

## SQL QUERIES

```
CREATE DATABASE expenseTracker;  
USE expenseTracker;
```

```
CREATE TABLE categories(  
    categoryID INT PRIMARY KEY,  
    categoryname VARCHAR(25) not null  
)
```

```
INSERT INTO categories(categoryID,categoryname)  
VALUES  
(21,'Electricity'),  
(22,'Rent'),  
(23,'Water'),  
(24,'Grocery'),  
(25,'Entertainment')
```

```
CREATE TABLE items(  
    itemID INT PRIMARY KEY,  
    item_name varchar(45),  
    item_cost int,  
    item_bill int  
)
```

```
INSERT INTO items(itemID,item_name,item_cost,item_bill)  
VALUES  
(11,'motor',345,211),  
(12,'rice',300,212),  
(13,'water',40,213),  
(14,'detergent',250,214),  
(15,'houserent',650,215),  
(16,'airconditioner',120,216)
```

```
CREATE TABLE itemList(  
    itemlist_id INT PRIMARY KEY,  
    itemid INT FOREIGN KEY REFERENCES items(itemID)  
)
```

```
INSERT INTO itemList(itemlist_id,itemID)  
VALUES  
(01,11),  
(02,12)
```

```
CREATE TABLE log_in(  
    loginID varchar(10) PRIMARY KEY,  
    password VARCHAR(25) NOT NULL  
)
```

```
insert into log_in  
values  
( 'jh01','jh01'),  
( 'ro01','ro01'),  
( 'so01','so01')
```

```
CREATE TABLE users(  
    userID INT PRIMARY KEY ,  
    username VARCHAR(25) NOT NULL,  
    phone_no varchar(20) NOT NULL,  
    email VARCHAR(25) NOT NULL,  
    useraddress VARCHAR(25) NOT NULL,  
    loginID varchar(10) FOREIGN KEY REFERENCES log_in(loginID)  
)
```

```
insert into users  
values  
(3001,'John','9874561232','jhon@gmail.com','ekm','jo01'),  
(3002,'rony','9874563212','jro@gmail.com','Tvm','ro01'),  
(3003,'sony','9874501232','eury@gmail.com','Tcr','so01');
```

```
CREATE TABLE expenses(  
    expenseid int Primary key,  
    userID INT FOREIGN KEY REFERENCES users(userID),  
    itemlist_id INT FOREIGN KEY REFERENCES itemlist(itemlist_id),  
    ex_date Date,  
    total_expense int  
)
```

```
insert into expenses  
values  
(1,3001,01,'2010-06-03',7500),  
(2,3003,02,'2011-06-03',7000);
```

## MONGODB

use expensetracker

```
db.createCollection("Expense");
```

```
db.Expenselist.insertMany([
{
  "category":"Electricity",
  "items":[{"item":"motor",cost:1500},{item:"AC",cost:300}],
  "totalcost":5000
},
{
  "category":"grocery",
  "items":[{"item":"Rice",cost:500},{item:"Grains",cost:1300}],
  "totalcost":500
}
]);
```

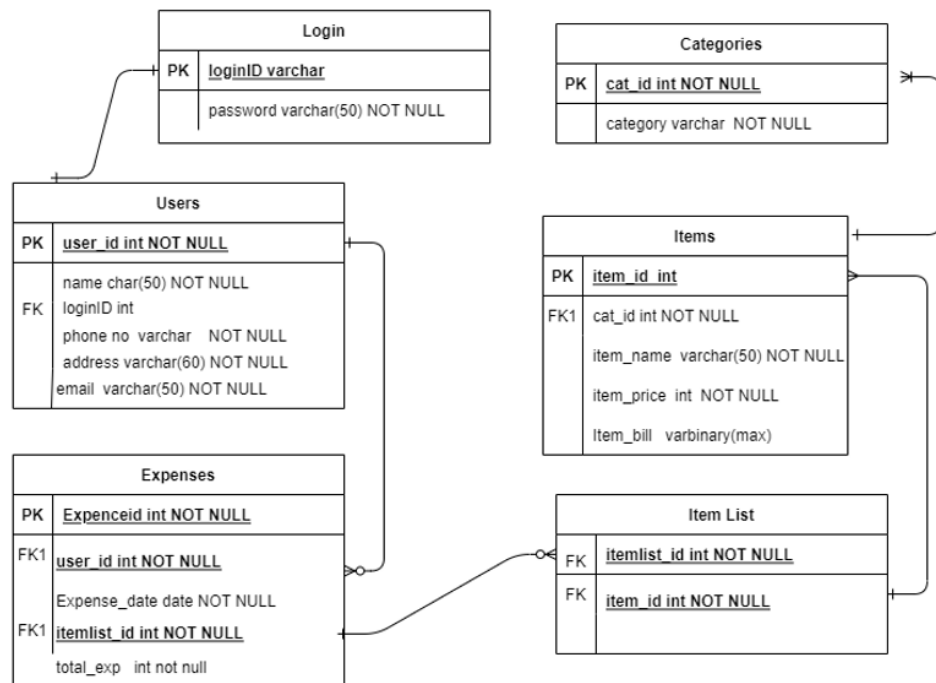
```
1.db.Expenselist.find({ "items.cost": { $gt: 1000 } }).sort({"items.cost":-1});
```

2.

