DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

UNITED INTERNATIONAL UNIVERSITY

CSE6001: Advanced Database Systems

Implementing a Food Delivery Service Database Using Object-Oriented Oracle and MongoDB

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Part 1: Implementing in Object-Oriented Oracle

Part 2: Implementing in MongoDB

Here I have used JSON schema to define the structure and validation rules for each collection. I have explicity used create commands. Though in mongodb we dont́ need to use create command. In each collection i have inserted at least 5 records or documents. Here I have used

Here's how JSON schema is used in the code:

- **schema:** Every collection has a validator that specifies JSON schema for that collection

- **data types:** Data types for each field, such as string, number, boolean, date, and array.

- **required fields:** It defines which fields are required and which are optional.

- **validation rules:** validation rules, such as regular expressions for email addresses or phone numbers, or range constraints for numerical values

MongoDB supports both reference-based and embedded document modeling, but in this project I have used embedded documents to represent relationships between entities.

- **food_items collection:** here restaurant_id: linking the food item to the restaurant collection.

- **oreders collection:** customer_id linking the customer. food_items: Array of ordered food items which is embedded, each with a food_item_id which is linking with food item collection. delivery_personnel_id linking the delivery persoannel collection.

- **payments collection:** order_id linking with order collection.

- **combo_offers collection:** restaurant_id linking with restaurant collection