

# **Pharmacy Management System**

**Group No 10**

**ICT 2304**

**Object Oriented Programming**

**2017/2018 Batch**

Department of Information & Communication Technology

Faculty of Technology

Rajarata University of Sri Lanka

## Group Members

Name	Registration Number	Index Number
E.G.Gayashan	ITT/2017/2018/029	0717
M.U.K.Gunawardhana	ITT/2017/2018/030	0718
T.Sivathanushan	ENT/2017/2018/090	0679
A.W.D.Nirosha	ENT/2017/2018/062	0653
A.M.Naseem	ENT/2017/2018/059	0650

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# 1. Project Introduction

This system is very useful to the pharmacy to handle implementation of the pharmacy. The owner(admin) and workers(cashiers) of the pharmacy can log into this system. These two persons have unique username and password to log into system.as well as admin can add many workers into system and maintain whole system. The workers can use the system within limit. Therefore there is best security guard to protect .

The workers' details are stored in the system and they can view any time but one of the worker can not view other worker's details.as well as Admin can view all of the workers' details.

The medicine information, suppliers' details, daily transactions are stored in database and this information can be viewed by admin.

After analyzing the above conditions, we create this system as a solution for those problems. Here, to improve efficiency of the people. We can protect our resources.

## **System Roles:**

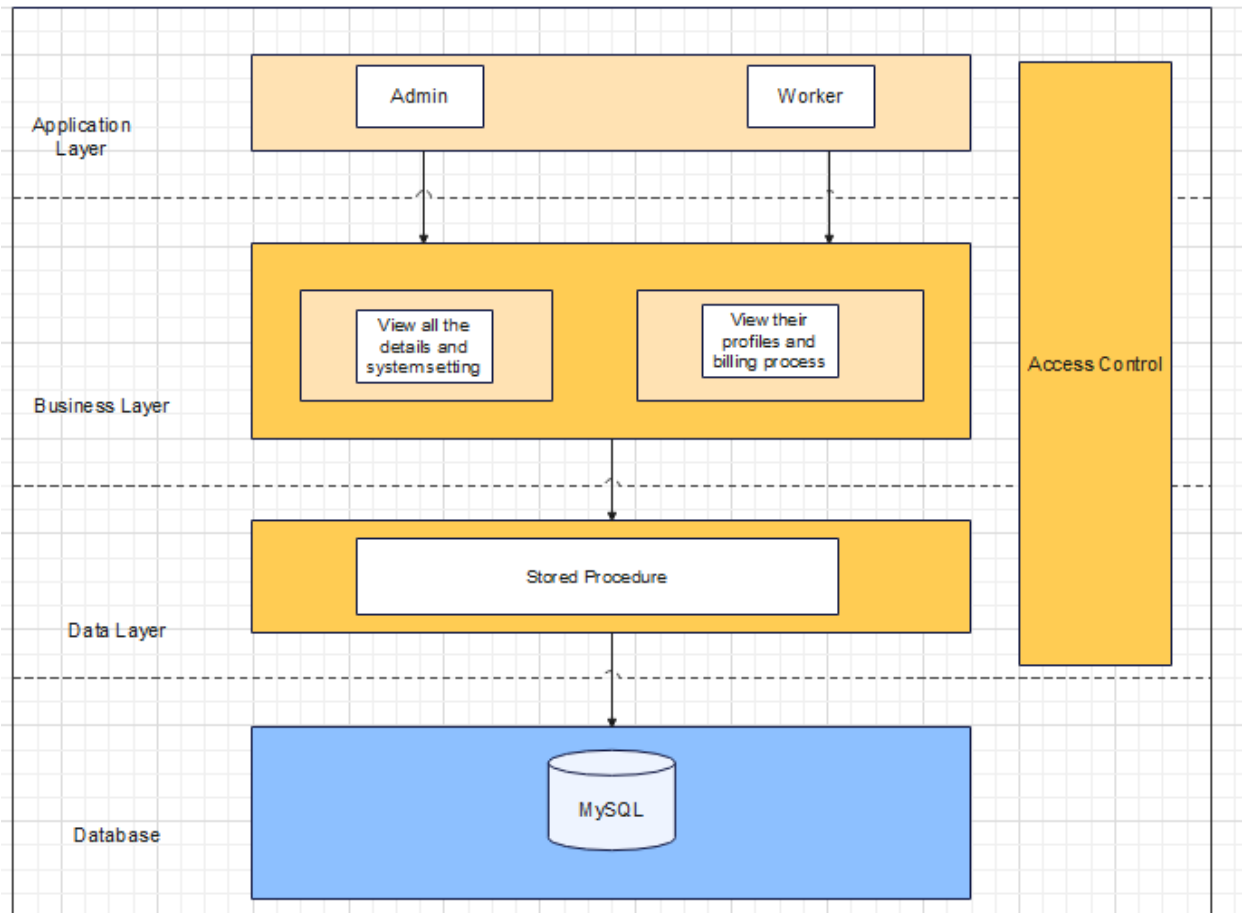
Admin:

