

# DBMS PROJECT

## INVENTORY MANAGEMENT SYSTEM

CSE- A

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Google Drive Link for the Project:

[https://drive.google.com/drive/folders/1atg\\_tdHFwVxlq\\_l4Yyixs25lgIHSxEva?usp=sharing](https://drive.google.com/drive/folders/1atg_tdHFwVxlq_l4Yyixs25lgIHSxEva?usp=sharing)

Creation of Tables:

```
drop table ORDERS;  
drop table EMPLOYEES;  
drop table SUPPLY;  
drop table SUPPLIERS;  
drop table STORES;  
drop table CUSTOMERS;  
drop table PRODUCTS;
```

```
create table PRODUCTS(PID varchar2(5) primary key,  
brand char(20) not null,  
pname char(20) not null,  
mfg_date DATE not null,  
exp_date DATE not null,  
category char(10) not null,  
Quantity int not null,  
unit_price int not null);
```

```
create table CUSTOMERS(CID varchar2(5) PRIMARY KEY,  
fname char(10) not null,  
lname char(10) not null,  
phno varchar2(10) not null,
```

```
doorno varchar(10) not null,  
street varchar2(10) not null,  
area varchar2(10) not null,  
city varchar2(10) not null,  
state varchar2(10) not null);
```

```
create table STORES(STID varchar2(5) primary key,  
sname char(10) not null,  
phno varchar2(10) not null,  
doorno varchar(10) not null,  
street varchar2(10) not null,  
area varchar2(10) not null,  
city varchar2(10) not null,  
state varchar2(10) not null  
);
```

```
create table SUPPLIERS(  
SID VARCHAR2(5) primary key,  
sname char(10) not null,  
phno varchar2(10) not null,  
doorno varchar(10) not null,  
street varchar2(10) not null,  
area varchar2(10) not null,  
city varchar2(10) not null,  
state varchar2(10) not null  
);
```

```
create table SUPPLY(SUPID varchar2(5) primary key,  
PID varchar2(5),  
SID varchar2(5),  
STID varchar2(5),  
Sup_Date DATE not null,  
CONSTRAINT chck_fk_pid FOREIGN KEY(pid) REFERENCES PRODUCTS(pid),  
CONSTRAINT chck_fk_sid FOREIGN KEY(sid) REFERENCES SUPPLIERS(sid),  
CONSTRAINT chck_fk_sttid FOREIGN KEY(stid) REFERENCES STORES(stid));
```

```
create table EMPLOYEES(EID varchar2(5) PRIMARY KEY,  
STID varchar2(5),  
fname char(10) not null,  
lname char(10) not null,  
phno varchar2(10) not null,  
doorno varchar(10) not null,  
street varchar2(10) not null,  
area varchar2(10) not null,
```

```
city varchar2(10) not null,  
state varchar2(10) not null,  
CONSTRAINT chck_fk_stid FOREIGN KEY(STID) REFERENCES STORES(STID));
```

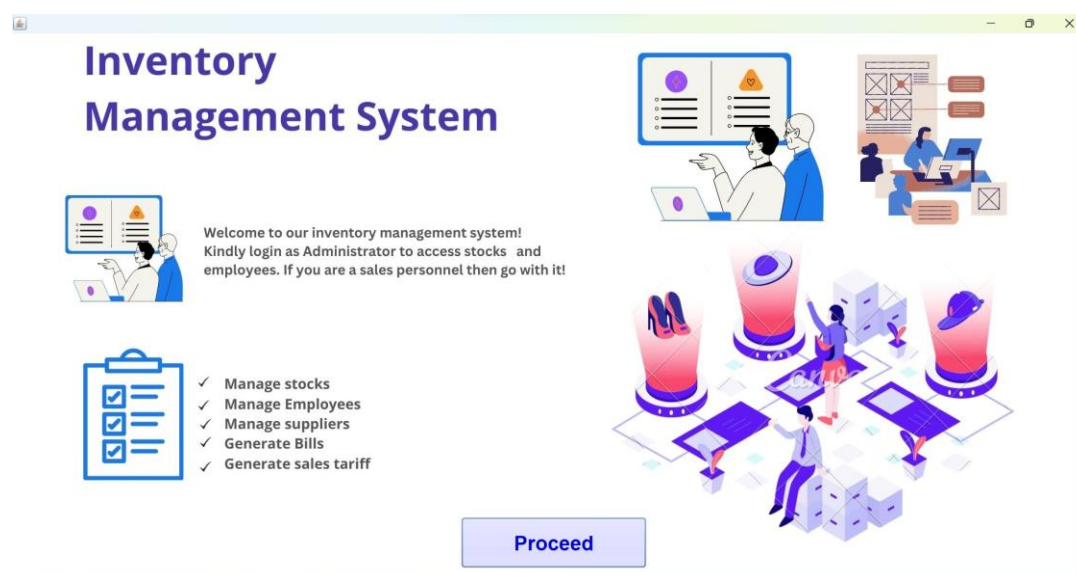
```
create table ORDERS(OID varchar2(5),  
PID varchar2(5),  
CID varchar2(5),  
EID varchar2(5),  
Price int NOT NULL,  
Quantity int NOT NULL,  
Bill_Date DATE NOT NULL,  
PRIMARY KEY(OID,PID),  
CONSTRAINT chck_fk_PPID FOREIGN KEY(PID) REFERENCES PRODUCTS(PID),  
CONSTRAINT chck_fk_CCID FOREIGN KEY(CID) REFERENCES CUSTOMERS(CID),  
CONSTRAINT chck_fk_EEID FOREIGN KEY(EID) REFERENCES EMPLOYEES(EID));
```