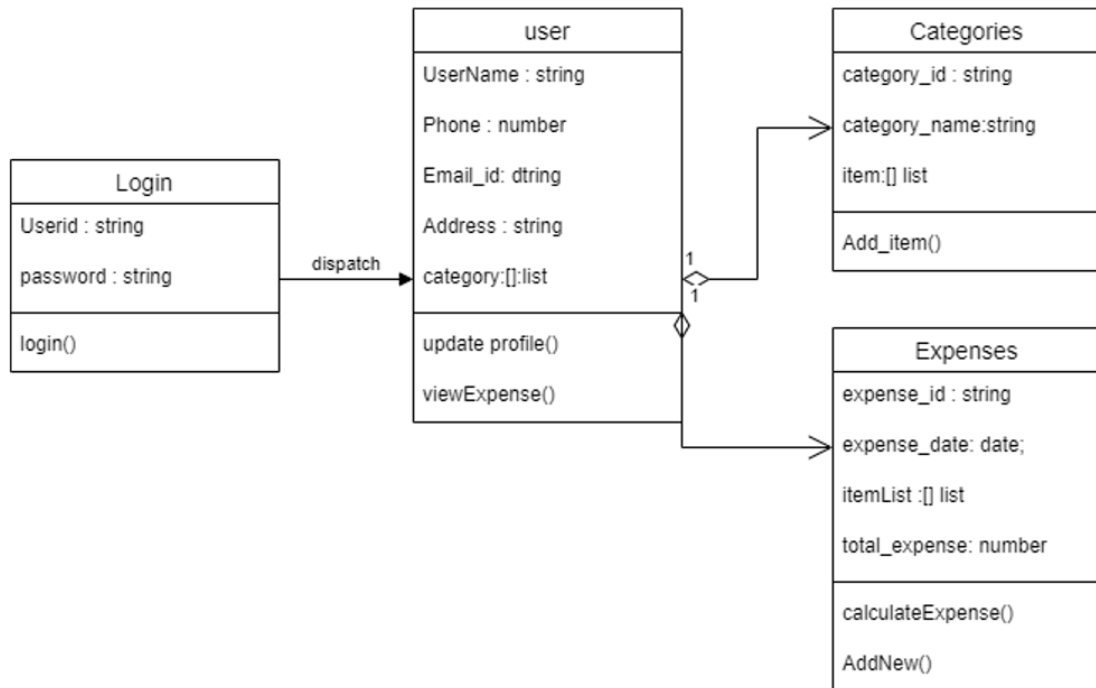
## NONSQL SCHEMA

```
{ "uselD":number,
  "username":string,
  "phone":number,
  "Email":string ,
  "categorys":[{"category":string,
    "items":[{"item:string,
      cost:number}],
    "totalcost":number}
```

## DB DIAGRAM



## CLASS DIAGRAM



## API DESIGN

Description	To fetch the list of all users
Url	<a href="https://expensetrack.com/users">https://expensetrack.com/users</a>
HTTP Method	GET

Data Passed	
Data Received	<pre>{   "page": 1, "per_page": 6, "total": 12, "total_pages": 2, "data": [     { "userID": "ID", "userName": "name", "phone": "765800994....." },     { "userID": "ID", "userName": "name", "phone": "765800994....." },     { "userID": "ID", "userName": "name", "phone": "765800994....." },   ] }</pre>
Expected Response	200 OK

Description	To fetch the details of one single user
Url	<a href="https://expensetrack.com/users/{userID}">https://expensetrack.com/users/{userID}</a>
HTTP Method	GET
Data Passed	
Data Received	<pre>{   userID: 'ID',   'userName': 'name',   'Phone': 765800994,   'Address': 'Address Text',   'email': 'test@user.com' }</pre>
Expected Response	200 OK, 404 Not Found

Description	Register a user
Url	<a href="https://expensetrack.com/users">https://expensetrack.com/users</a>
HTTP Method	POST
Data Passed	<pre>{   userID: 'ID',   'userName': 'name', }</pre>

	'Phone':765800994, 'Address': 'Address Text', 'email': <a href="mailto:test@user.com">test@user.com</a> }
Data Received	
Expected Response	201 OK

