***** EXPERIMENT NO: 08-A *****

Aim : To study any one NoSQL database and develop an application that incorporates NoSQL database access.

Problem Statement : Pharmacy Stock Management Application with Selling Details handled by the owner.

Author :

- Aniket Tawani
- Harsh Shrirame
- Bhavesh Kewalramani

Roll No :

- 017 [5A]
- 021 [5A]
- 025 [5A]

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Abstract:

The primary goal of the project is to manage the pharmaceutical shop's database. This is accomplished by compiling a database of the medications offered in the shop. The database is then linked to the main application via an interconnection between the Visual Basic program and the previously built database.

Application:

This program can be used in any pharmaceutical shops having a database to maintain. The software used can be used to manage the stocks of the medicines present in the shop. This will help the owner when to reorder the stock and also discard the expired medicines. The software can also print bills.

Introduction:

The program first has a login page where the store owner can login with their registered email and password. On successfully login, he/she can check the medicines prescribed to the customer. If the medicine is present then he/she can give it to the customer and at the end he/she can generate the bill by adding the details like Customer Name, Address, Medicines bought along with the total cost. After printing the bill, the quantity will be updated in the database. Owner can keep the check on the stock and can reorder the stock if require. He/She can also update the amount or quantity of the medicine or delete the medicines which no longer are used in the market.

Merits:

- This will save the time of both of owner and customer as owner don’t has to do the manual work in searching the whole shop and customer don’t have to wait for too long to buy it.

- Expired items can be searched and discarded easily as Date of Expiry is already present in the database.
- The owner will get the idea when he/she has to reorder the medicines or delete the medicines which are not used any longer.
- The owner can generate the bill and save the billing history for future use.

Limitations:

- Due to system constraints, report of reorder stocks, expired stocks, etc cannot be generated properly.
- Database has to be kept up to date.
- The login info for owner will be generated only after registering with the admin due to security purposes.

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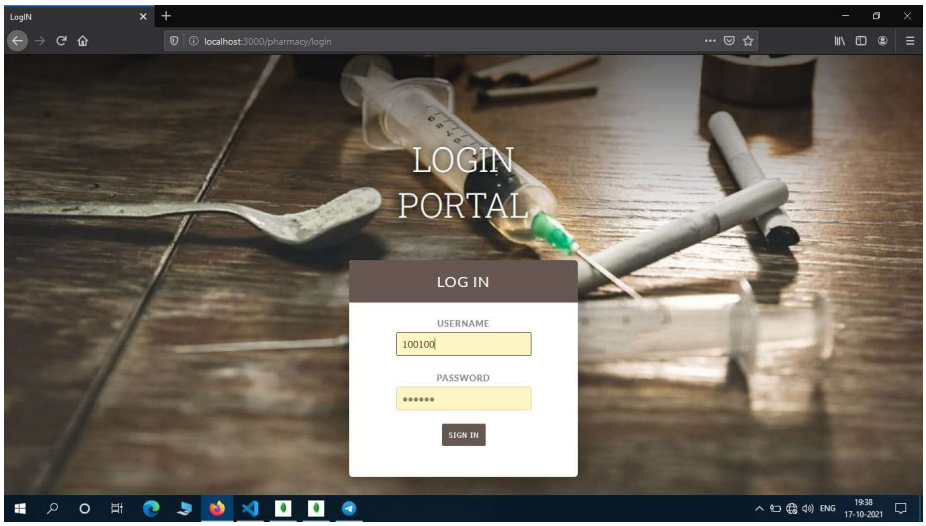
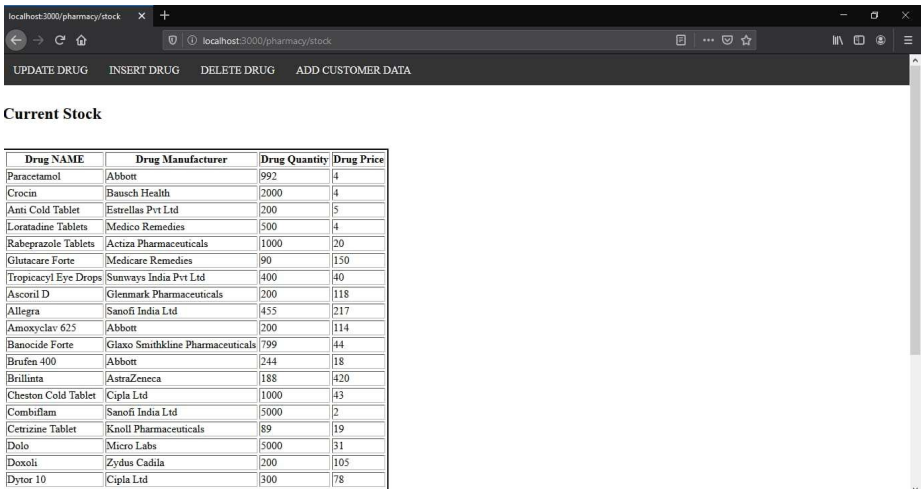
QUERY-01: Query to check the login credentials in the credential database by taking the username and password as input in JavaScript form.

