Database Design and Development Report

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Team ID	SWTID1743680479
Project Name	SB Foods - Food Ordering App
Maximum Marks	

Project Title: SB Foods - Food Ordering App

Date: 14/04/25

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Objective

Our project focuses on building a simple food delivery web app using the MERN stack by combining basic but essential features. The main goal is to allow users to register, log in, view a list of available restaurants, browse food items by category, add items to their cart, and place orders smoothly.

Technologies Used

- **Database Management System (DBMS):** MongoDB
- **Object-Document Mapper (ODM):** Mongoose

Design the Database Schema

The database schema is designed to accommodate the following entities and relationships:

1. Users

- Attributes: name, email, password, cartdata

2. Orders

- Attributes: userId, items, amount, address, status, date, payment

3. Food

- Attributes: name, description, price, image, category

Implement the Database using MongoDB

The MongoDB database is implemented with the following collections and structures:

Database Name: food_delivery_website

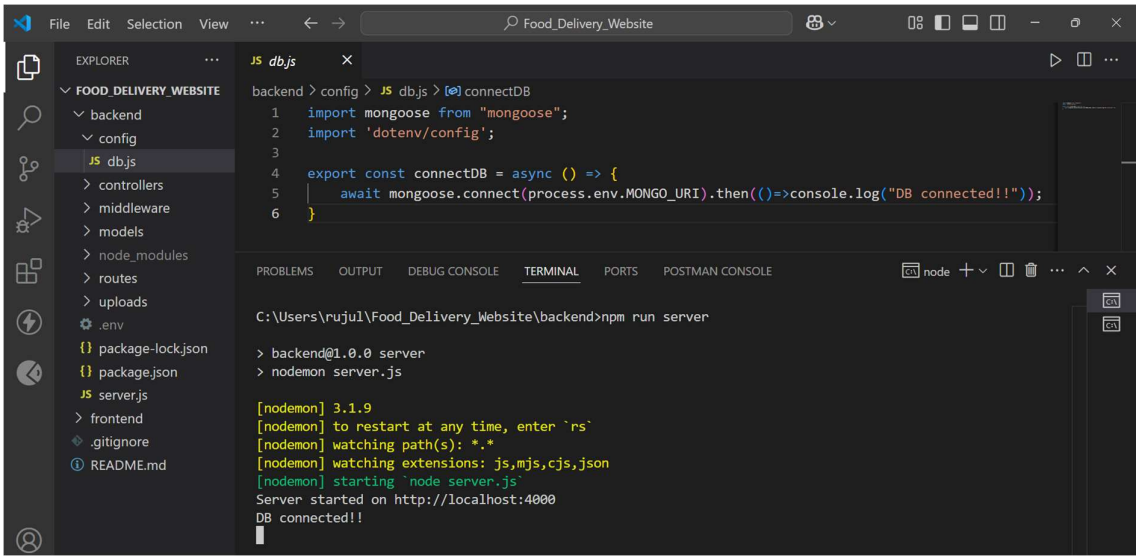
```
foodSchema = new mongoose.Schema({
    name: {type:String,required:true},
    description: {type:String,required:true},
    price:{type:Number,required:true},
    image:{type:String,required:true},
    category:{type:String,required:true}
})

orderSchema = new mongoose.Schema({
  userId: { type: String, required: true },
  items: { type: Array, required: true },
  amount: { type: Number, required: true },
  address: { type: Object, required: true },
  status: { type: String, default: "Food Processing" },
  date: { type: Date, default: Date.now },
  payment: { type: Boolean, default: false }
});

userSchema = new mongoose.Schema({
    name:{type:String, required:true},
    email:{type:String, required:true, unique:true},
    password:{type:String, required:true},
    cartData:{type:Object, default:{}},
})
```

Integration with Backend

- Database connection:



- The backend APIs interact with MongoDB using Mongoose ODM Key interactions include:
    - User Management: CRUD operations for Users.
    - Food Management: CRUD operations for Food items.
    - Order Management: CRUD operations for Orders.