PROJECT REPORT
SUBMITTED
IN FULLFILEMENT
OF
PYTHON TRAINING

SUBMITTED BY:-

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PROJECT NAME
(Inventory Management System)
using
Python Tkinter with SQLite

ACKNOWLEDGEMENT

I take this opportunity to express my profound gratitude and deep regards to my faculty (Prof. Chandan Mukherjee) for his exemplary guidance, monitoring and constant encouragement throughout the course of this project. The blessing, help and guidance given by him/her time to time shall carry me a long way in the journey of life on which I am about to embark.

I am obliged to my project team members for the valuable information provided by them in their respective fields. I am grateful for their cooperation during the period of my assignment

Full Signature of the Candidates (with date)

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5. Vivek Sharma

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INTRODUCTION

The inventory management ensures that the company always has the required materials and products in hand while keeping the cost as low as possible. Inventory Management refers to the process of supervising and controlling the stock items of a company. Typically, Inventory Management Systems are used by firms that either sell a product or manufacture a product for the purpose of accounting all the tangible goods that allow for a sale of a finished product, or parts for making a product. This inventory management system can be used to store the details of the inventory, update the inventory based on the sale details, generate receipts for sales, generate salesand inventory reports periodically. This inventory management software has one module, Admin.Admin has the authority to add, update and delete an inventory. This inventory management software also has its own intelligently managed support system. This intelligent support system allows admin to view and manage various inventories.

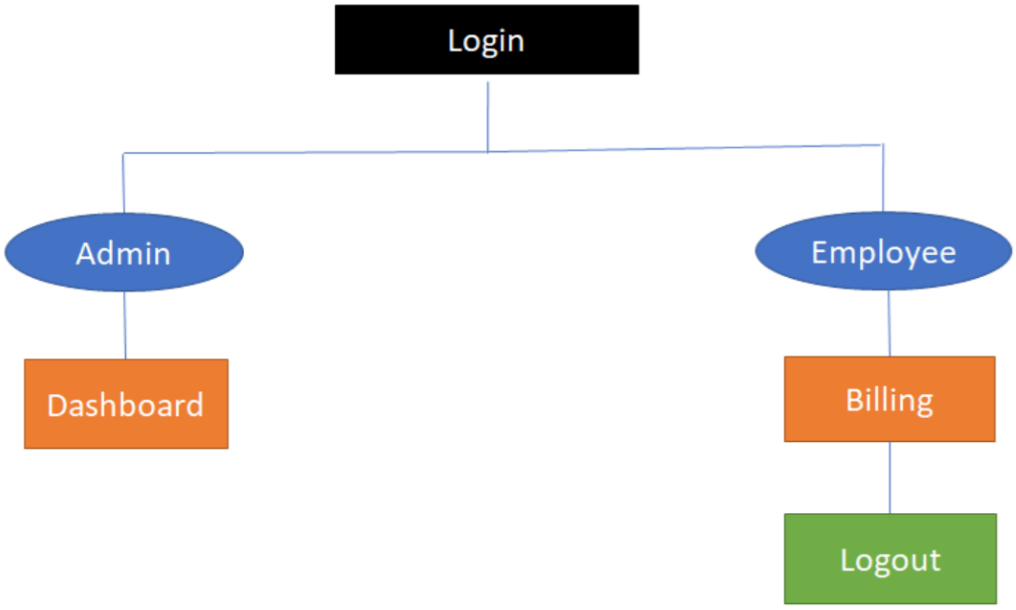
OBJECTIVE

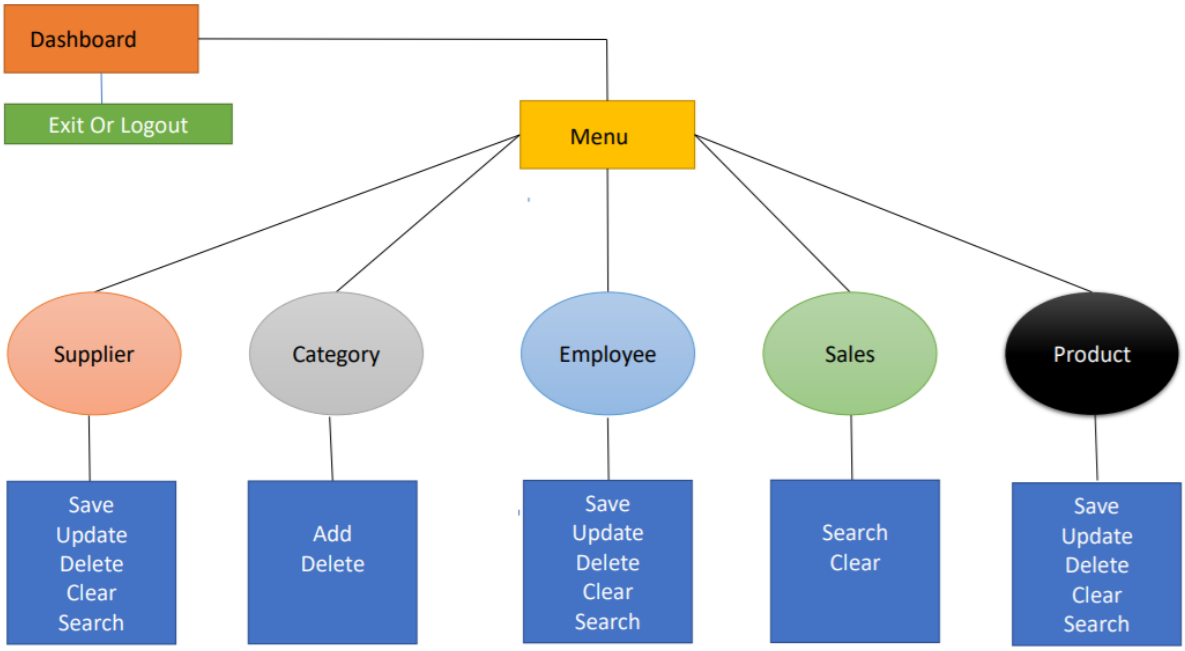
The main objective of inventory management is to maintain inventory at appropriate level to avoid excessive or shortage of inventory because both the cases are undesirable for business. Thus, management is faced with the following conflicting objectives:-