****

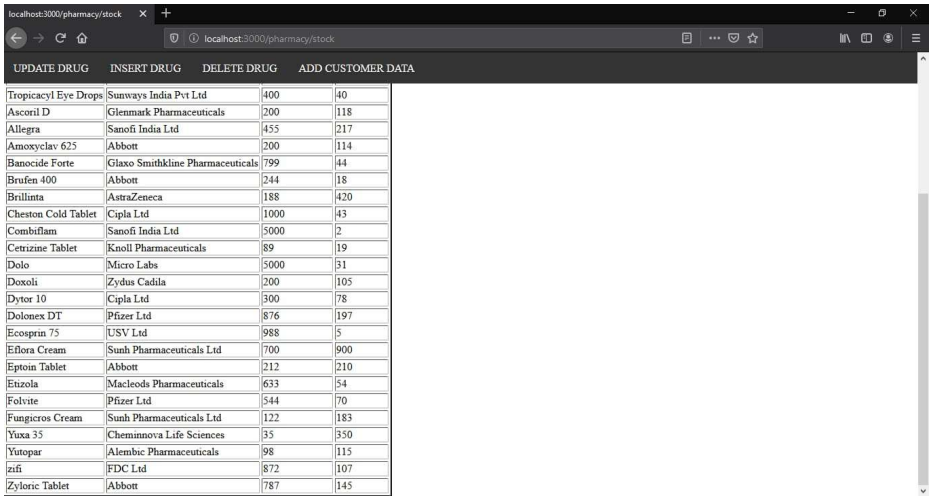
```
router.post("/login" , (req,res)=>{

    console.log(req.body)
    var a = req.body.username
    var b = req.body.password
    var que = {$and : [{id : {$eq : a}} , {pass : {$eq : b}}]}
    credd.find(que , function(err , docs){
        if(err){
            console.log("Error")
        }
        else{
            if (docs.length == 0){
                res.render("invcred")
            }
            else{
                console.log("Logged in ")
                res.redirect("/pharmacy/stock")
            }
        }
    })

})
```



After successful login, the owner can see the page below



Drug NAME	Drug Manufacturer	Drug Quantity	Drug Price
Paracetamol	Abbott	992	4
Crocin	Bausch Health	2000	4
Anti Cold Tablet	Estrellas Pvt Ltd	200	5
Loratadine Tablets	Medico Remedies	500	4
Rabeprazole Tablets	Actiza Pharmaceuticals	1000	20
Glutacare Forte	Medicare Remedies	90	150
Tropicacyl Eye Drops	Sunways India Pvt Ltd	400	40
Ascoril D	Glenmark Pharmaceuticals	200	118
Allegra	Sanofi India Ltd	455	217
Amoxyclav 625	Abbott	200	114
Banocide Forte	Glaxo Smithkline Pharmaceuticals	799	44
Brufen 400	Abbott	244	18
Brillinta	AstraZeneca	188	420
Cheston Cold Tablet	Cipla Ltd	1000	43
Combiflam	Sanofi India Ltd	5000	2
Cetrizine Tablet	Knoll Pharmaceuticals	89	19
Dolo	Micro Labs	5000	31
Doxoli	Zydus Cadila	200	105
Dytor 10	Cipla Ltd	300	78



Tropicacyl Eye Drops	Sunways India Pvt Ltd	400	40
Ascoril D	Glenmark Pharmaceuticals	200	118
Allegra	Sanofi India Ltd	455	217
Amoxyclav 625	Abbott	200	114
Banocide Forte	Glaxo Smithkline Pharmaceuticals	799	44
Brufen 400	Abbott	244	18
Brillinta	AstraZeneca	188	420
Cheston Cold Tablet	Cipla Ltd	1000	43
Combiflam	Sanofi India Ltd	5000	2
Cetrizine Tablet	Knoll Pharmaceuticals	89	19
Dolo	Micro Labs	5000	31
Doxoli	Zydus Cadila	200	105
Dytor 10	Cipla Ltd	300	78
Dolonex DT	Pfizer Ltd	876	197
Ecosprin 75	USV Ltd	988	5
Eflora Cream	Sunh Pharmaceuticals Ltd	700	900
Eptoin Tablet	Abbott	212	210
Etizola	Macleods Pharmaceuticals	633	54
Folvite	Pfizer Ltd	544	70
Fungicros Cream	Sunh Pharmaceuticals Ltd	122	183
Yuxa 35	Cheminnova Life Sciences	35	350
Yutopar	Alembic Pharmaceuticals	98	115
zifi	FDC Ltd	872	107
Zyloric Tablet	Abbott	787	145

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QUERY-02: Query to print the data from the table after successful login.