Admin is the owner of the pharmacy.

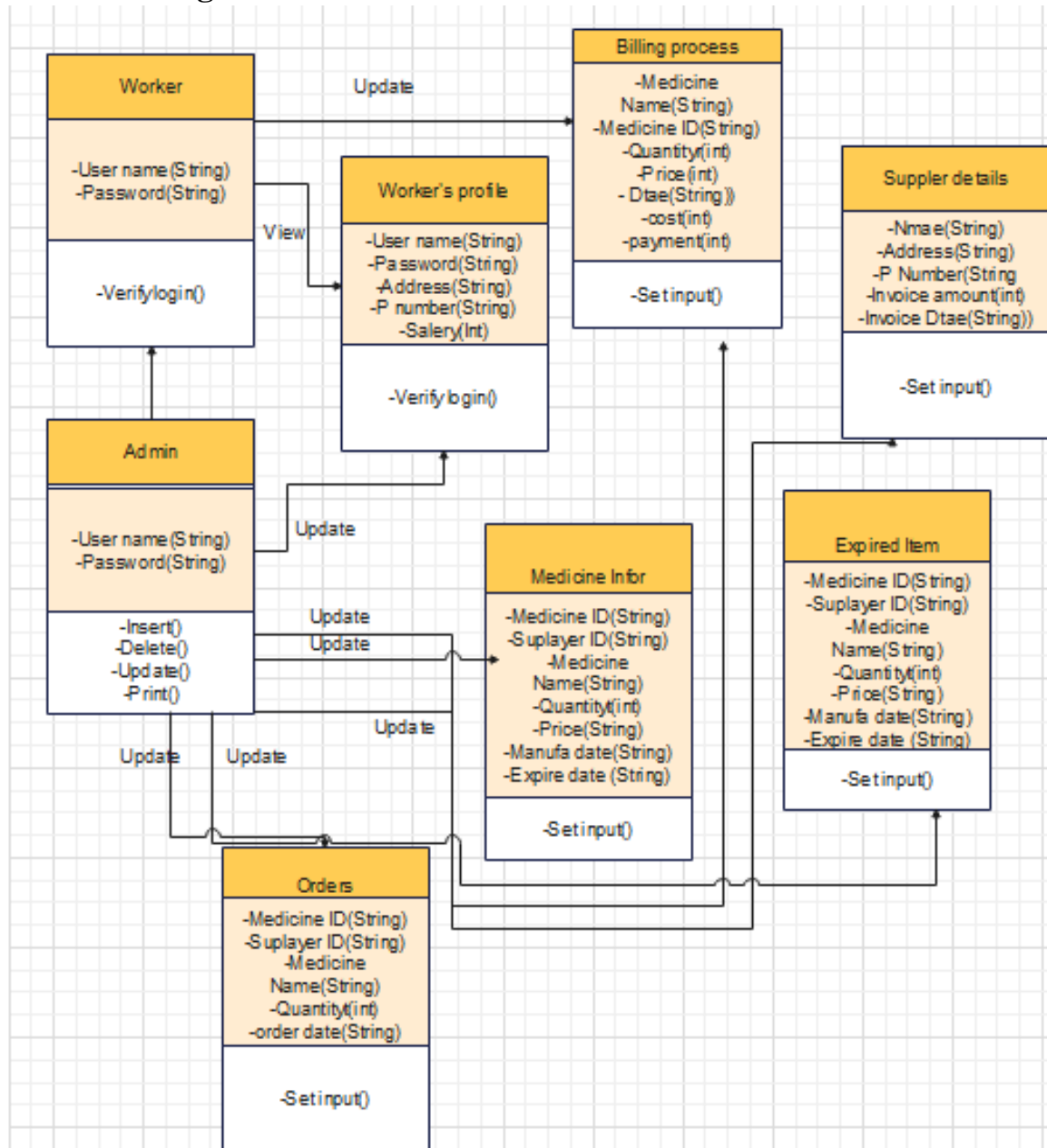
User:

The workers of the pharmacy.

