

Models Schemas :

1.User

```
{
  UserName: { type: String, required: true },
  userEmail: { type: String, required: true },
  UserType: { type: String, required: true},
  Password: { type: String, required: true },
}
```

2.Admin

```
{
  adminName: { type: String, required: true },
  adminEmail: { type: String, required: true },
  adminContact: { type: String},
  Image: { type: String },
  adminAddress: { type: mongoose.Types.ObjectId, required: true, ref: 'Address' },
  user: { type: mongoose.Types.ObjectId, required: true, ref: 'User' },
}
```

3.Customer

```
{
  CustomerName: { type: String, required: true },
  CustomerEmail: { type: String, required: true },
  CustomerContact: { type: String },
  Image: { type: String },
  CustomerAddress: { type: mongoose.Types.ObjectId, required: true, ref: 'Address' },
  user: { type: mongoose.Types.ObjectId, required: true, ref: 'User' },
}
```

4.Address

```
{
  cityVillage: { type: String, required: true },
  pincode: { type: Number, required: true },
  state: { type: String, required: true },
  country: { type: String, required: true },
  streetOrSociety: { type: String, required: true },
  // Owner can be an Admin, Customer, or used in OrderDetail
  ownerId: { type: mongoose.Schema.Types.ObjectId, required: true, refPath: 'ownerModel' },
  // ownerModel dynamically points to 'Admin', 'Customer', or 'OrderDetail'
  ownerModel: { type: String, required: true, enum: ['Admin', 'Customer', 'OrderDetail'] }
}
```

5.Product

```
{
  Name: { type: String, required: true },
  Description: { type: String, required: true },
  Price: { type: Number, required: true },
  Available: { type: Boolean, required: true },
  Stock: { type: Number, required: true },
  Image: { type: String, required: true },
  Rating: { type: Number, required: true },
  Category: { type: String, required: true },
  SubCategory: { type: String, required: true },
}
```

6.Shoppingcart

```
{
  user: { type: mongoose.Types.ObjectId, required: true, ref: 'User' },
  cartItems: [{ type: mongoose.Types.ObjectId, ref: 'CartItem' }], // Store only ObjectIds
  totalPrice: { type: Number, required: true }, // Sum of all cartItems' prices
  lastUpdated: { type: Date, default: Date.now },
}
```

7.cartItem

```
{  
  product: { type: mongoose.Types.ObjectId, required: true, ref: 'Product' },  
  quantity: { type: Number, required: true },  
  totalPrice: { type: Number, required: true }, // Product price * quantity  
}
```

8.order

```
{  
  user: { type: mongoose.Types.ObjectId, required: true, ref: 'User' },  
  orderItems: [{  
    product: { type: mongoose.Types.ObjectId, required: true, ref: 'Product' },  
    quantity: { type: Number, required: true },  
    price: { type: Number, required: true },  
  }],  
  totalPrice: { type: Number, required: true }, // Sum of all orderItems' prices  
  orderStatus: { type: String, enum: ['pending', 'confirmed', 'delivered'], default: 'pending' },  
  orderDate: { type: Date, default: Date.now },  
}
```

9.Orderdetail

```
{  
  order: { type: mongoose.Types.ObjectId, required: true, ref: 'Order' },  
  deliveryAddress: { type: mongoose.Types.ObjectId, required: true, ref: 'Address' },  
  totalPrice: { type: Number, required: true },  
  tax: { type: Number, default: 0 },  
  discount: { type: Number, default: 0 },  
  finalPrice: { type: Number, required: true }, // totalPrice + tax - discount  
}
```

Database Entry Format With Endpoints :

POST Method:

User

Api: <http://localhost:5000/api/users/>

```
{
  "_id": "64b5e0d3f9c5bcdbb8a90c23",
  "UserName": "customer_emily",
  "UserEmail": "emily.customer@example.com",
  "UserType": "Customer",
  "Password": "hashedpassword5"
}
```