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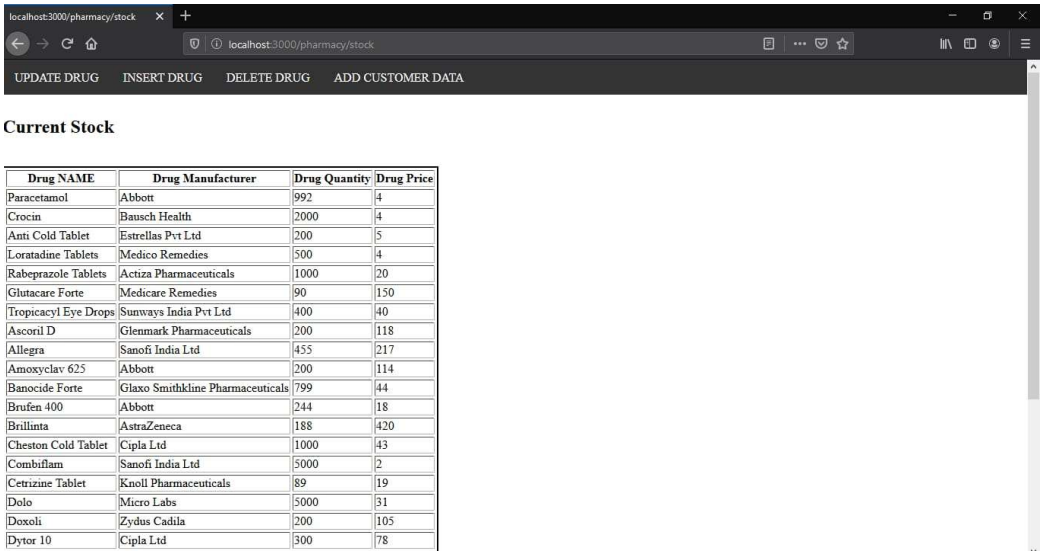
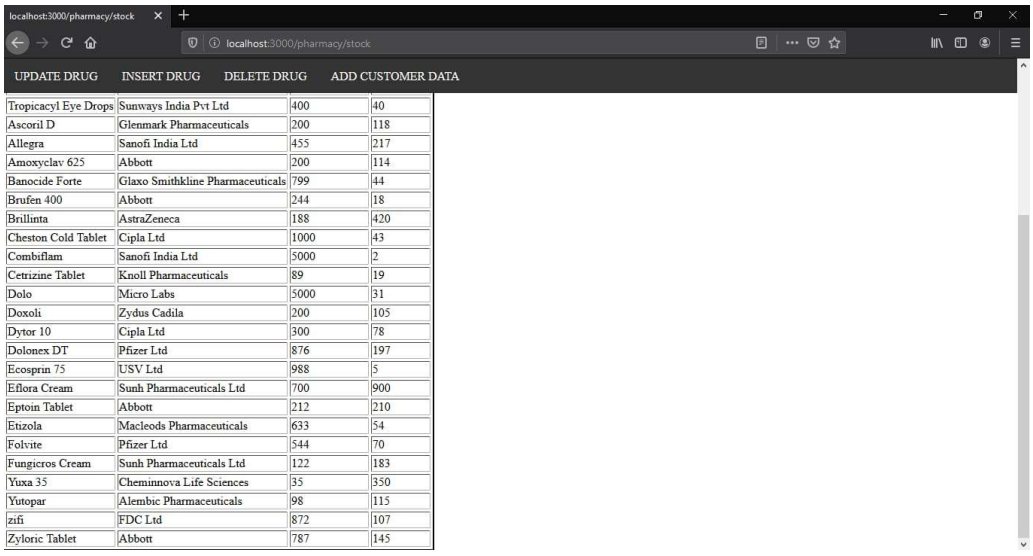
```
router.post("/data" , (req,res)=>{
    conn.collection("purs").find().toArray(function(er , d){
        if(!er)
        {console.log(d);
            res.render("purdata" , {data : d})}
    })
})
```