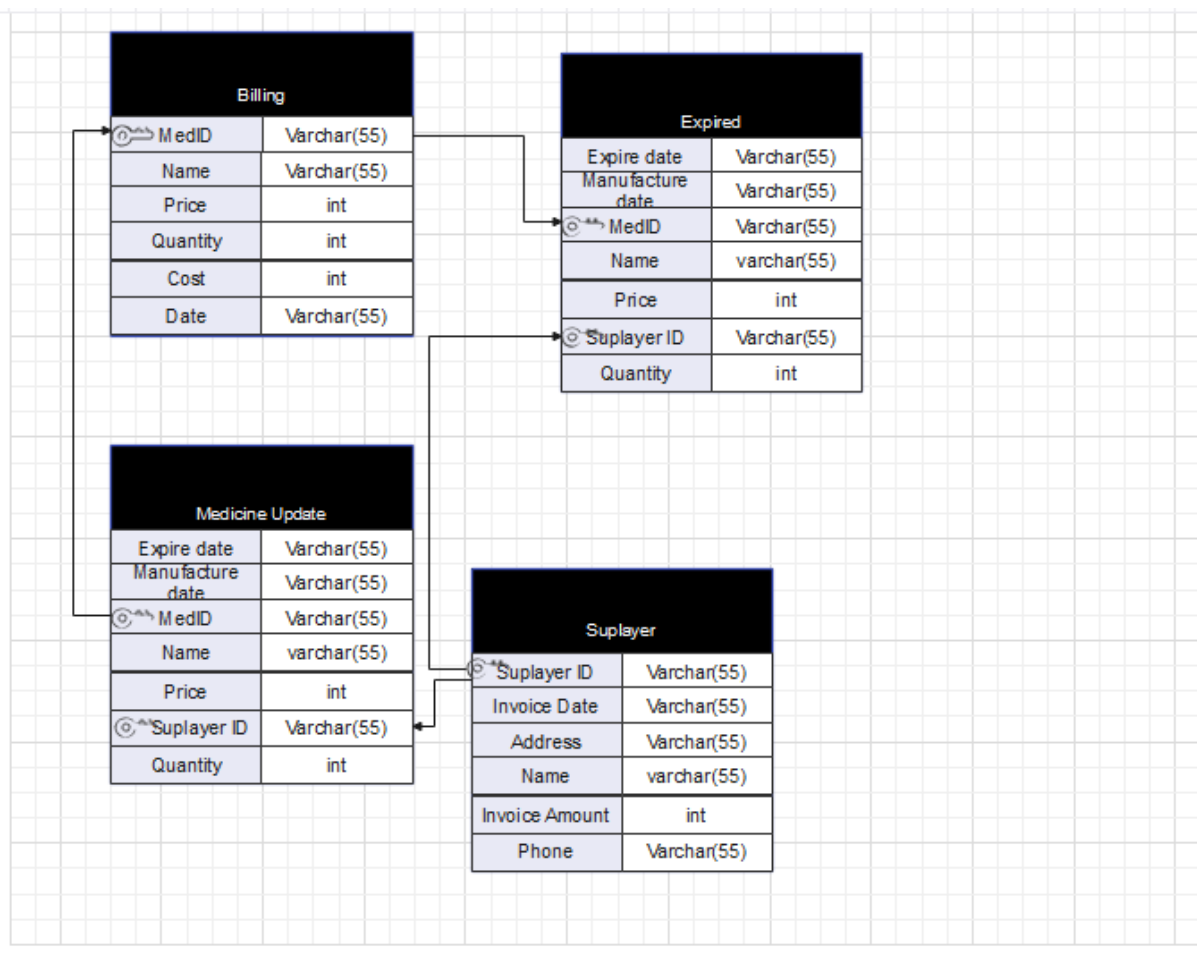
## 2. System Design



### 3. Class Diagram

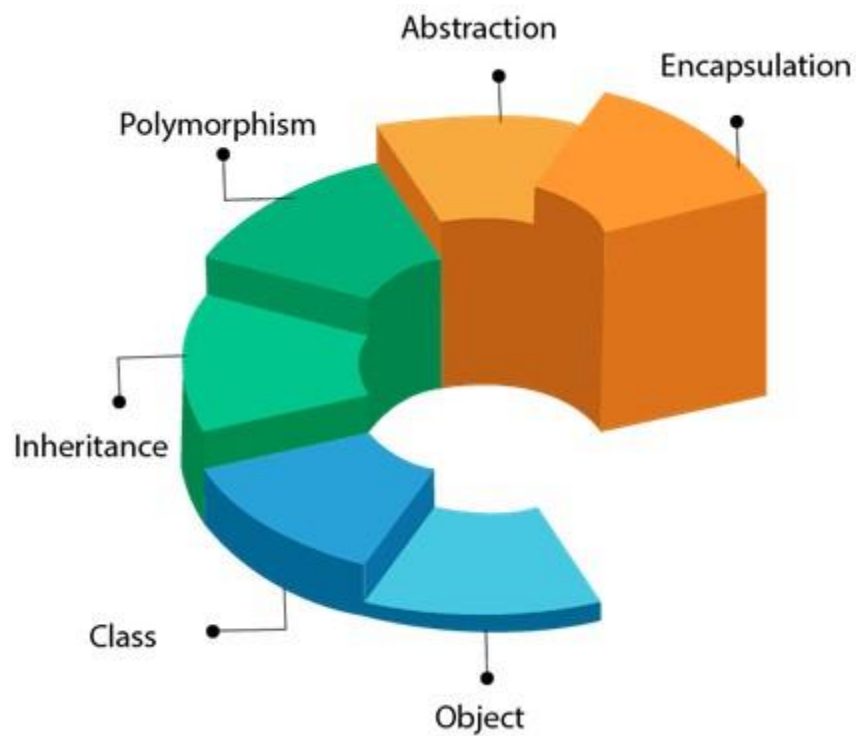


## 4. Database Design



## 5. System Demonstration

### a. Application of the OOP Concepts



#### Object:

```
public void search12(String str){  
    model=(DefaultTableModel) mtable.getModel();  
    TableRowSorter<DefaultTableModel> trs=new TableRowSorter<>(model);  
    mtable.setRowSorter(trs);  
    trs.setRowFilter(RowFilter.regexFilter(str));  
}
```



```

private void mtableMouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:

    DefaultTableModel model=(DefaultTableModel)mtable.getModel();
    int myindex=mtable.getSelectedRow();
    int d1=mtable.getSelectedRow();
    Date date2,date1;
    id.setText(model.getValueAt(myindex,0).toString());
    name.setText(model.getValueAt(myindex, 1).toString());
    qty.setText(model.getValueAt(myindex, 2).toString());
    price.setText(model.getValueAt(myindex, 3).toString());
    try {
        date2 = new SimpleDateFormat("YYYY-MM-dd").parse((String)model.getValueAt(d1, 4));
        date1 = new SimpleDateFormat("YYYY-MM-dd").parse((String)model.getValueAt(d1, 5));
        mdate.setDate(date2);
        edate.setDate(date1);
    } catch (ParseException ex) {
        Logger.getLogger(expired2.class.getName()).log(Level.SEVERE, null, ex);
    }

    sid.setSelectedItem(model.getValueAt(myindex, 6).toString());
}

```

## Class and Inheritance:

```

public class billing1 extends javax.swing.JFrame {

    public billing1() {

        initComponents();
        selectMed1();
        selectMed();
    }

    DefaultTableModel model,model1;
    String old;
    int x=1,pay1=0,cost=0;
    public void selectMed1(){

        try{

            Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/pharmacy", "root", "");
            Statement st=con.createStatement();
            ResultSet Rs=st.executeQuery("SELECT * FROM billing");
            mtable1.setModel(DbUtils.resultSetToTableModel(Rs));
        }
        catch(SQLException e){

            e.printStackTrace();
        }
    }
}

```

```

    }
    public class supler{
        String name;
        String id;
        public supler(String id,String name){
            this.id=id;
            this.name=name;
        }

        public String toString(){
            return name;
        }
    }
}

