

NoSQL2 Guided Project

Introduction

This week we will be learning how to fetch various data from the database for the Ecommerce App in MongoDB.

In order to fetch data we have to make sure we have enough documents in each of the collections of the database for Ecommerce App. For these you can use the NodeJS script provided and guidelines document provided in the **02_NOSQL2 Guided Project_Files and Script.zip** folder.

We have designed the database as per **01_ECommerceApp_NoSQL Database Design Document.pdf** documents provided within the **02_NOSQL2 Guided Project_Files and Script** folder. We will only focus on the queries of collections in this session. We will perform all queries on **Mongo Shell**.

Housekeeping points

- This is a minimal example and may not follow some standard practices.
- We focus on the main flow, and not much error handling.

Problem Statement

Our task is as follows:

- 1. Find a user with a specific username.
- 2. Retrieve users with a particular email address.
- 3. Get active users.
- 4. Find users who are administrators (isAdmin = true).
- 5. Retrieve users created within a specific time range.
- 6. Find users with a partial match on their full name.
- 7. Retrieve users having a specific password.
- 8. Find a session by its unique ID.
- 9. Retrieve sessions for a specific user ID.
- 10. Retrieve sessions with a specific session token.
- 11. Find an order by its unique ID.
- 12. Retrieve orders for a specific user ID.
- 13. Get orders with a total price greater than a specified value.
- 14. Find orders that include a specific product ID.
- 15. Retrieve active orders.
- 16. Find orders created within a specific time range.
- 17. Get orders with a specific status.



- 18. Find ids and total order price of all orders with a total price greater than a specified value using aggregation.
- 19. Find orders with a specific email in the shipping details.
- 20. Calculate the total number of orders.
- 21. Calculate the total order value for all orders.
- 22. Retrieve the average order total price.
- 23. Get the count of orders for each status.
- 24. Calculate the total order value for each user.
- 25. Find the top 3 selling products based on the number of units sold.