After successful login, the table from the database will be printed as below



Current Stock

Drug NAME	Drug Manufacturer	Drug Quantity	Drug Price
Paracetamol	Abbott	992	4
Crocin	Bausch Health	2000	4
Anti Cold Tablet	Estrellas Pvt Ltd	200	5
Loratadine Tablets	Medico Remedies	500	4
Rabeprazole Tablets	Actiza Pharmaceuticals	1000	20
Glutacare Forte	Medicare Remedies	90	150
Tropicacyl Eye Drops	Sunways India Pvt Ltd	400	40
Ascoril D	Glenmark Pharmaceuticals	200	118
Allegra	Sanofi India Ltd	455	217
Amoxyclav 625	Abbott	200	114
Banocide Forte	Glaxo Smithkline Pharmaceuticals	799	44
Brufen 400	Abbott	244	18
Brillinta	AstraZeneca	188	420
Cheston Cold Tablet	Cipla Ltd	1000	43
Combiflam	Sanofi India Ltd	5000	2
Cetrizine Tablet	Knoll Pharmaceuticals	89	19
Dolo	Micro Labs	5000	31
Doxoli	Zydus Cadila	200	105
Dytor 10	Cipla Ltd	300	78



Tropicacyl Eye Drops	Sunways India Pvt Ltd	400	40
Ascoril D	Glenmark Pharmaceuticals	200	118
Allegra	Sanofi India Ltd	455	217
Amoxyclav 625	Abbott	200	114
Banocide Forte	Glaxo Smithkline Pharmaceuticals	799	44
Brufen 400	Abbott	244	18
Brillinta	AstraZeneca	188	420
Cheston Cold Tablet	Cipla Ltd	1000	43
Combiflam	Sanofi India Ltd	5000	2
Cetrizine Tablet	Knoll Pharmaceuticals	89	19
Dolo	Micro Labs	5000	31
Doxoli	Zydus Cadila	200	105
Dytor 10	Cipla Ltd	300	78
Dolonex DT	Pfizer Ltd	876	197
Ecosprin 75	USV Ltd	988	5
Eflora Cream	Sunh Pharmaceuticals Ltd	700	900
Eptoin Tablet	Abbott	212	210
Etizola	Macleods Pharmaceuticals	633	54
Folvite	Pfizer Ltd	544	70
Fungicros Cream	Sunh Pharmaceuticals Ltd	122	183
Yuxa 35	Cheminnova Life Sciences	35	350
Yutopar	Alembic Pharmaceuticals	98	115
zifi	FDC Ltd	872	107
Zyloric Tablet	Abbott	787	145

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QUERY-03: Query to insert a new drug in the table taking input in the JavaScript form.