```

### Polymorphism:

```

    public expired2() {
        initComponents();
    }
    String name12;
    public expired2(String name) {
        initComponents();
        connect();
        this.name12=name;

        selectMed();
        loadSupler();
    }

    Connection con;
    PreparedStatement pst;
    ResultSet rs;
    DefaultTableModel model;

```

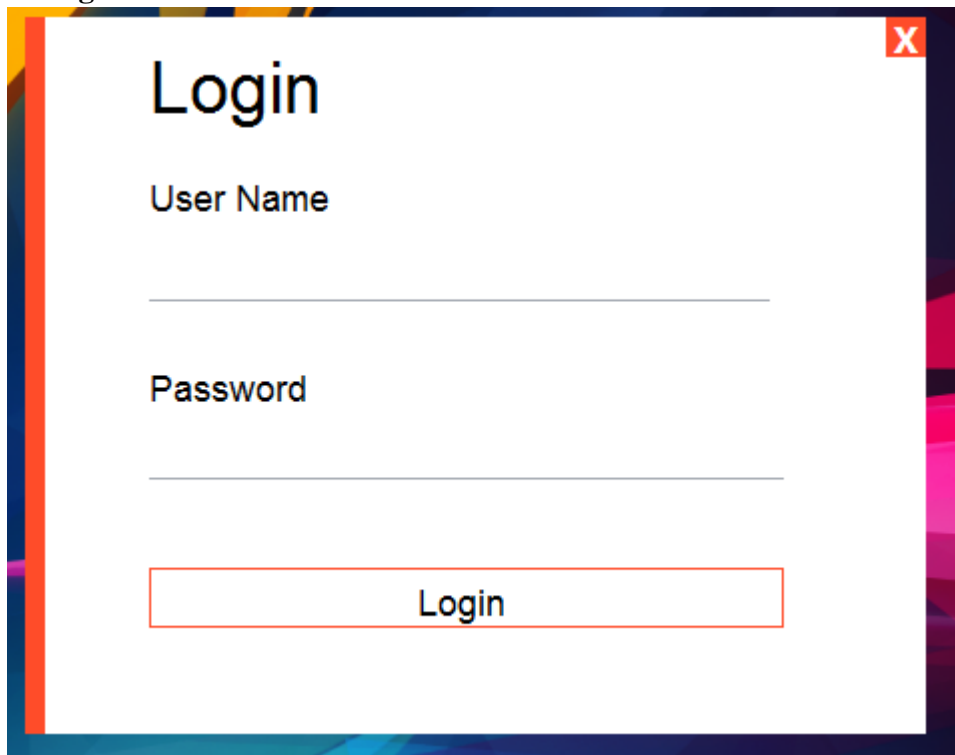
### Encapsulation:

```
private void delete1MouseExited(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    delete1.setBackground(new Color(255,76,41));
}
```

## b. Interfaces

There are different technologies to create a Graphical User Interface. In the light of that, I have used Java, MySQL, xampp server and NetBeans ,launch4j , inno setup to create a Graphical User Interface.