PLSQL Procedure: (for calculating total price of a product)

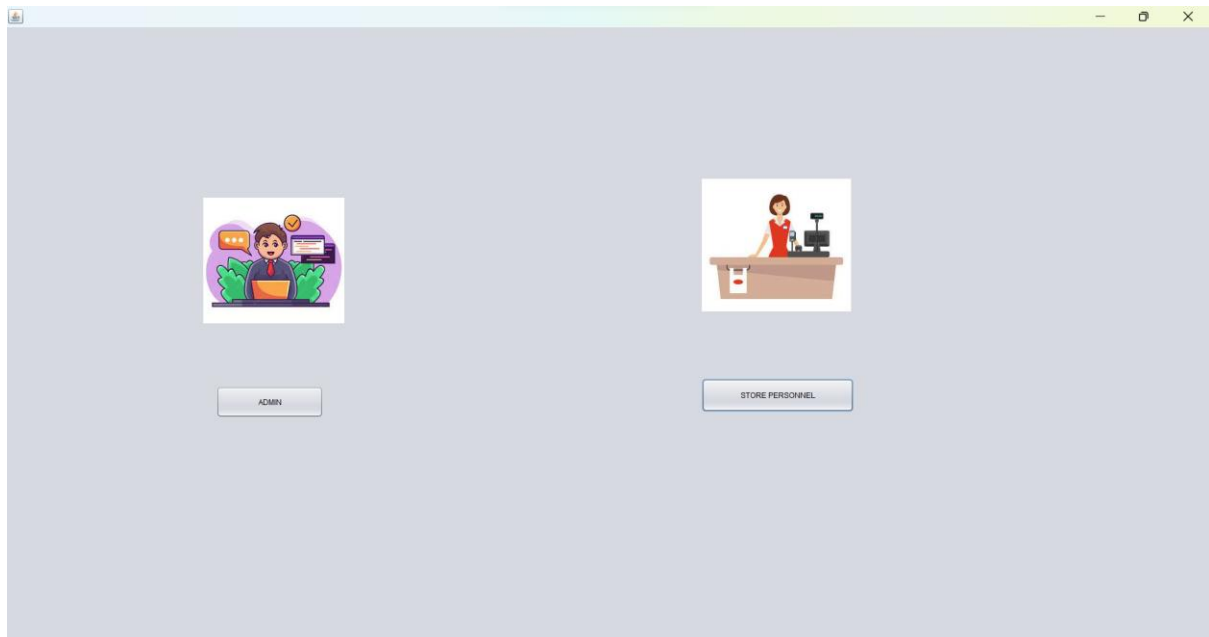
```
CREATE OR REPLACE PROCEDURE Calc(Quantity IN int,Price IN int,tp OUT int) IS  
BEGIN  
tp:= quantity*price;  
commit;  
END;  
/
```