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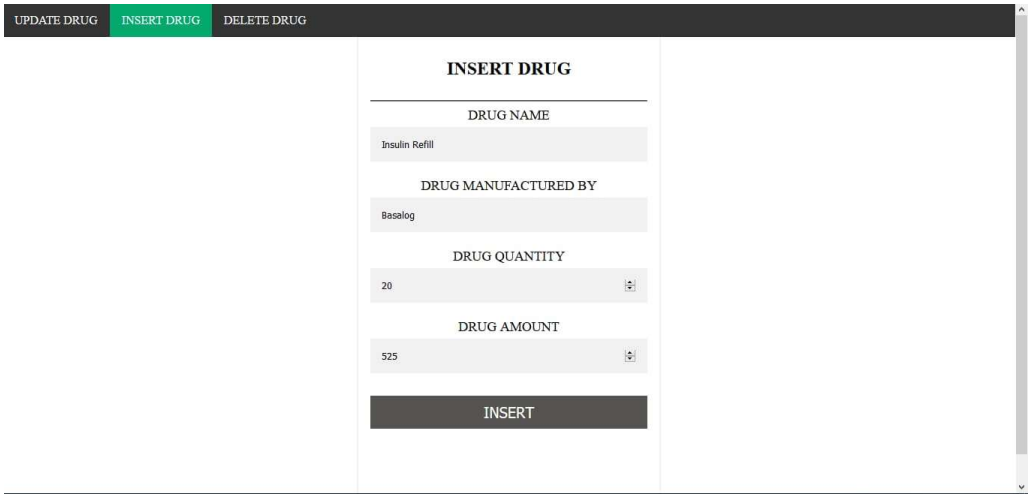
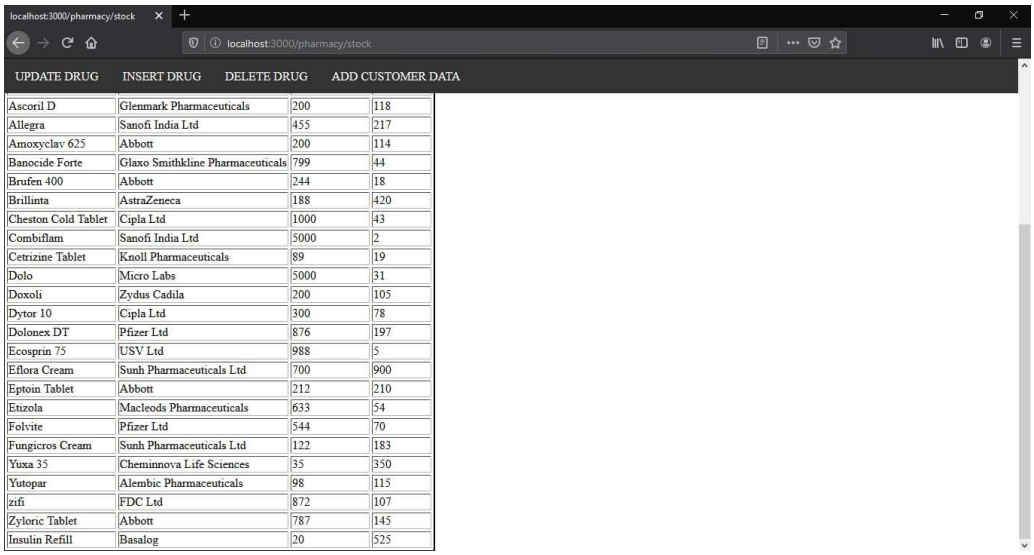
```
router.post("/ins" , (req,res)=>{
    var a = req.body.dname
    var b = req.body.dmfd
    var c = (req.body.dqty)
    var d = (req.body.dprice)
    var q = {dname : req.body.dname , dmfd : req.body.dmfd ,
             dqty :req.body.dqty , dprice : req.body.dprice };
    conn.collection("phms").insertOne(q , function(er , d){
        console.log(d);
        if(er){
            console.log("Error")
        }
        else{
            res.redirect("/pharmacy/stock");
        }
    });
});
```



After successful insertion, owner can check the drug details in stock as below



Ascoril D	Glenmark Pharmaceuticals	200	118
Allegra	Sanofi India Ltd	455	217
Amoxyclav 625	Abbott	200	114
Banocide Forte	Glaxo Smithkline Pharmaceuticals	799	44
Brufen 400	Abbott	244	18
Brillinta	AstraZeneca	188	420
Cheston Cold Tablet	Cipla Ltd	1000	43
Combiflam	Sanofi India Ltd	5000	2
Cetrizine Tablet	Knoll Pharmaceuticals	89	19
Dolo	Micro Labs	5000	31
Doxoli	Zydus Cadila	200	105
Dytor 10	Cipla Ltd	300	78
Dolonex DT	Pfizer Ltd	876	197
Ecosprin 75	USV Ltd	988	5
Eflora Cream	Sunh Pharmaceuticals Ltd	700	900
Eptoin Tablet	Abbott	212	210
Etizola	Macleods Pharmaceuticals	633	54
Folvite	Pfizer Ltd	544	70
Fungicros Cream	Sunh Pharmaceuticals Ltd	122	183
Yuxa 35	Cheminnova Life Sciences	35	350
Yutopar	Alembic Pharmaceuticals	98	115
zifi	FDC Ltd	872	107
Zyloric Tablet	Abbott	787	145
Insulin Refill	Basalog	20	525

