**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/**](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/**](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/**](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/**](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/**](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/**](http://localhost:5000/api/shopping-carts/)

**{**

**"user": "67890d161f6fffa6bb68a83f",**

**"cartItems": ["678915f33a27aa213520ea51", "678915f33a27aa213520ea52"],**

**"totalPrice": 7.8,**

**"lastUpdated": "2025-01-16T15:00:00Z"**

**}**

**CartItems**

**Api:** [**http://localhost:5000/api/cart-items/**](http://localhost:5000/api/cart-items/)

**{**

**"\_id": "678915f33a27aa213520ea52",**

**"product": "678915f33a27aa213520ea43",**

**"quantity": 1,**

**"totalPrice": 1.8**

**}**

**Order**

**Api:** [**http://localhost:5000/api/orders/**](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/**](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/**](http://localhost:5000/api/users/)

**Admin**

**Api:** [**http://localhost:5000/api/admins/**](http://localhost:5000/api/admins/)

**Customer**

**Api:** [**http://localhost:5000/api/customers/**](http://localhost:5000/api/customers/)

**Address**

**Api:** [**http://localhost:5000/api/addresses/**](http://localhost:5000/api/addresses/)

**ShoppingCart**

**Api:** [**http://localhost:5000/api/shopping-carts/:id**](http://localhost:5000/api/shopping-carts/:id)

**Id 🡪 User id**

**CartItems**

**Api:** [**http://localhost:5000/api/cart-items/**](http://localhost:5000/api/cart-items/)

**Order**

**Api:** [**http://localhost:5000/api/orders/**](http://localhost:5000/api/orders/)

**OrderDetails**

**Api:** [**http://localhost:5000/api/order-details/**](http://localhost:5000/api/order-details/)

**Products**

**Api:** [**http://localhost:5000/api/products/**](http://localhost:5000/api/products/)

**Get ALL By ID**

**User**

**Api:** [**http://localhost:5000/api/users/:id**](http://localhost:5000/api/users/:id) **🡨 User Id**

**Admin**

**Api:** [**http://localhost:5000/api/admins/:id**](http://localhost:5000/api/admins/:id) **🡨 Admin Id**

**Customer**

**Api:** [**http://localhost:5000/api/customers/:id**](http://localhost:5000/api/customers/:id) **🡨 Customer Id**

**Address**

**Api:** [**http://localhost:5000/api/addresses/:id**](http://localhost:5000/api/addresses/:id) **🡨 Address Id**

**ShoppingCart**

**Api:** [**http://localhost:5000/api/shopping-carts/:id**](http://localhost:5000/api/shopping-carts/:id) **🡨 User Id**

**CartItems**

**Api:** [**http://localhost:5000/api/cart-items/:id**](http://localhost:5000/api/cart-items/:id) **🡨 CartItem Id**

**Order**

**Api:** [**http://localhost:5000/api/orders/:id**](http://localhost:5000/api/orders/:id) **🡨 Order Id**

**OrderDetails**

**Api:** [**http://localhost:5000/api/order-details/:id**](http://localhost:5000/api/order-details/:id) **🡨 OrderDetails**

**Product**

**Api:** [**http://localhost:5000/api/products/:id**](http://localhost:5000/api/products/:id) **🡨 Product Id**

**Delete**

**User**

**Api:** [**http://localhost:5000/api/users/:id**](http://localhost:5000/api/users/:id) **🡨 User Id**

**Admin**

**Api:** [**http://localhost:5000/api/admins/:id**](http://localhost:5000/api/admins/:id) **🡨 Admin Id**

**Customer**

**Api:** [**http://localhost:5000/api/customers/:id**](http://localhost:5000/api/customers/:id) **🡨 Customer Id**

**Address**

**Api:** [**http://localhost:5000/api/addresses/:id**](http://localhost:5000/api/addresses/:id) **🡨 Address Id**

**ShoppingCart**

**Api:** [**http://localhost:5000/api/shopping-carts/:id**](http://localhost:5000/api/shopping-carts/:id) **🡨 User Id**

**CartItems**

**Api:** [**http://localhost:5000/api/cart-items/:id**](http://localhost:5000/api/cart-items/:id) **🡨 CartItem Id**

**Order**

**Api:** [**http://localhost:5000/api/orders/:id**](http://localhost:5000/api/orders/:id) **🡨 Order Id**

**OrderDetails**

**Api:** [**http://localhost:5000/api/order-details/:id**](http://localhost:5000/api/order-details/:id) **🡨 OrderDetails**

**Product**

**Api:** [**http://localhost:5000/api/products/:id**](http://localhost:5000/api/products/:id) **🡨 Product Id**

**PUT Method / Update Method**

**Get ALL By ID**

**User**

**Api:** [**http://localhost:5000/api/users/:id**](http://localhost:5000/api/users/:id) **🡨 User Id**

**{**

**"\_id": "64b5e0d3f9c5bcdbb8a90c23",**

**"UserName": "customer\_emily",**

**"UserEmail": "emily.customer@example.com",**

**"UserType": "Customer",**

**"Password": "emily123",**

**"\_\_v": 0**

**}**

**Admin**

**Api:** [**http://localhost:5000/api/admins/:id**](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**](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**](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**](http://localhost:5000/api/shopping-carts/:id) **🡨 User Id**

**{**

**"\_id": "67892c993a27aa213520ea78",**

**"user": "67890d161f6fffa6bb68a83f",**

**"cartItems": [**

**"678915f33a27aa213520ea51",**

**"678915f33a27aa213520ea52"**

**],**

**"totalPrice": 9.8,**

**"lastUpdated": "2025-01-16T15:00:00.000Z",**

**"\_\_v": 0**

**}**

**CartItems**

**Api:** [**http://localhost:5000/api/cart-items/:id**](http://localhost:5000/api/cart-items/:id) **🡨 CartItem Id**

**{**

**"\_id": "678917b43a27aa213520ea49",**

**"product": "64b5e1b9f9c5bcdbb8a90c2a",**

**"quantity": 1,**

**"totalPrice": 7,**

**"\_\_v": 0**

**}**

**Order**

**Api:** [**http://localhost:5000/api/orders/:id**](http://localhost:5000/api/orders/:id) **🡨 Order Id**

**{**

**"\_id": "677bd18817310fff83b507d9",**

**"user": "64b5e0d3f9c5bcdbb8a90c1f",**

**"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**](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**](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/**](http://localhost:5000/api/users/register/)

**{**

**"UserName": "OliverWilson1",**

**"UserEmail": "oliverwilson1@example.co.uk",**

**"UserType": "Customer",**

**"Password": "oliver123",**

**"\_\_v": 0**

**}**

**User loign:**

**Api:** [**http://localhost:5000/api/users/login/**](http://localhost:5000/api/users/login/)

**{**

**"UserEmail": "john.admin@example.com",**

**"Password": "john123"**

**}  
  
Output:**

**{**

**"message": "Login successful",**

**"token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6IjY3ODhjYWMyZmQ2NjcxYTFjNDNiYjFmYSIsImlhdCI6MTczNzA0OTA2NCwiZXhwIjoxNzM3MDUyNjY0fQ.9YqJtafPFEvhHqSIwHUAeXGpUdpVdABLdbkeYp2nWrM"**

**}**