## PROGRAM WALKTHROUGH

### Home Page

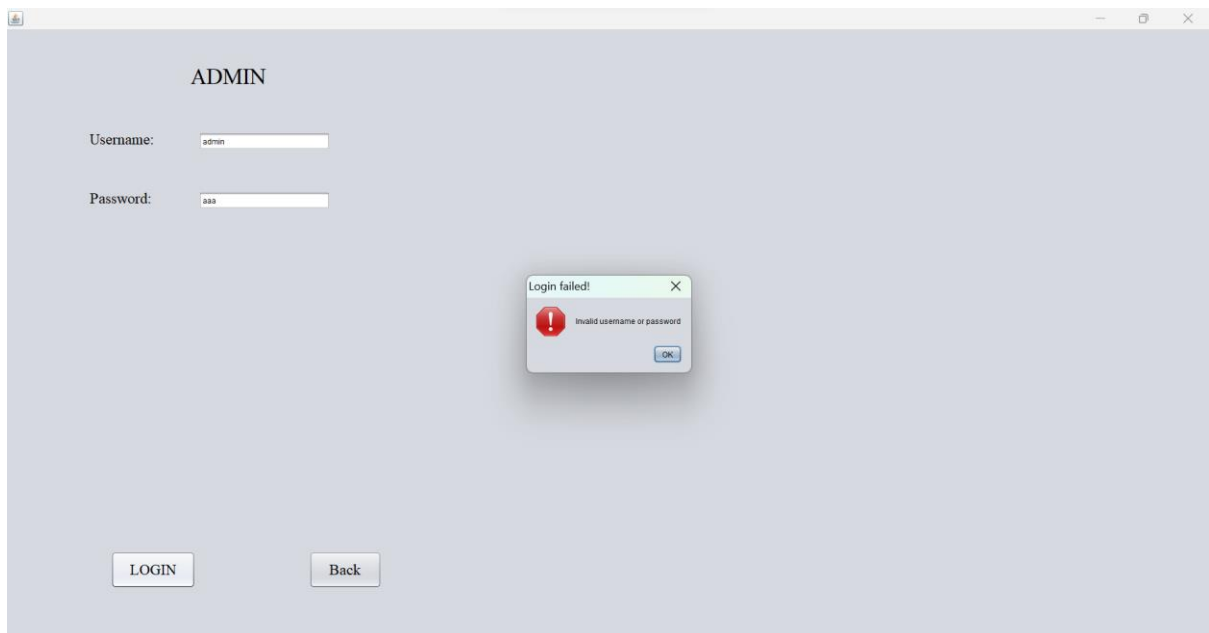


## Login page

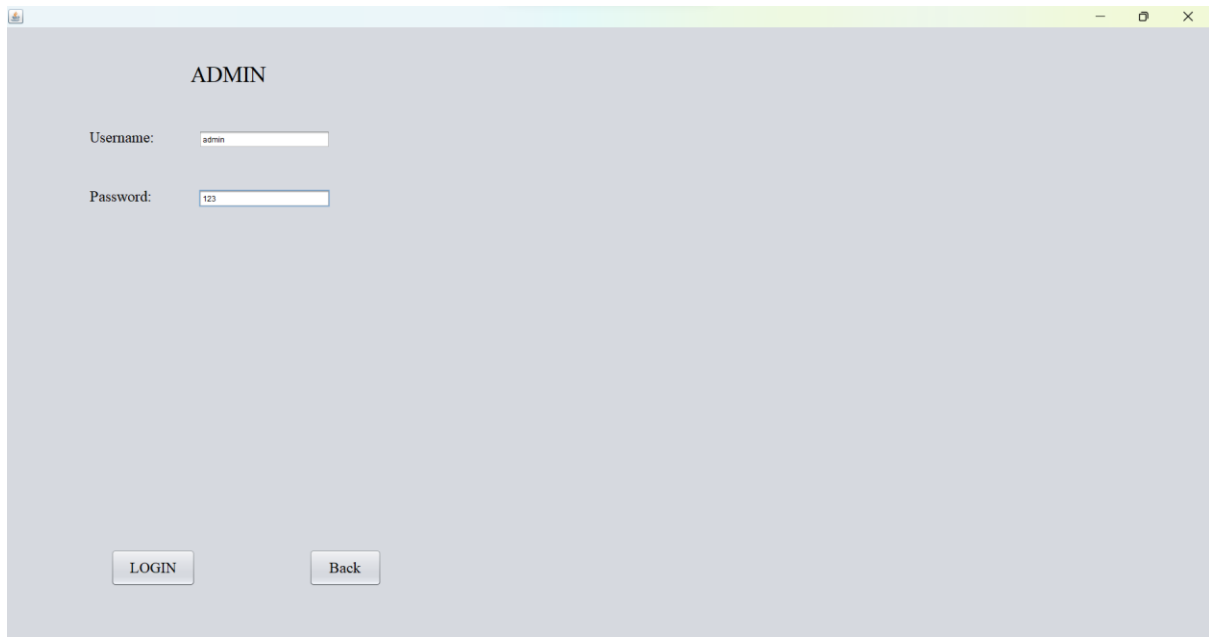


## ADMIN LOGIN

Trying wrong password:



Now, giving correct password



A screenshot of a web browser window displaying the ADMIN login page. The page has a light gray background. At the top center, the word "ADMIN" is displayed. Below it, there are two input fields: "Username:" with the value "admin" and "Password:" with the value "123". At the bottom of the page, there are two buttons: "LOGIN" and "Back".

ADMIN HOME PAGE BEING DISPLAYED:



A screenshot of a web browser window displaying the ADMIN HOME page. The page has a light gray background. At the top center, the text "WELCOME!" and "ADMIN HOME" are displayed. Below this, there is a grid of 12 buttons arranged in 4 rows and 3 columns. The buttons are: "VIEW STOCK", "VIEW SUPPLIER", "VIEW EMPLOYEE", "ADD STOCK", "ADD SUPPLIER", "ADD EMPLOYEE", "UPDATE STOCK", "UPDATE SUPPLIER", "UPDATE EMPLOYEE", "REMOVE STOCK", "REMOVE SUPPLIER", and "REMOVE EMPLOYEE".