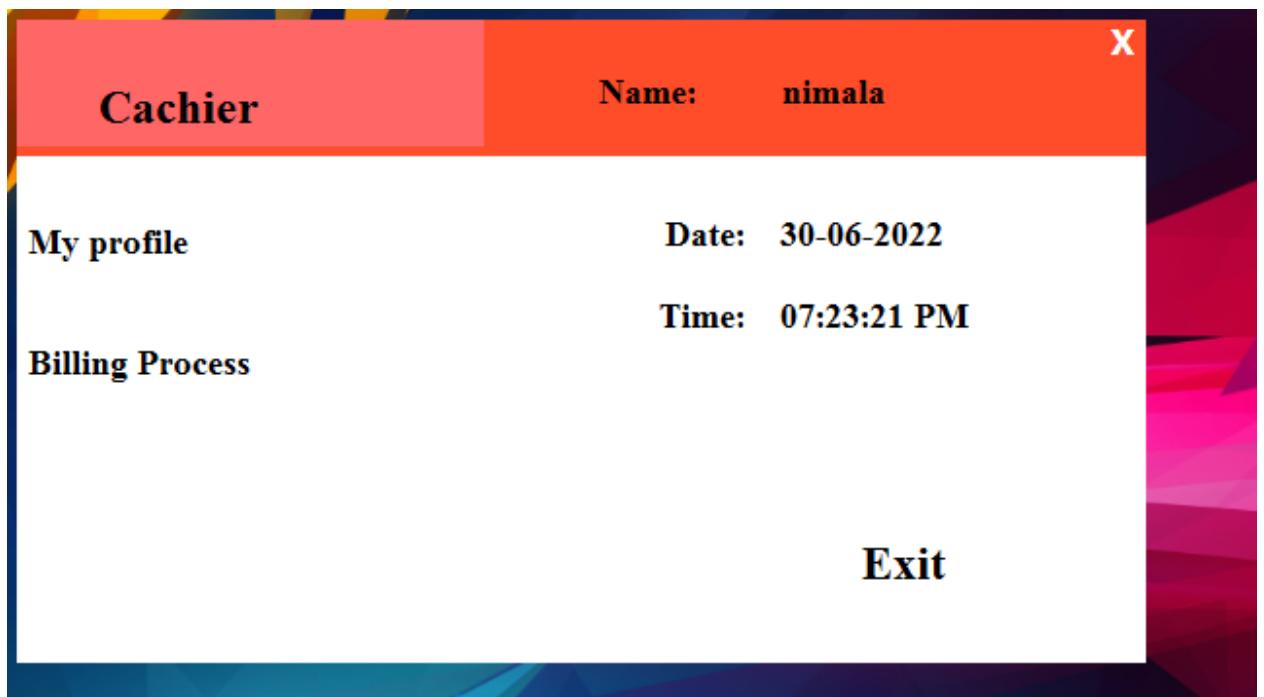
**Login:**



When the Admin and worker (cashier) access the system they will be shown unique home pages to each other.

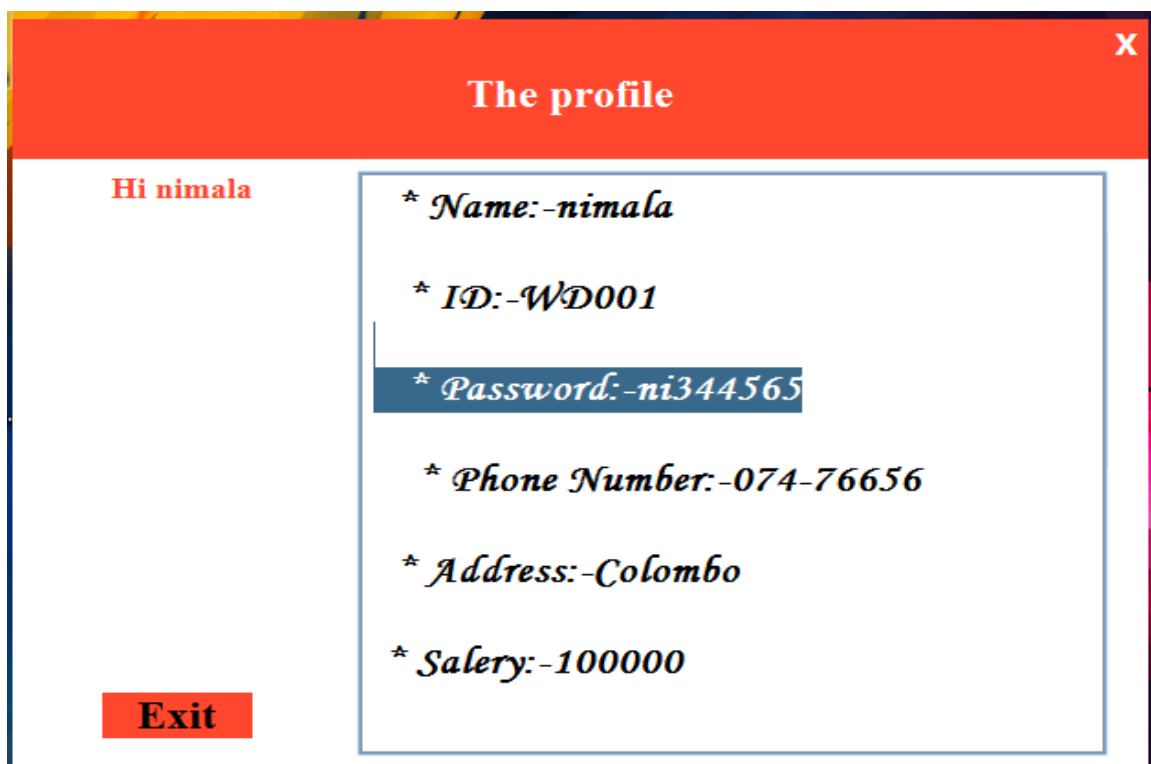
If it is worker of the pharmacy , he or she can see below interface and this interface can be used to do their works according to duty.

