

[Group Name: Minions]

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DATABASE PROPOSAL

[Online Grocery Store]

1. users

This **users collection** is use for storing all the necessary customers details those who would be regirsted with our grocery website. The users collection would be like the sample object design as below:

Users Document Object

```
{
  _id : "an uuid",
  name : "customer name",
  email : "customer email id",
  mobile : "customer contact number",
  image : "url for customer image",
  payment_mode : "mode of payment",
  payment_details : [ ],    // sub-document
  reg_date : "date of customer registration",
  promo_code : "valid promo code for customer",
  wallet : "online available cash"
}
```

Document Details for **users** collection

| Field Name | Field Type | Description |
|-----------------|--------------|--|
| _id | String | Unique identifier for user |
| name | String | Name of user |
| email | String | Email id of user |
| mobile | String | Mobile number of user |
| image | String | Account picture of user |
| payment_mode | String | Default mode of payment selected by user |
| payment_details | Sub Document | Payment details for user |
| reg_date | Date | Date and time of creating account |
| promo_code | String | Valid promo for particular user |
| wallet | Number | Available online user cash |

Users Sub-document Object

```
{
  card_name : "name on card",
  card_number : "card number",
  card_type : "type of card",
  card_bank : "bank issued card",
  card_brand : "company sponsored card",
  exp_date : "expiration date of card"
}
```

Sub-document Details for **users** collection

| Field Name | Field Type | Description |
|-------------|------------|--|
| card_name | String | Name of card holder written on the top of the card |
| card_number | String | Number of the card |
| card_type | String | Type of the card ie debit, credit, etc. |
| card_bank | String | Name of the bank issued the card |
| card_brand | String | Name of the company sponsor the fund transfer |
| exp_date | String | Expiration date of card |

Users Collection Example

```
{
  _id: "bd8fa389-3171-4478-8845-e36a02de1b7b",
  name: "Paras Garg",
  email: "pgarg2@steven.edu",
  mobile: "9178616967",
  image: "http://paras-garg.info/profile-picture.jpg",
  payment_mode: "cash",
  payment_details: [
    {
      card_name: "Paras Garg",
      card_number: "3452-5356-2567-3256",
      card_type: "debit",
      card_bank: "Bank of America",
      card_brand: "Visa",
      exp_date: "12/2018"
    },
    {
      card_name: "Paras Garg",
      card_number: "4532-3556-6752-5632",
      card_type: "credit",
      card_bank: "American Express",
      card_brand: "AMEX",
      exp_date: "06/2017"
    }
  ],
  reg_date: "2017-03-21T16:00:00z",
  promo_code: "GS101",
  wallet: 24
}
```

2. products

This **products collection** is use for storing all the necessary products details which would be available in our grocery store website. The products collection would be like the sample object design as below:

Products Document Object

```
{
  _id : "an uuid",
  title : "product name",
  description : "brief summary",
  brand : "brand name",
  category : "category name",
  exp_date : "expiration date",
  mfd_date : "manufacture date",
  size : "product capacity",
  price : "price value",
  stock : "quantity left",
  images : [ ],
  suggestions : [ ],
  allegations : [ ],
  reviews : [ ],           // sub-document
  rating : "product rating"
}
```

Document Details for **products** collection

| Field Name | Field Type | Description |
|-------------|--------------|--------------------------------------|
| _id | String | Unique identifier for product |
| name | String | Name of product |
| description | String | Bried summary of product |
| brand | String | Brand of product |
| category | String | Category of product |
| exp_date | String | Expiration date of product |
| mfd_date | String | Manufactured date of product |
| size | String | Quantity of product |
| price | Number | Price value of product |
| stock | Number | Number of products left in stock |
| images | Array | Different images of product |
| suggestions | Array | Any suggestions for product use |
| allegations | Array | Any allegations on product |
| reviews | Sub Document | Review and rating of products |
| rating | Number | Overall calculated rating of product |

Products Sub-document Object

```
{
  _id : "an uuid"
  poster : "name of reviewer",
  email : "email of poster"
  comment : "comment by reviewer",
  rating : "rating by reviewer"
}
```

Sub-document Details for **products** collection

| Field Name | Field Type | Description |
|------------|------------|--------------------------------------|
| _id | String | Unique identifier for review |
| poster | String | Name of the customer who post review |
| email | String | Email id of the poster |
| comment | String | Comment by the poster |
| rating | Number | Rating by the poster |

Products Collection Example

```
{
  _id: "7c527da1-67c0-4c13-ae99-3c1288ff1234",
  name: "Horizon Organic Whole Milk",
  description: "A cold, creamy glass of Horizon organic milk
    is good choice for your family and the environment.",
  brand: "Horizon",
  category: "Dairy"
  exp_date: "04/20/2017"
  mfd_date: "03/21/2017"
  size: "1/2 gallon",
  price: 4.99,
  stock: 43,
  images: [
    "http://horizon.com/organic-milk-front.jpg",
    "http://horizon.com/organic-milk-back.jpg"
  ],
  suggestions: [
    "Best within 7 days after open",
    "Best before 1 month after manufactured"
  ],
  allegations: [
    "Contains milk ingredients"
  ],
  reviews: [
    {
      _id: "6b527da1-66c0-4c13-ae66-3c1288ff6666",
      poster: "Paras Garg",
      email: "pgarg2@stevens.edu",
      comment: "Really a nice product!",
      rating: 4.5
    },
  ],
}
```

```

    {
      _id: "6b527da1-66c0-4c13-ae66-3c1288ff6667",
      poster: "Rashmi Basavaraj",
      email: "rbasa4@stevens.edu",
      comment: "Good for health.",
      rating: 4
    },
    {
      _id: "6b527da1-66c0-4c13-ae66-3c1288ff6668",
      poster: "Peizhe Feng",
      email: "pfeng@stevens.edu",
      comment: "Have some side effects",
      rating: 2.3
    }
  ],
  rating: 3.6
}