Adding a product using 'ADD STOCK' option:

**Add Product to Stock**

Product ID:

Brand:

Product name:

Mfg Date:

Exp Date:

Category:

Quantity:

Price per unit:

**Message**

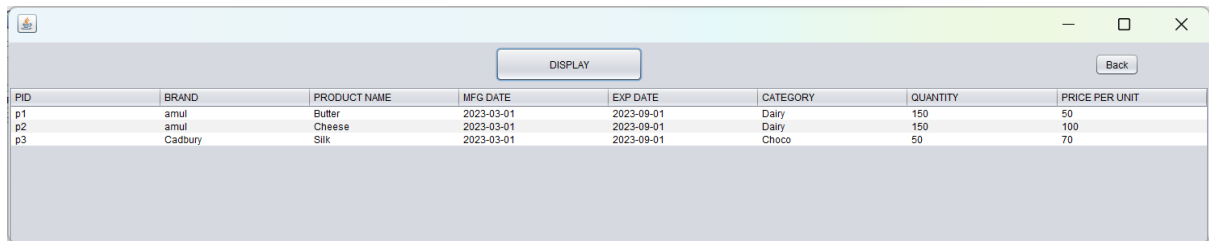
Product Successfully Added

**Add Product** **Back**

Product added in the table:

```
C:\oradexe\app\oracle\produ. x + v
SQL*Plus: Release 11.2.0.2.0 Production on Mon Jun 19 22:11:15 2023
Copyright (c) 1982, 2014, Oracle. All rights reserved.
Enter user-name: system
Enter password:
Connected to:
Oracle Database 11g Express Edition Release 11.2.0.2.0 - 64bit Production
SQL> select * from products;
PID  BRAND          PNAME          MFG_DATE  EXP_DATE  CATEGORY
-----
QUANTITY UNIT_PRICE
-----
p1    amul             Butter          01-MAR-23 01-SEP-23 Dairy
      150             50
```

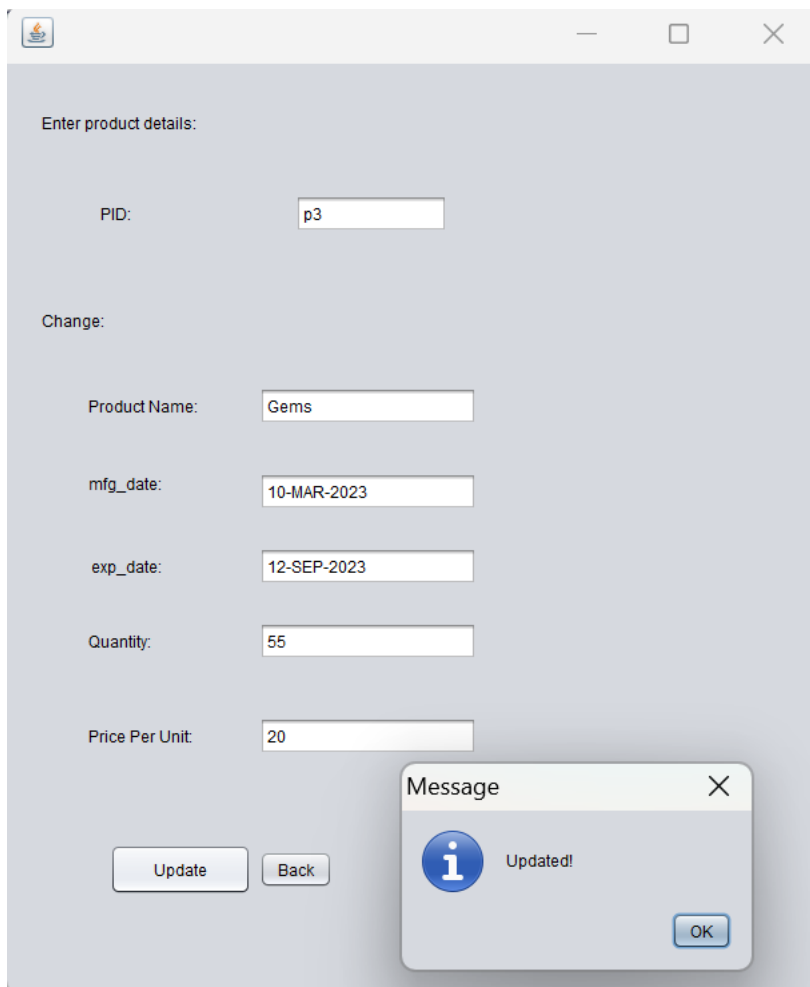
Adding Few more products and viewing the stock:



A screenshot of a software window titled 'DISPLAY' with a 'Back' button. It contains a table with 8 columns: PID, BRAND, PRODUCT NAME, MFG DATE, EXP DATE, CATEGORY, QUANTITY, and PRICE PER UNIT. The table lists three products: p1 (amul Butter), p2 (amul Cheese), and p3 (Cadbury Silk).