**Cashier'home page:**



The cashier can use my profile and billing process interfaces in this system. If cashier view my profile . He or She can see he's details or she's details but they can not change the details. Only admin can change information of workers.

**My profile:**



They can go back to home page by clicking Exit button.

**Billing process Page:**

Billing process

### Billing

Medicine ID:

Name of medicine:

Price: Rs.

Quantity:

Date:

Total cost: Rs.

Payment: Rs.

Balance: Rs.

medice_id	medicne_na...	quntity	price	Manufacture_...	Exppire_Date	suplayer_id
MD001	Vitamin-E	4000	50000	2021-12-27	2021-12-27	Nimal
MD002	panadol	4500	50000	2021-12-27	2021-12-27	D.moho...
MD003	FDR400	9000	40000	2021-12-27	2022-12-26	Akilaa
MD004	GT34	400	56	2021-12-04	2021-12-25	D.moho...
MD005	DHT1	1000	45	2021-12-24	2022-12-31	D.moho...
MD006	Faica	2000	4000	2022-12-03	2023-12-02	Akilaa
MD007	Vitamin-B	10000	6	2022-12-31	2023-01-09	Nimal

Id	name	price	quntity	date	cost
MD002	panadol	50000	67	2022-06-09	3350000
MD003	FDR400	40000	233	2022-06-17	9320000
MD004	GT34	56	60	2022-06-16	3360
MD005	DHT1	45	56	2022-06-18	2520
MD006	Faica	4000	500	2022-06-01	2000000
MD007	Vitamin-B	6	100	2022-06-24	600

This page is completed all daily transactions by cashier.

When Admin log into the system.

**Admin home Page:**

Updation

Report

Name: **admin**
X

**Medicne updates**

**Supplement updates**

**Workers details**

**Date: 2022-06-30**

**Time: 09:19:50 PM**

Exit

Updation

Report

Name: admin

Expired items report

Date: 2022-06-30

Odering item report

Time: 09:20:12 PM

Exit

Admin can move anywhere in this system using home page of admin. There are five interfaces here.

- Medicine update

Medicine Updates

Medicine ID

MD016

Suplayer ID

Nimal

Medicine Name

Quantity

Price

Manufacture Date

Exppire Date

INSERT

UPDATE

DELETE

CLEAR

Exit

Search

medice_id	medicne_n...	quntity	price	Manufacture...	Exppire_Date	suplayer_id
MD001	Vitami...	4000	50000	2021-12...	2021-12...	Nimal
MD002	panadol	4500	50000	2021-12...	2021-12...	D.moh...
MD003	FDR400	9000	40000	2021-12...	2022-12...	Akilaa
MD004	GT34	400	56	2021-12...	2021-12...	D.moh...
MD005	DHT1	1000	45	2021-12...	2022-12...	D.moh...
MD006	Faica	2000	4000	2022-12...	2023-12...	Akilaa
MD007	Vitami...	10000	6	2022-12...	2023-01...	Nimal
MD010	bgdvx	300	49	2018-12...	2021-12...	D.moh...
MD011	Avr	23	1000	2021-12...	2022-12...	mohom...