Admin

Api: <http://localhost:5000/api/admins/>

```
{
  "adminName": "John Does",
  "adminEmail": "john.doe@example.com",
  "adminContact": "1234567890",
  "Image": "admin1.jpg",
  "adminAddress": {
    "cityVillage": "New York",
    "pincode": 10001,
    "state": "NY",
    "country": "USA",
    "streetOrSociety": "5th Avenue"
  },
  "user": {
    "UserName": "John Does",
    "UserEmail": "john.doe@example.com",
    "UserType": "Admin",
    "Password": "password123"
  }
}
```

Customer

Api: <http://localhost:5000/api/customers/>

```
{
  "CustomerName": "Robin Customer",
  "CustomerEmail": "Robin.customer@example.com",
  "CustomerContact": "0987654321",
  "Image": "/uploads/customer/bob.jpg",
  "CustomerAddress": {
    "cityVillage": "Chicago",

```

```
"pincode": 60601,
"state": "Illinois",
"country": "USA",
"streetOrSociety": "101 North Michigan Ave"
},
"user": {
  "UserName": "Robin",
  "UserEmail": "Robin.customer@example.com",
  "UserType": "Customer",
  "Password": "Robin123"
}
}
```

Address

Api: <http://localhost:5000/api/addresses/>

```
{
  "_id": "64b5e1b9f9c5bcdbb8a90c2e",
  "cityVillage": "Houston",
  "pincode": 77001,
  "state": "Texas",
  "country": "USA",
  "streetOrSociety": "Main Street",
  "ownerId": "64b5e0d3f9c5bcdbb8a90c23",
  "ownerModel": "Customer"
}
```

Product

Api: <http://localhost:5000/api/products/>

```
{
  "Name": "Raw Honey",
  "Description": "Pure and natural raw honey",
  "Price": 6.5,
  "Available": true,
  "Stock": 40,
  "Image": "/images/products/raw_honey.jpg",
  "Rating": 4.9,
  "Category": "Pantry",
  "SubCategory": "Sweeteners",
  "__v": 0
}
```

ShoppingCart

Api: <http://localhost:5000/api/shopping-carts/>

```
{
  "user": "67890d161f6fffa6bb68a83f",
  "cartItems": ["678915f33a27aa213520ea51", "678915f33a27aa213520ea52"],
  "totalPrice": 7.8,
  "lastUpdated": "2025-01-16T15:00:00Z"
}
```

CartItem

Api: <http://localhost:5000/api/cart-items/>

```
{
  "_id": "678915f33a27aa213520ea52",
  "product": "678915f33a27aa213520ea43",
  "quantity": 1,
  "totalPrice": 1.8
}
```

Order

Api: <http://localhost:5000/api/orders/>

```
{
  "_id": "678916f33a27aa213520ea62",
  "user": "67890d161f6fffa6bb68a83f",
  "orderItems": [
    {
      "product": "678915f33a27aa213520ea40",
      "quantity": 3,
      "price": 6.0
    },
    {
      "product": "678915f33a27aa213520ea43",
      "quantity": 1,
      "price": 1.8
    }
  ],
  "totalPrice": 7.8,
  "orderStatus": "delivered",
  "orderDate": "2025-01-16T15:45:00Z"
}
```

OrderDetails

Api: <http://localhost:5000/api/order-details/>

```
{
  "_id": "678917f33a27aa213520ea72",
  "order": "678916f33a27aa213520ea62",
}
```

```
"deliveryAddress": {  
  "cityVillage": "Chicago",  
  "pincode": 60601,  
  "state": "Illinois",  
  "country": "USA",  
  "streetOrSociety": "101 North Michigan Ave",  
  "ownerId": "678916f33a27aa213520ea62",  
  "ownerModel": "OrderDetail",  
  "__v": 0  
},  
"totalPrice": 7.8,  
"tax": 0.2,  
"discount": 0.5,  
"finalPrice": 7.5  
}
```