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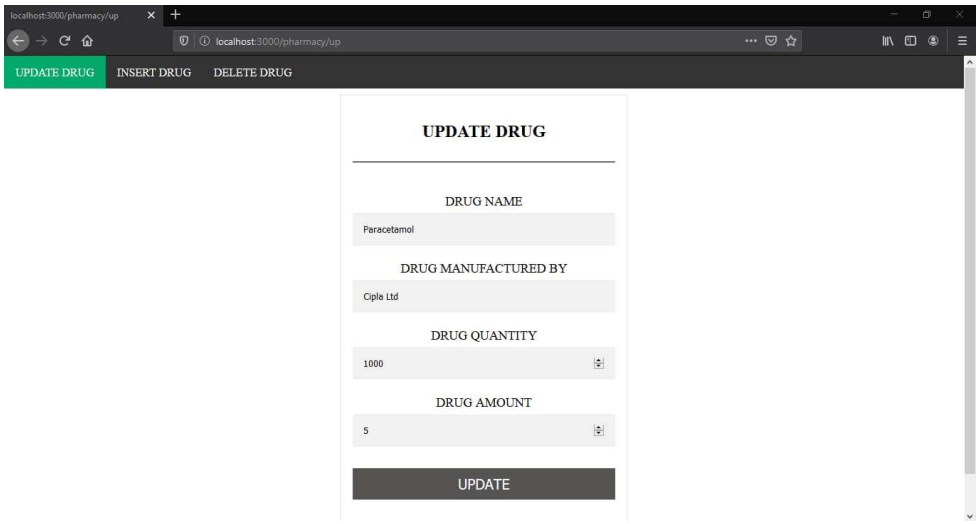
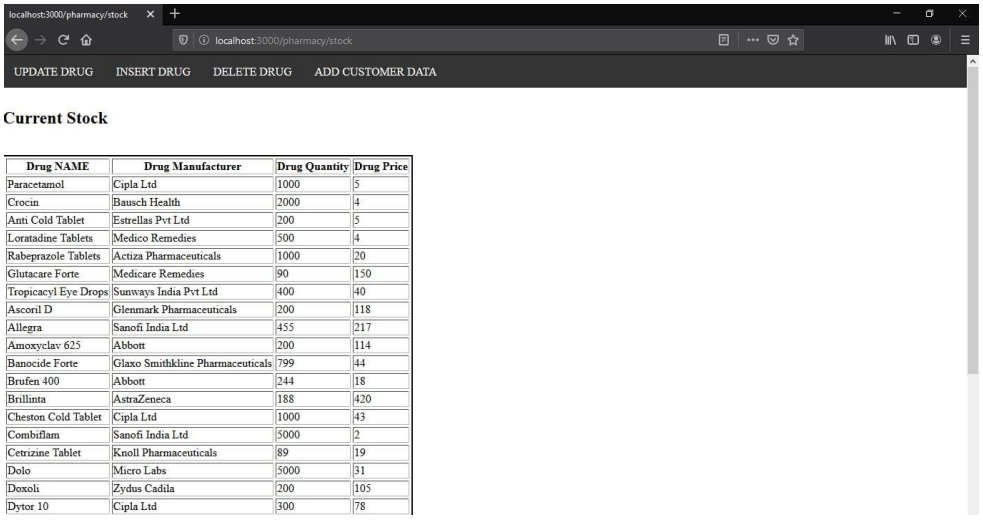
QUERY-04: Query to update a drug in the table taking input in the JavaScript form.

****

```
router.post("/up" , (req,res)=>{
    var a = req.body.dname
    var b = req.body.dmfd
    var c = req.body.dqty
    var d = req.body.dprice
    var q = {dname : req.body.dname }
    var nq = {$set : {dmfd : req.body.dmfd , dqty :req.body.dqty ,
                      dprice : req.body.dprice }}
    conn.collection("phms").updateOne(q , nq , function(er , d){
        console.log(d);
        if(er){
            console.log("Error")
        }
        else{
            res.redirect("/pharmacy/stock");
        }
    });
});
```



After successful update, owner can check the stocks table. For example- The update in the drug named “Paracetomol” can be viewed below as



Drug NAME	Drug Manufacturer	Drug Quantity	Drug Price
Paracetamol	Cipla Ltd	1000	5
Crocin	Bausch Health	2000	4
Anti Cold Tablet	Estrellas Pvt Ltd	200	5
Loratadine Tablets	Medico Remedies	500	4
Rabeprazole Tablets	Actiza Pharmaceuticals	1000	20
Glutacare Forte	Medicare Remedies	90	150
Tropicacyl Eye Drops	Sunways India Pvt Ltd	400	40
Ascoril D	Glenmark Pharmaceuticals	200	118
Allegra	Sanofi India Ltd	455	217
Amoxyclav 625	Abbott	200	114
Banocide Forte	Glaxo Smithkline Pharmaceuticals	799	44
Brufen 400	Abbott	244	18
Brillinta	AstraZeneca	188	420
Cheston Cold Tablet	Cipla Ltd	1000	43
Combiflam	Sanofi India Ltd	5000	2
Cetrizine Tablet	Knoll Pharmaceuticals	89	19
Dolo	Micro Labs	5000	31
Doxoli	Zydus Cadila	200	105
Dytor 10	Cipla Ltd	300	78