- Supplement update

Suplayer updates

Suplayer ID

SD008

Suplayer Name

Phone Number

Address

Monthly Invoice Amount Rs:

Invoice Date

INSERT

UPDATE

DELETE

CLEAR

Exit

Search

suplayer_id	suplayer_name	phone	address	invoice_amount	Invoice_date
SD001	Nimal	071-67547...	Colombo	200000	2021-12-18
SD002	D.mohom...	089-63445...	jaffna	30000	2021-12-04
SD003	Akilaa	077-54565...	Negambo	10000	2022-01-06
SD004	mohomand	036-765894	kelaniya	3000	2021-12-09
SD005	Nassem	036-765893	Jaffana	10000	2021-12-09
SD006	Raviin ka...	077-56437...	colombo	3000	2021-12-23
SD007	T.Silva	036-25456...	galle	10000	2022-06-25

- Workers details

Workers Details

Worker ID

WD003

Worker Name

Password

Phone Number

Address

Salary(Rs:)

INSERT

UPDATE

DELETE

CLEAR

Exit

Search

worker_id	worker_name	password	phone	address	salary
WD001	nimala	ni344565	074-76656	Colombo	100000
WD002	amal	765vby b	045-764873...	kandy	40000

- Expired items report

Expired items report

Medicine ID

Suplayer ID

Nimal

Medicine Name

Quantity

Price

Manufacture Date

Exppire Date

Return to Company

Exit

Search

medice_id	medicne_na...	quntity	price	Manufacture...	Exppire_Date	suplayer_id
MD001	Vitamin...	4000	50000	2021-12...	2021-12...	Nimal
MD002	panadol	4500	50000	2021-12...	2021-12...	D.moho...
MD004	GT34	400	56	2021-12...	2021-12...	D.moho...
MD010	bgdvy	300	49	2018-12...	2021-12...	D.moho...
MD014	nbb	7000	400	2021-12...	2021-12...	Akilaa
MD015	Ctracine	200	5	2022-06...	2022-06...	Akilaa

- Ordering item report

Odering item report

Orders

medice_id	name	supplier	qunttity	date
MD012	wyg	Nimal	67	2021-12-10
MD015	hRW	Nimal	80	2021-12-25
MD008	bv300	Nassem	12	2022-06-25

Order

Exit

Shortage products

medice_id	name
-----------	------

Medicine ID

Medicine Name

Suplayer ID

Nimal

Quantity

Ordered Date

In this pages, Admin can

**Insert:** By clicking “insert” button admin can add new information to the database.

**Update:** The admin can change /update previously entered information by clicking “update” button.

**Delete:** The admin can delete entered information by clicking “delete” button.

**Clear:** If admin wants to clear that data that he/she have already added and reenter data, then admin should click the “Clear” button and can reset data.

**Print:** when admin click the “print” button then he/she gets a feedback of printing details.

### c. System Codes

#### Delete:

```
delete1.setBackground(Color.white);
if(id.getText().isEmpty()){

    JOptionPane.showMessageDialog(this,"Enert id to be delete");

}

else{

try{

    Class.forName("com.mysql.jdbc.Driver");
    Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/pharmacy","root","");
    PreparedStatement pst=con.prepareStatement("DELETE FROM mupdate WHERE medice_id=?");
    pst.setString(1,id.getText());

    pst.executeUpdate();
    selectMed();
    autoId();
    name.setText(null);
    qty.setText(null);
    price.setText(null);
    mdate.setCalendar(null);
    edate.setCalendar(null);
    sid.setSelectedIndex(-1);
    JOptionPane.showMessageDialog(null,"Deletion successful");

},
```

#### Insert:



```

private void insertMouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    insert.setBackground(Color.white);
    DefaultTableModel model=(DefaultTableModel)mtable.getModel();
    try{
        Class.forName("com.mysql.jdbc.Driver");
        Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/pharmacy","root","");
        PreparedStatement pst=con.prepareStatement("insert into mupdate values(?,?,?,?,?,?,?)");
        |
        supler sup=(supler)sid.getSelectedItem();
        pst.setString(1,id.getText());
        pst.setString(2,name.getText());
        pst.setString(3,qty.getText());
        pst.setString(4,price.getText());
        SimpleDateFormat df=new SimpleDateFormat("YYYY-MM-dd");
        String date1=df.format(mdate.getDate());
        String date2=df.format(edate.getDate());
        pst.setString(5,date1);
        pst.setString(6,date2);
        pst.setString(7,sid.getSelectedItem().toString());
        pst.executeUpdate();
        selectMed();
        autoId();
        name.setText(null);
        qty.setText(null);
        price.setText(null);
        mdate.setCalendar(null);
        edate.setCalendar(null);
        sid.setSelectedIndex(-1);
        JOptionPane.showMessageDialog(null,"successful");
    }
}

```

.....END.....