Get ALL

User

Api: <http://localhost:5000/api/users/>

Admin

Api: <http://localhost:5000/api/admins/>

Customer

Api: <http://localhost:5000/api/customers/>

Address

Api: <http://localhost:5000/api/addresses/>

ShoppingCart

Api: <http://localhost:5000/api/shopping-carts/:id>

Id → User id

CartItem

Api: <http://localhost:5000/api/cart-items/>

Order

Api: <http://localhost:5000/api/orders/>

OrderDetails

Api: <http://localhost:5000/api/order-details/>

Products

Api: <http://localhost:5000/api/products/>

Get ALL By ID

User

Api: <http://localhost:5000/api/users/:id> ← User Id

Admin

Api: <http://localhost:5000/api/admins/:id> ← Admin Id

Customer

Api: <http://localhost:5000/api/customers/:id> ← Customer Id

Address

Api: <http://localhost:5000/api/addresses/:id> ← Address Id

ShoppingCart

Api: <http://localhost:5000/api/shopping-carts/:id> ← User Id

CartItem

Api: <http://localhost:5000/api/cart-items/:id> ← CartItem Id

Order

Api: <http://localhost:5000/api/orders/:id> ← Order Id

OrderDetails

Api: <http://localhost:5000/api/order-details/:id> ← OrderDetails

Product

Api: <http://localhost:5000/api/products/:id> ← Product Id

Delete

User

Api: <http://localhost:5000/api/users/:id> ← User Id

Admin

Api: <http://localhost:5000/api/admins/:id> ← Admin Id

Customer

Api: <http://localhost:5000/api/customers/:id> ← Customer Id

Address

Api: <http://localhost:5000/api/addresses/:id> ← Address Id

ShoppingCart

Api: <http://localhost:5000/api/shopping-carts/:id> ← User Id

CartItem

Api: <http://localhost:5000/api/cart-items/:id> ← CartItem Id

Order

Api: <http://localhost:5000/api/orders/:id> ← Order Id

OrderDetails

Api: <http://localhost:5000/api/order-details/:id> ← OrderDetails

Product

Api: <http://localhost:5000/api/products/:id> ← Product Id

PUT Method / Update Method

Get ALL By ID

User

Api: <http://localhost:5000/api/users/:id> ← User Id

```
{
  "_id": "64b5e0d3f9c5bcd8b8a90c23",
  "UserName": "customer_emily",
  "UserEmail": "emily.customer@example.com",
  "UserType": "Customer",
  "Password": "emily123",
  "__v": 0
}
```

Admin

Api: <http://localhost:5000/api/admins/:id> ← Admin Id

```
{
  "adminName": "John Does",
  "adminEmail": "john.doe@example.com",
  "adminContact": "1234567890",
  "Image": "admin1.jpg",
  "adminAddress": {
    "cityVillage": "New York",
    "pincode": 10001,
    "state": "NY",
    "country": "USA",
    "streetOrSociety": "5th Avenue"
  },
  "user": {
    "UserName": "John Does",
```

```

    "UserEmail": "john.doe@example.com",
    "UserType": "Admin",
    "Password": "password123"
  }
}

```

Customer

Api: <http://localhost:5000/api/customers/:id> ← Customer Id

```

{
  "_id": "6788cbacfd6671a1c43bb20d",
  "CustomerName": "customer_emily",
  "CustomerEmail": "emily.customer@example.com",
  "user": {
    "_id": "64b5e0d3f9c5bcdbb8a90c23",
    "UserName": "customer_emily",
    "UserEmail": "emily.customer@example.com",
    "UserType": "Customer",
    "Password": "$2a$10$CiE3s3h.26hTXIJ0kpeKGu6B4k3HuCVyuToKlXKaXgzmAPL0/k9ty",
    "__v": 0
  },
  "CustomerAddress": {
    "cityVillage": "Chicago",
    "pincode": 60601,
    "state": "Illinois",
    "country": "USA",
    "streetOrSociety": "101 North Michigan Ave",
    "ownerId": "678911bb4b5dafad785fd13f",
    "ownerModel": "Customer",
    "__v": 0
  },
  "__v": 0
}

