Full Stack Development with MERN

Database Design and Development Report

Date	12-July-2024
Team ID	SWTID1720069738
Project Name	House Hunt
Maximum Marks	5 Marks

Project Title: House Hunt

Date: 12-July-2024

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Objective

The objective of this report is to outline the database design and implementation details for the "House Hunt" project, including schema design and database management system (DBMS) integration.

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: `_id`, `name`, `email`, `password`, `avatar`.

2.Listing Schema:

-Attributes: `_id`, `name`, `description`, `address`, `type`, `bedrooms`, `bathrooms`, `regularPrice`, `discountPrice`, `offer`, `parking`, `furnished`, `imageUrls`, `userRef`, `createdAt`, `updatedAt`

Implement the Database using MongoDB

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

Database Name: [your_database_name]

1. Collection: users

- Schema:

```
{
  _id: ObjectId,
  name: String,
  email: String,
  password: String,
  avatar:String
}
```

2. Collection: Listing

- Schema:

```
_id: ObjectId,
name: String,
description: String,
address: String,
type: String,
bedrooms: Number,
bathrooms: Number,
regularPrice: Number,
discountPrice: Number,
offer: Boolean,
parking: Boolean,
furnished: Boolean,
```

imageUrls: [String],

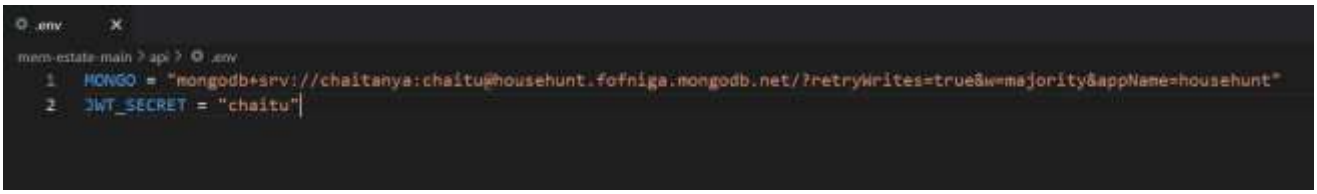
userRef: ObjectId,

createdAt: Date,

updatedAt: Date ```

Integration with Backend

- Database connection: The Screenshot of Database connection done using Mongoose



- The backend APIs interact with MongoDB using Mongoose ODM Key interactions include:
    - User Management: CRUD operations for users.
    - Post Management: CRUD operations for posts, with user authentication.
    - Comment Management: CRUD operations for comments associated with posts.