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"
}
```