```

Address

Api: <http://localhost:5000/api/addresses/:id> ← Address Id

```

{
  "_id": "6788cf9c5f96bf946b919b1c",
  "cityVillage": "Los Angeles",
  "pincode": 90001,
  "state": "California",
  "country": "USA",
  "streetOrSociety": "Sunset Blvd",
  "ownerId": "64b5e0d3f9c5bcdbb8a90c20",
  "ownerModel": "Admin",
  "__v": 0
}

```

```
}
```

ShoppingCart

Api: <http://localhost:5000/api/shopping-carts/:id> ← User Id

```
{
  "_id": "67892c993a27aa213520ea78",
  "user": "67890d161f6ffa6bb68a83f",
  "cartItems": [
    "678915f33a27aa213520ea51",
    "678915f33a27aa213520ea52"
  ],
  "totalPrice": 9.8,
  "lastUpdated": "2025-01-16T15:00:00.000Z",
  "__v": 0
}
```

CartItem

Api: <http://localhost:5000/api/cart-items/:id> ← CartItem Id

```
{
  "_id": "678917b43a27aa213520ea49",
  "product": "64b5e1b9f9c5bcd8b8a90c2a",
  "quantity": 1,
  "totalPrice": 7,
  "__v": 0
}
```

Order

Api: <http://localhost:5000/api/orders/:id> ← Order Id

```
{
  "_id": "677bd18817310ff83b507d9",
  "user": "64b5e0d3f9c5bcd8b8a90c1f",
  "orderItems": [
    {
      "product": null,
      "quantity": 2,
      "price": 20,
      "_id": "677bd2d9155ce081d1ac3590"
    }
  ],
  "totalPrice": 90,
  "orderStatus": "confirmed",
}
```

```
"orderDate": "2025-01-05T12:00:00.000Z",
"__v": 0
}
```

OrderDetails

Api: <http://localhost:5000/api/order-details/:id> ← OrderDetails

```
{
  "_id": "67893a5c95dc8dfba76bd39c",
  "order": "678916f33a27aa213520ea60",
  "deliveryAddress": {
    "_id": "67893a5b95dc8dfba76bd39a",
    "cityVillage": "Chicago",
    "pincode": 60601,
    "state": "Illinois",
    "country": "USA",
    "streetOrSociety": "101 North Michigan Ave",
    "ownerId": "678916f33a27aa213520ea60",
    "ownerModel": "OrderDetail",
    "__v": 0
  },
  "totalPrice": 9.8,
  "tax": 0,
  "discount": 0,
  "finalPrice": 10,
  "__v": 0
}
```

Product

Api: <http://localhost:5000/api/products/:id> ← Product Id

```
{
  "_id": "678915f33a27aa213520ea43",
  "Name": "Organic Apple",
  "Description": "Fresh organic apples",
  "Price": 3.5,
  "Available": true,
  "Stock": 100,
  "Image": "/images/products/apple.jpg",
  "Rating": 4.5,
  "Category": "Fruits",
  "SubCategory": "Organic",
  "__v": 0
}
```

User Registration and login

User Register:

Api: <http://localhost:5000/api/users/register/>

```
{
  "UserName": "OliverWilson1",
  "UserEmail": "oliverwilson1@example.co.uk",
  "UserType": "Customer",
  "Password": "oliver123",
  "__v": 0
}
```

User login:

Api: <http://localhost:5000/api/users/login/>

```
{
  "UserEmail": "john.admin@example.com",
  "Password": "john123"
}
```

Output:

```
{
  "message": "Login successful",
  "token":
    "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6IjY3ODhjYWMyZmQ2NjcxYTFjNDNiYjFmYSIsImhhbmciOiI0MTczNzA0OTA2NCwiZXhwIjozMDUyNjY0fQ.9YqJtafPFEvhHqSIwHUAeXGpUdpVdABLdbkeYp2nWrM"
}
```