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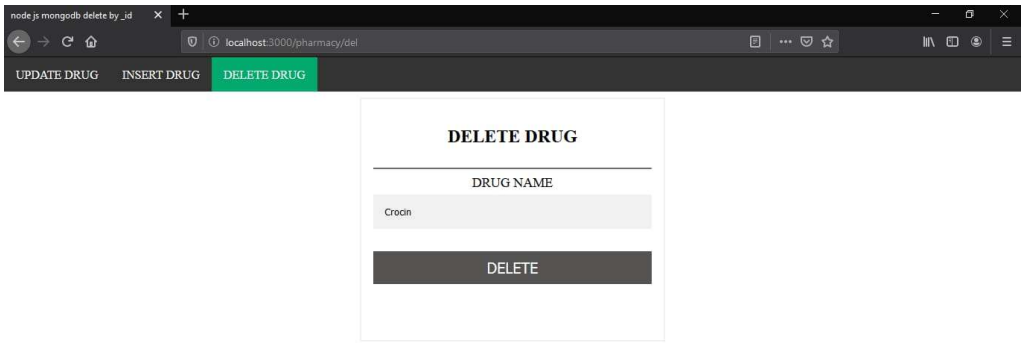
QUERY-05: Query to delete a drug in the table taking input in the JavaScript form.

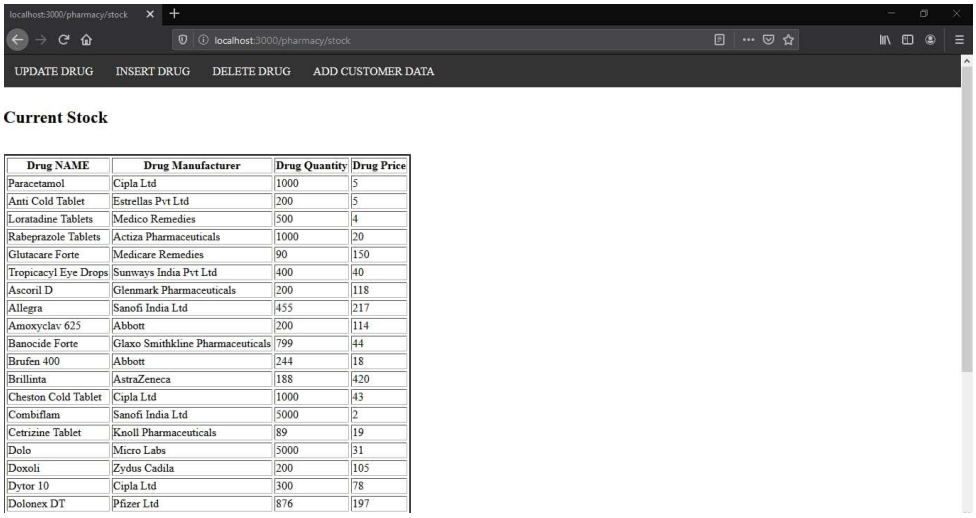
****

```
router.post("/del" , (req,res)=>{
    var a = req.body.dname

    var q = {dname : req.body.dname }

    conn.collection("phms").deleteOne(q, function(er , d){
        console.log(d);
        if(er){
            console.log("Error")
```

```
            }
            else{
                res.redirect("/pharmacy/stock");
            }
        });
    });
```



After successful deletion, owner can check the stock table. For example- Deletion of drug named “Crocin” can be viewed as below



Drug NAME	Drug Manufacturer	Drug Quantity	Drug Price
Paracetamol	Cipla Ltd	1000	5
Anti Cold Tablet	Estrellas Pvt Ltd	200	5
Loratadine Tablets	Medico Remedies	500	4
Rabeprazole Tablets	Actiza Pharmaceuticals	1000	20
Glutacare Forte	Medicare Remedies	90	150
Tropicacyl Eye Drops	Sunways India Pvt Ltd	400	40
Ascoril D	Glenmark Pharmaceuticals	200	118
Allegra	Sanofi India Ltd	455	217
Amoxyclav 625	Abbott	200	114
Banocide Forte	Glaxo Smithkline Pharmaceuticals	799	44
Brufen 400	Abbott	244	18
Brillinta	AstraZeneca	188	420
Cheston Cold Tablet	Cipla Ltd	1000	43
Combiflam	Sanofi India Ltd	5000	2
Cetrizine Tablet	Knoll Pharmaceuticals	89	19
Dolo	Micro Labs	5000	31
Doxoli	Zydus Cadila	200	105
Dytor 10	Cipla Ltd	300	78
Dolonex DT	Pfizer Ltd	876	197

