Module 2 – Schema Design and Data Modelling

MongoDB Demo

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Demo:

1. Consider that we have Customers, Country, Promotions, Products, and Sales tables to be inserted in Oracle Database.
2. We want to insert the same collections in MongoDB database.
3. Let us now observe the relationship between these tables for SQL database.
4. The Customer table consists of fields like CUST_CODE and COUNTRY_CODE where CUST_CODE is the Primary key.
5. Customer table also consists of COUNTRY_CODE which shares a relationship with the Country table which has COUNTRY_CODE as a primary key.
6. Similarly, the Promotion and Products Table consists of primary keys PROD_CODE and PROMO_CODE respectively.
7. These fields are also present in the Sales table with ORDER_NUMBER as the primary key.
8. We can establish the relation between customer and country whereas Sales tables can be related to Customers, Promotions, and Products using the primary-foreign key relationship.
9. This type of Data model is called Relational Data-model.
10. However, in MongoDB database, there are two types of data models: Reference data model and Embedded data model.
11. We can utilize both the data models, for the given set of collections.
12. We can embed the data of Country collection in Customer collection because Country Collection is related to only Customer Collection.
13. However, to relate sales collection with other collections such as Customers, Products, and Promotions, we can use reference data model to avoid redundancy and complexity.
14. In Reference data modelling, we can use fields such as PROMO_CODE, PROD_CODE, and CUST_CODE to find a document in SALES collection and vice versa.

This concludes the demo.