PID	BRAND	PRODUCT NAME	MFG DATE	EXP DATE	CATEGORY	QUANTITY	PRICE PER UNIT
p1	amul	Butter	2023-03-01	2023-09-01	Dairy	150	50
p2	amul	Cheese	2023-03-01	2023-09-01	Dairy	150	100
p3	Cadbury	Silk	2023-03-01	2023-09-01	Choco	50	70

Updating a product:



A screenshot of a software window for updating a product. It has a title bar with a close button. The main area is titled 'Enter product details:'. It contains input fields for PID (p3), Product Name (Gems), mfg\_date (10-MAR-2023), exp\_date (12-SEP-2023), Quantity (55), and Price Per Unit (20). At the bottom are 'Update' and 'Back' buttons. A 'Message' dialog box is open in the foreground, displaying an information icon and the text 'Updated!' with an 'OK' button.

Enter product details:

PID:

Change:

Product Name:


mfg\_date:

exp\_date:

Quantity:

Price Per Unit:

Message

 Updated!

## Removing a product:

REMOVE PRODUCT

Enter the Product ID to remove from the stock:

REMOVE Back

Message  
Product Successfully Removed  
OK

## Viewing stock after above updations:

DISPLAY Back

PID	BRAND	PRODUCT NAME	MFG DATE	EXP DATE	CATEGORY	QUANTITY	PRICE PER UNIT
p1	amul	Butter	2023-03-01	2023-09-01	Dairy	150	50
p3	Cadbury	Gems	2023-03-10	2023-09-12	Choco	55	20

## Similarly adding and Viewing Suppliers:

Click to Display Back

SUPPLIERS

Supplier ID	Supplier Name	Phone	Door No	Street	Area	City	State
sp1	Kanna	9800018765	10	Main St	Downing	Chennai	TamilNadu
sp2	Rajesh	9890876543	23	Cross St	TNagar	Chennai	TamilNadu
sp3	Sanjana	9890789765	45	Not St	Broadway	Chennai	TamilNadu

Click to display Employees Back

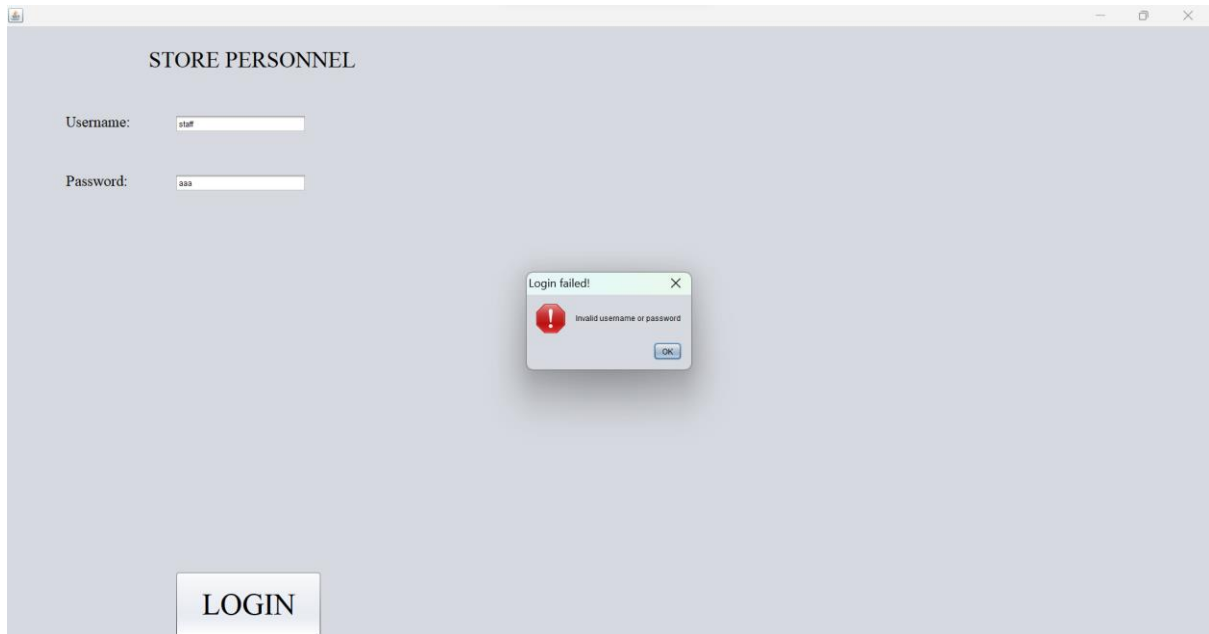
EID	STID	FName	LName	Ph No	Door No	Street	Area	City	State
e2	st1	Virat	Kohli	0987654321	54G	Sunflower	Central	Delhi	Delhi
e1	st1	Mahi	Dhoni	9876543210	53G	Jasmine	Central	Ranchi	Jharkand



