**

Please send all inquiries to training@couchbase.com.