

Exercise LAB 12: MongoDB

Instructions

- You can find the list of commands supported by MongoDB, and additional useful documentation on the official website (<https://docs.mongodb.com/manual/>)
- You are required to submit all tasks on paper mentioning your Roll No , during Lab.(Time : 45 min)

Problem 1.

Assume you are launching an E-commerce website which has a Product catalog Module. Product catalog is a set of information about individual models. Models are specific versions or various configurations of an asset. Models published to the product catalog includes information about goods (models). It is simply a database of information about all the products that you have ready for launch on your website. It has the capacity to store many differed types of objects with different sets of attributes like Type, title, description, shipping, pricing and other details. Any entity can have any set of any attributes. New product categories do not require any changes to the data model in the database. The document for each product only needs to contain attributes relevant to that product. Product shipping details should include the Products' weight, dimensions, width, height and depth. Product pricing details should include price, retail, savings and discount amounts on that product. Then, a sub-details sub-document that contains fields that vary between product types and manufact_date.

- Task 1. Design an E-commerce product Catalog System.
- Task 2. Convert RDBMS to Nosql to use MongoDB as a storage engine.
- Task 3. Create database and Use a single MongoDB collection to store all the products.
- Task 4. Insert data of different types of products.
(atleast 10 documents of 3 different types i.e. DVD,CAR, MOBILE)
(Hint: you can use bulk.insert())
- Task 5. Extract documents that match certain criteria.
(Hint: using find() with operators e.g. \$gt)
- Query 1. Find products in price range \$5 to \$10.
- Query 2. Find products on which discount is > 25 %.
- Query 3. Find a DVD movie product directed by Christopher Nolan
(Hint: Sub-details).
- Query 4. Find products by Type Car.
- Query 5. Find products sorted by manufactured date.