Admin Options over-----

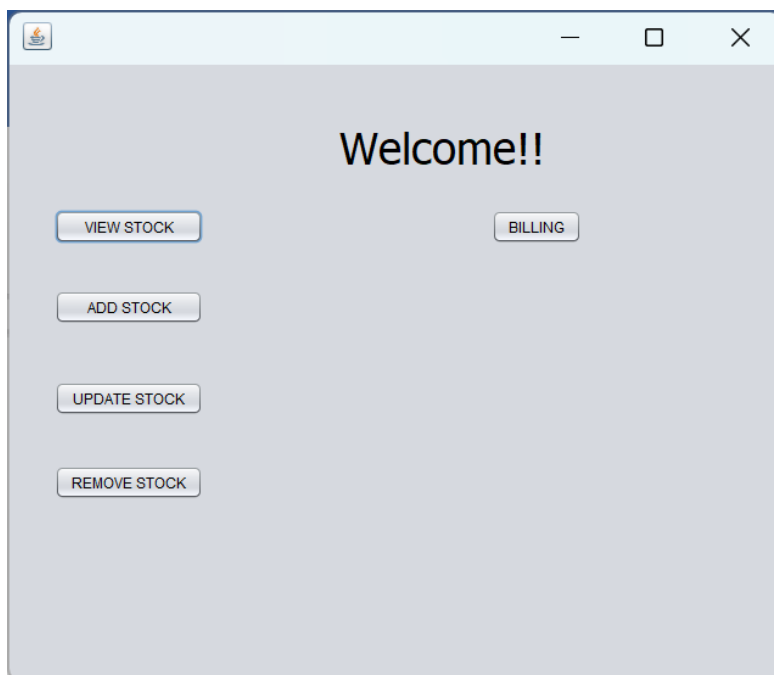
Going to Staff Personnel login

Password validation:



Now, entering correct password:

Staff Home Page:



The stock manipulation options are similar to admins

Proceeding to Billing:

Billing page:

**Purchase**

Order Id: 390

Emp ID:

Enter Customer ID:

Bill date

Product ID

Product Name

Quantity

Price Per Unit:

Discount 10% ☐

Calculate Total Price

Total Price:

Search Product By Id

Search

Item_Id	Item_name	quantity	price
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CART

OID	PID	Pname	Quantity	Unit Price	Total
-----	-----	-------	----------	------------	-------

ADD Purchase and Generate Bill

Note: Order ID is being generated by the program for each new order

Searching by product ID:

**Purchase**

Order Id: 390

Emp ID:

Enter Customer ID:

Bill date

Product ID

Product Name

Quantity

Price Per Unit:

Discount 10% ☐

Calculate Total Price

Total Price:

Search Product By Id p1

Search

Item_Id	Item_name	quantity	price
p1	Butter	150	50

CART

OID	PID	Pname	Quantity	Unit Price	Total
-----	-----	-------	----------	------------	-------

ADD Purchase and Generate Bill

Clicking on the product record fills in the product ID, product name and unit price fields automatically:

The screenshot shows a web application window titled "Purchase". On the left, there are input fields for "Order Id:" (390), "Emp ID:" (e1), "Enter Customer ID:" (c1), "Bill date:" (18-JUN-2023), "Product ID:" (p1), "Product Name:" (Butter), "Quantity:" (empty), "Price Per Unit:" (50), a "Discount 10%" checkbox (unchecked), a "Calculate Total Price" button, and a "Total Price:" field (empty). On the right, there is a "Search Product By Id" section with a search bar containing "p1" and a "Search" button. Below the search bar is a table with columns "Item\_Id", "Item\_name", "quantity", and "price". The table contains one row: "p1", "Butter", "150", "50". Below the table is a "CART" section with a table with columns "OID", "PID", "Pname", "Quantity", "Unit Price", and "Total". The table is empty. At the bottom right, there is a "Back" button. At the bottom center, there is an "ADD" button and a "Purchase and Generate Bill" button.

Item_Id	Item_name	quantity	price
p1	Butter	150	50

OID	PID	Pname	Quantity	Unit Price	Total
-----	-----	-------	----------	------------	-------

Entering Quantity and calculating total price:

The screenshot shows the same "Purchase" form as before, but with the "Quantity:" field now containing the value "3". The "Total Price:" field now contains the value "150". The "Search Product By Id" section and the "CART" section remain the same. The "Back" button is still present at the bottom right. The "ADD" button and "Purchase and Generate Bill" button are still at the bottom center.