Description	Update a user
Url	<a href="https://expensetrack.com/users/{userID}">https://expensetrack.com/users/{userID}</a>
HTTP Method	PUT
Data Passed	{ userID:'ID', 'userName':'name', 'Phone':765800994, 'Address': 'Address Text', 'email': <a href="mailto:test@user.com">test@user.com</a> }
Data Received	
Expected Response	200 OK,404 Not Found

Description	Delete a user
Url	<a href="https://expensetrack.com/users/{userID}">https://expensetrack.com/users/{userID}</a>
HTTP Method	DELETE
Data Passed	
Data Received	
Expected Response	204 SUCCESS,404 Not Found

Description	To fetch the list of expense of a user
Url	<a href="https://expensetrack.com/{userID}/expenses">https://expensetrack.com/{userID}/expenses</a>
HTTP Method	GET

Data Passed	
Data Received	{ expID:'ID', 'userID':'ID', 'ExpenseDate':dd/mm/yyyy, 'ItemlistID':'IDt', }
Expected Response	200 OK

Description	To update expense of a user
Url	<a href="https://expensetrack.com/users/{userID}/expenses">https://expensetrack.com/users/{userID}/expenses</a>
HTTP Method	PUT
Data Passed	{ expID:'ID', 'userID':'ID', 'ExpenseDate':dd/mm/yyyy, 'ItemlistID':'IDt', }
Data Received	
Expected Response	200 OK,404 NOT FOUND

Description	To update date of a expense
Url	<a href="https://datenchat.com/users/{userID}/expenses">https://datenchat.com/users/{userID}/expenses</a>
HTTP Method	PATCH
Data Passed	{ 'ExpenseDate':dd/mm/yyyy, }
Data Received	
Expected Response	201 OK,404 NOT FOUND

Description	To delete a expense
Url	<a href="https://expensetrack.com/users/{userID}/{expenseID}">https://expensetrack.com/users/{userID}/{expenseID}</a>
HTTP Method	DELETE



Data Passed	
Data Received	
Expected Response	204 OK,404 NOT FOUND

Description	To fetch items
Url	<a href="https://expensetrack.com/items">https://expensetrack.com/items</a>
HTTP Method	GET
Data Passed	
Data Received	<pre>{   "page":1,"per_page":6,"total":12,"total_pages":2,"data":   [     {'itemID':'ID','itemName':'name',.....},     {'itemID':'ID','itemName':'name',.....},     {'itemID':'ID','itemName':'name',.....},   ] }</pre>
Expected Response	200 OK

Description	To fetch the details of a item
Url	<a href="https://expensetrack.com/items/{itemID}">https://expensetrack.com/items/{itemID}</a>
HTTP Method	GET
Data Passed	
Data Received	<pre>{   itemID:'ID',   'itemName':'name'   'catID':'ID',   'itemPrice':234,   'item bill':'billno', }</pre>
Expected Response	200 OK

Description	To add new item
Url	<a href="https://expensetrack.com/items">https://expensetrack.com/items</a>
HTTP Method	POST

Data Passed	{ itemID:'ID', 'itemName':'name' 'catID':'ID', 'itemPrice':234, 'item bill':'billno', }
Data Received	
Expected Response	201 OK

Description	Update a item
Url	<a href="https://expensetrack.com/items/{itemID}">https://expensetrack.com/items/{itemID}</a>
HTTP Method	PUT
Data Passed	{ itemID:'ID', 'itemName':'name' 'catID':'ID', 'itemPrice':234, 'item bill':'billno', }
Data Received	
Expected Response	200 OK,404 Not Found

Description	To update price of a item
Url	<a href="https://datenchat.com/items/{itemID}">https://datenchat.com/items/{itemID}</a>
HTTP Method	PATCH
Data Passed	{

	'itemPrice':234 }
Data Received	
Expected Response	201 OK,404 NOT FOUND

Description	To delete a item
Url	<a href="https://expensetrack.com/items/{itemsID}">https://expensetrack.com/items/{itemsID}</a>
HTTP Method	DELETE
Data Passed	
Data Received	
Expected Response	204 OK,404 NOT FOUND

Description	To fetch the items inside a category
Url	<a href="https://expensetrack.com/category/{catID}/items">https://expensetrack.com/category/{catID}/items</a>
HTTP Method	GET
Data Passed	
Data Received	{       "page":1,"per_page":6,"total":12,"total_pages":2,"data":       [         {'catID':'ID',categoryName:'name','itemID':'ID.....'},         {'catID':'ID',categoryName:'name','itemID':'ID.....'},         {'catID':'ID',categoryName:'name','itemID':'ID.....'},       ]     }
Expected Response	200 OK