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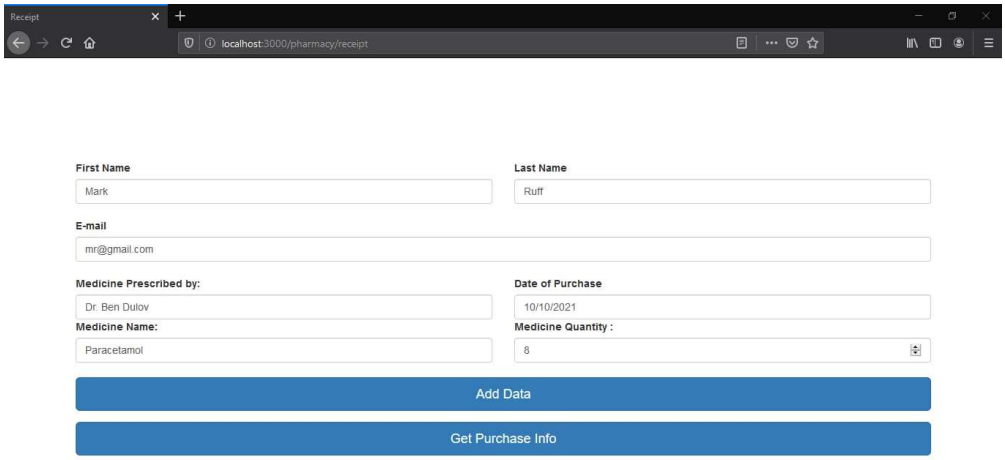
QUERY-06: Query to update the stock in the table after billing it to the customer taking details as input in the JavaScript form.

****

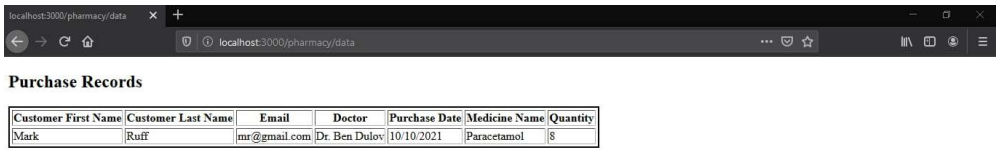
```
router.post("/receipt" , (req,res)=>{
    var q = {fname: req.body.fname,   lname:req.body.lname  ,
              email:req.body.email, doctorr:req.body.doctorr,
              dpurchase: req.body.dpurchase,medn:req.body.medn ,
              medq:req.body.medq  }
    conn.collection("purs").insertOne(q , function(err ,docs){
        if(err){
            console.log(err)
        }else{

            var x = parseInt(req.body.medq)

            console.log(x)
            conn.collection("phms").findOne({dname :req.body.medn},
function(er , d){
                if(!er){

                    var y = (parseInt(d.dqty)-x)


                    conn.collection("phms").updateOne({dname :req.body.medn}
                                , {$set :{dqty : y}},function(err , doc){
                        if(!err){
                            console.log("Stock Updated")
                        }
                    })
                }
                else{
                    console.log(er)
                }
            })

        }
    })
})
```

Initially, purchase table will be empty as shown below

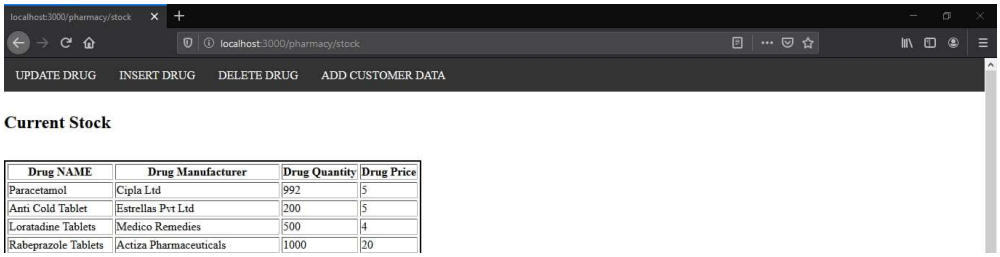
Taking the input in the form ad adding record to the purchase table



After successful adding the purchase info, owner can view it in the purchase info tab as below



Also, as the stock will get updated, it can be viewed as below



Conclusion:

A pharmacy management system is a software application that handles vital data and saves it, as well as information about a pharmacy's database and administration. This software aids in the efficient running of a pharmacy or shop. It provides statistics on medicines or pharmaceuticals that are in stock, and the data may be updated and modified. It operates according to the store owner's needs and provides alternatives appropriately. It allows the owner to input the production date as well as the expiry date of the drug when it is placed in stock and for sales transactions. This program can also produce bills and invoices, among other things. It can also preserve a record of customer bills. The main purpose is effectively and easily handling of pharmacy data and it's management.