Item_Id	Item_name	quantity	price
p1	Butter	150	50

OID	PID	Pname	Quantity	Unit Price	Total
-----	-----	-------	----------	------------	-------

Clicking on ADD : (product gets added to cart)

**Purchase** Back

Order Id:

Emp ID:

Enter Customer ID:

Bill date:

Product ID:

Product Name:

Quantity:

Price Per Unit:

Discount 10% ☐

Total Price:

Search Product By Id

Item_Id	Item_name	quantity	price
p1	Butter	150	50
p3	Gems	55	20

CART

OID	PID	Prname	Quantity	Unit Price	Total
390	p1	Butter	3	50	150

Similarly entering the next Product:

**Purchase** Back

Order Id:

Emp ID:

Enter Customer ID:

Bill date:

Product ID:

Product Name:

Quantity:

Price Per Unit:

Discount 10% ☐

Total Price:

Search Product By Id


Item_Id	Item_name	quantity	price
p1	Butter	150	50
p3	Gems	55	20

CART

OID	PID	Prname	Quantity	Unit Price	Total
390	p1	Butter	3	50	150
390	p3	Gems	4	20	80

Clicking Purchase and Generate Bill:

**Message** ×

 Successfully purchased!  
Your Order ID 390

Order ID must be noted down

Clicking 'OK', staff would be directed to the Bill page:

Enter order ID and click 'Generate Invoice':

HOME Bill No: Date:

Enter your Order ID: 390

OID	PID	CID	EID	price	quantity	total	Bill date
-----	-----	-----	-----	-------	----------	-------	-----------

Total Amount:

Generate Invoice

The bill is displayed:

HOME Bill No: Date:

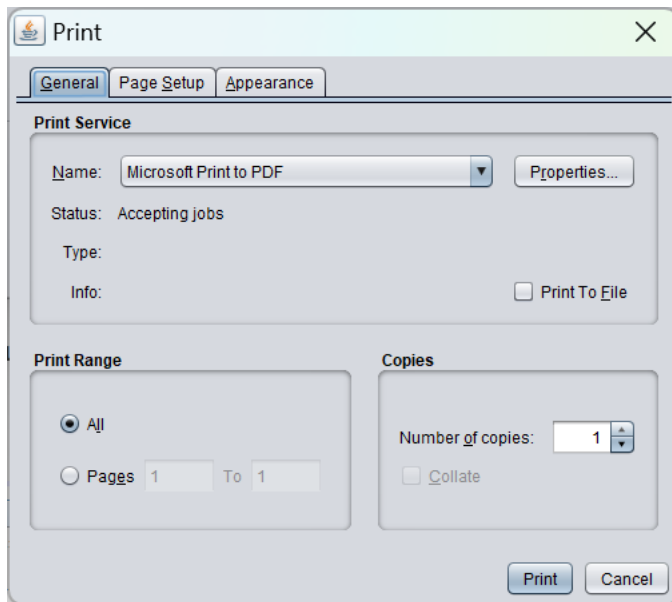
Enter your Order ID: 390

OID	PID	CID	EID	price	quantity	total	Bill date
390	p1	c1	e1	50	3	150	2023-06-18 00:00:00
390	p3	c1	e1	20	4	80	2023-06-18 00:00:00