```

3. orders

This **orders collection** is use for storing all the order history details for each customer who placed order from our grocery website. The orders collection would be like the sample object design as below:

Orders Document Object

```

{
  _id : "an uuid",
  user_id : "an uuid",
  trans_id : "an uuid"
  products : [ ] // sub-document,
  date : "order date and time",
  status : "order status"
}

```

Document Details for **orders** collection

| Field Name | Field Type | Description |
|------------|--------------|--|
| _id | String | Unique identifier of order |
| user_id | String | Unique identifier of user |
| trans_id | String | Unique identifier of payment transaction |
| products | Sub Document | Details of each product added in an order list |
| date | String | Date and time of order placed |
| status | String | Status of order |

Orders Sub-document Object

```
{
  id : "product id",
  name : "product name",
  amount : "price value",
  image : "url of product image"
}
```

Sub-document Details for **orders** collection

| Field Name | Field Type | Description |
|------------|------------|-------------------------------|
| id | String | Unique identifier of product |
| name | String | Name of the product purchased |
| amount | Number | Price of product purchased |
| image | String | Image of product purchased |

Orders Collection Example

```
{
  _id: "ca8fa389-3171-4478-8845-e36a02de4f1x"
  user_id: "bd8fa389-3171-4478-8845-e36a02de1b7b",
  trans_id: "9b527da1-67c0-4c13-ae99-3c1288ff2975",
  products: [
    {
      id: "7c527da1-67c0-4c13-ae99-3c1288ff1234",
      name: "Horizon Organic Whole Milk",
      amount: 4.99,
      image: "http://horizon.com/organic-milk.jpg"
    },
    {
      id: "7c527da1-67c0-4c13-ae99-3c1288ff1235",
      name: "Dirt Devil",
      amount: 10.99,
      image: "http://dirt.com/devil.jpg"
    }
  ],
  date: "2017-03-21T11:00:00z",
  status: "successful"
}
```

4. transactions

This **transactions collection** is use for storing all the necessary payment transactions details of each payment. The transaction collection would be like the sample object design as below:

Transactions Document Object

```
{
  _id : "an uuid",
  user_id : "an uuid",
  order_id : "an uuid",
  amount : "amount value",
  card_no : "card paid",
  pay_date : "payment date",
  pay_mode : "payment mode"
}
```

Document Details for **transactions** collection

| Field Name | Field Type | Description |
|------------|------------|-----------------------------------|
| _id | String | Unique identifier for transaction |
| user_id | String | Unique identifier of user |
| order_id | String | Unique identifier of order |
| amount | Number | Amount paid |
| card_no | String | Number of card used |
| pay_date | Date | Date and Time of payment |
| pay_mode | String | Mode of payment |

Transactions Collection Example

```
{
  _id: "9b527da1-67c0-4c13-ae99-3c1288ff2975",
  user_id: "bd8fa389-3171-4478-8845-e36a02de1b7b",
  order_id: "ca8fa389-3171-4478-8845-e36a02de4f1x",
  amount: 53.3,
  card_no: "4532-3556-6752-5632"
  pay_date: "2017-03-24T11:00:00z",
  pay_mode: "credit"
}
```


5. wishes

This **wishes collection** is use for storing all the product list for users which customer does not wanted to miss it. The wishes collection would be like the sample object design as below:

Wishes Document Object

```
{
  _id : "an uuid",
  user_id : "an uuid",
  prod_id : "an uuid"
}
```

Document Details for **wishes** collection

| Field Name | Field Type | Description |
|------------|------------|------------------------------|
| _id | String | Unique identifier for wish |
| user_id | String | Unique identifier of user |
| prod_id | String | Unique identifier of product |

Wishes Collection Example

```
{
  _id: "5w527da1-67c0-4c13-ae99-3c1288ff29es",
  user_id: "bd8fa389-3171-4478-8845-e36a02de1b7b",
  prod_id: "7c527da1-67c0-4c13-ae99-3c1288ff1234"
}
```

6. credentials

This **credentials collection** is use for storing all the user login details which they would require while logging to their account everytime. The credentials collection would be like the sample object design as below:

Credentials Document Object

```
{
  _id : "an uuid",
  email : "user email id",
  password : "user password"
}
```

Document Details for **credentials** collection

| Field Name | Field Type | Description |
|------------|------------|---------------------------|
| _id | String | Unique identifier of user |
| email | String | Email id of user |
| password | String | Password created by user |

Credentials Collection Example

```
{
  _id: "bd8fa389-3171-4478-8845-e36a02de1b7b",
  email: "pgarg2@stevens.edu",
  password: "encrypt-ed-pass-word"
}
```