Total Amount: Rs. 230

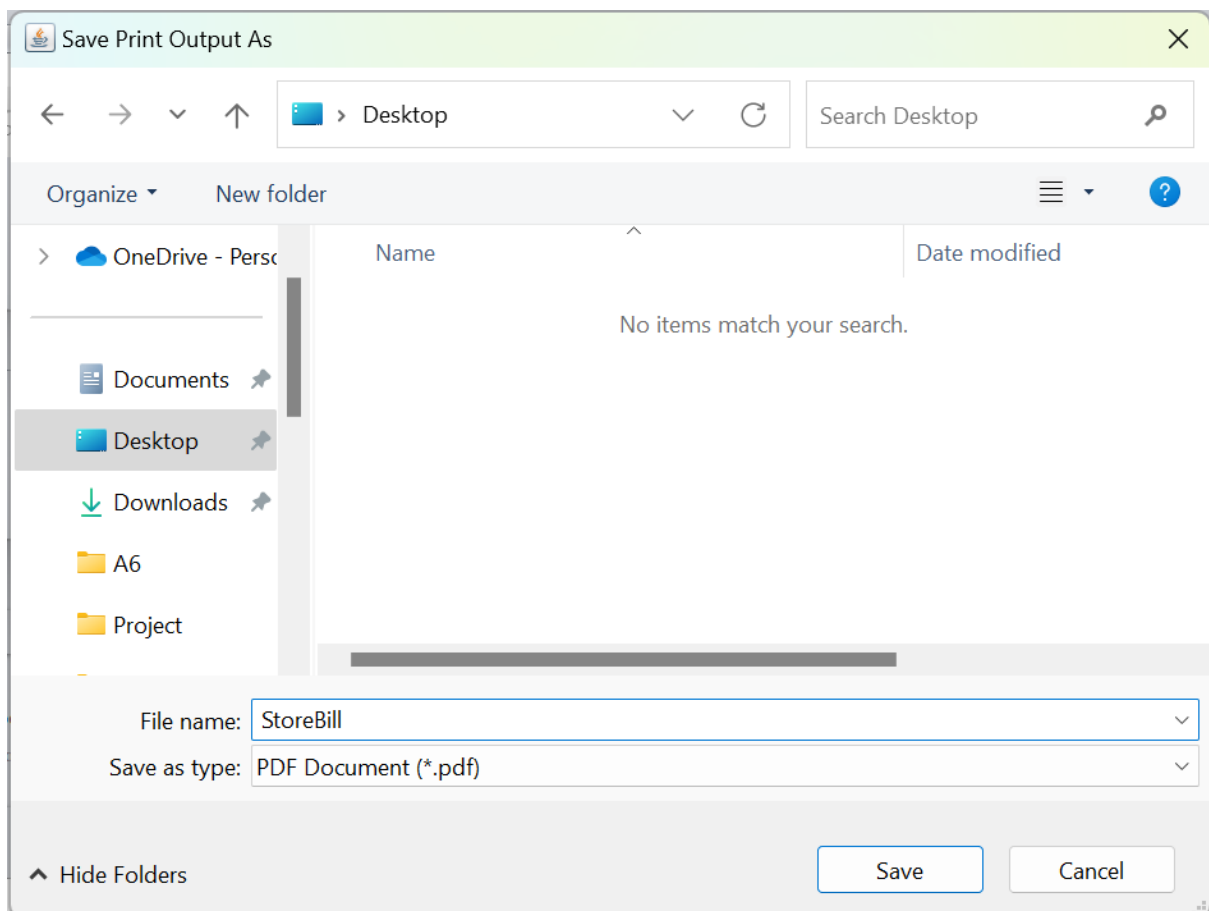
Generate Invoice

Also another window opens to select the destination where the invoice is to be saved:



Selecting Microsoft Print to PDF and clicking Print:

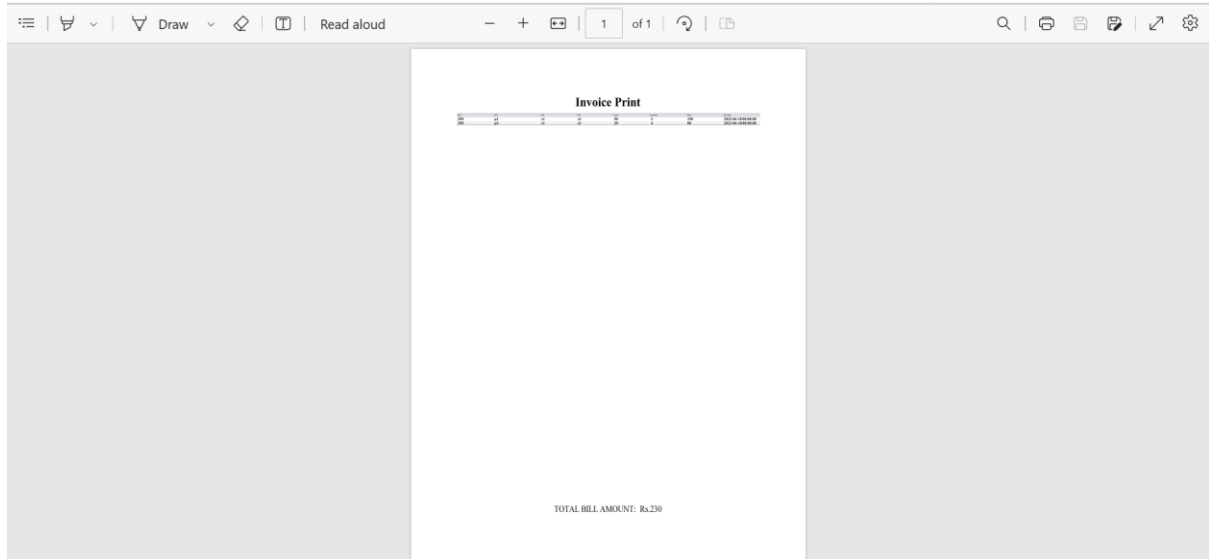
Selecting the location:



Click 'Save'

Going to the location and opening the bill:

The Invoice is generated as a pdf:



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