1. To keep inventory at sufficiently high level to perform production and sales activities smoothly.

2. To minimize investment in inventory at minimum level to maximize profitability.

PROJECT WORK FLOW





MODULES AND FUNCTIONALITY

- **Login:-** Admin or Employee can login his account using id and password.
- **Add supplier:-** Admin can add cashier by adding cashier details.
- **Add Product:-** Admin can add product.
- **View Supplier details:-** Admin can view cashier details.
- **View Sales:-** Admin can also view the sales done.
- **Add category:-** User can add category.
- **Update stock:-** Admin can add, delete the stock.
- **Billing:-** Employee can generate bills.

SOFTWARE AND HARDWARE REQUIREMENTS

Hardware Requirement Specifications:-

PROCESSOR :- Intel i3 or i51.8 GHz.
MOTHERBOARD :- According to the processor requirement
RAM :- 4GB.
FREE DISK SPACE :- 100MB

Software:-

PROGRAMMING LANGUAGE USED: **PYTHON3.9**
GUI Creation: **Tkinter**
IDE USED: **PyCharm**
Database: **SQLite**

DATABASE / TABLE INFORMATION

First table:- Employee

It stores the data about employee like name,email,gender,contact,date of birth(DOB),date of joining(DOJ),password,usertype,address,salary.

Second table:- Supplier

It stores the data of supplier like name ,contact , description.

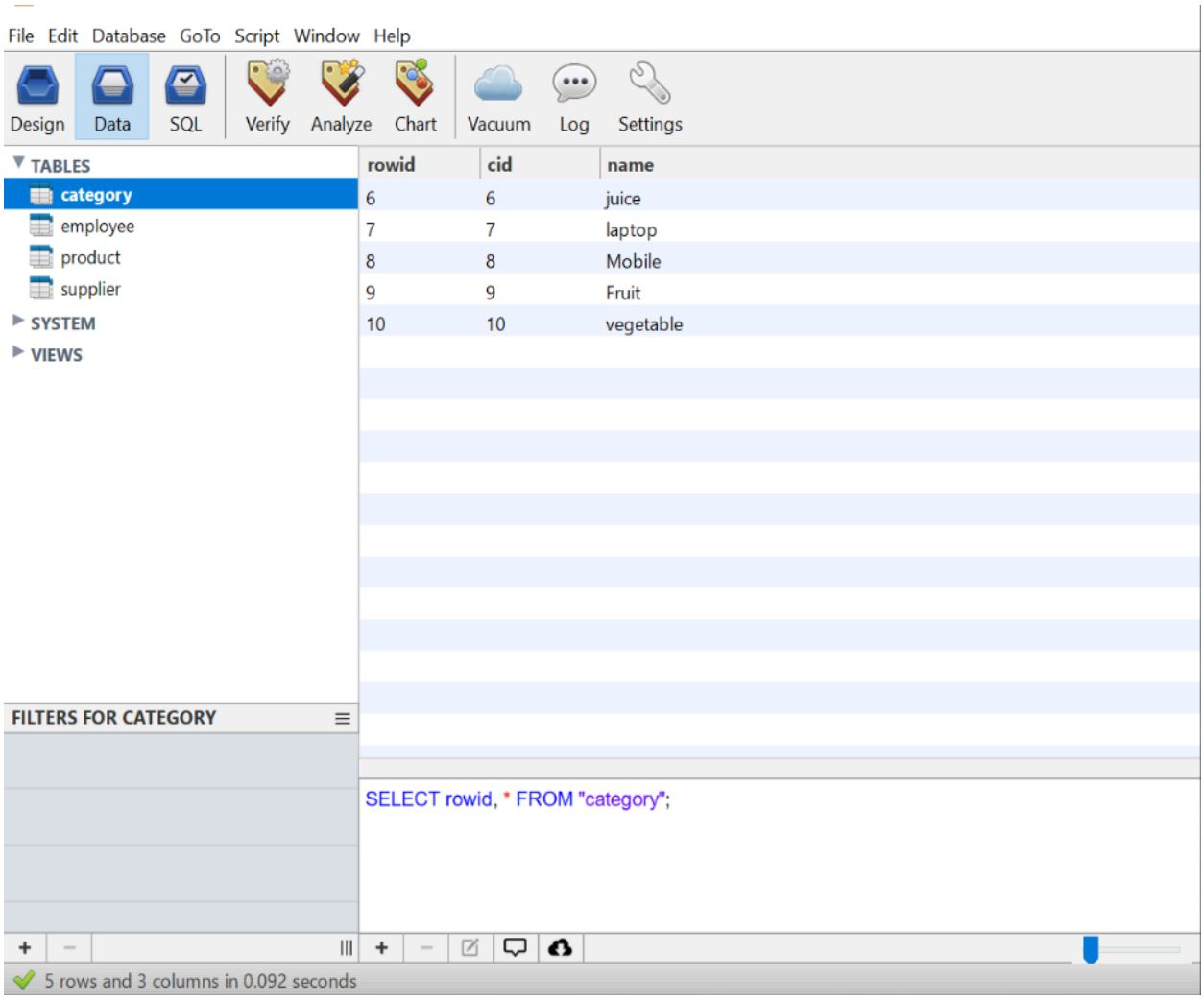
Third table:- Category

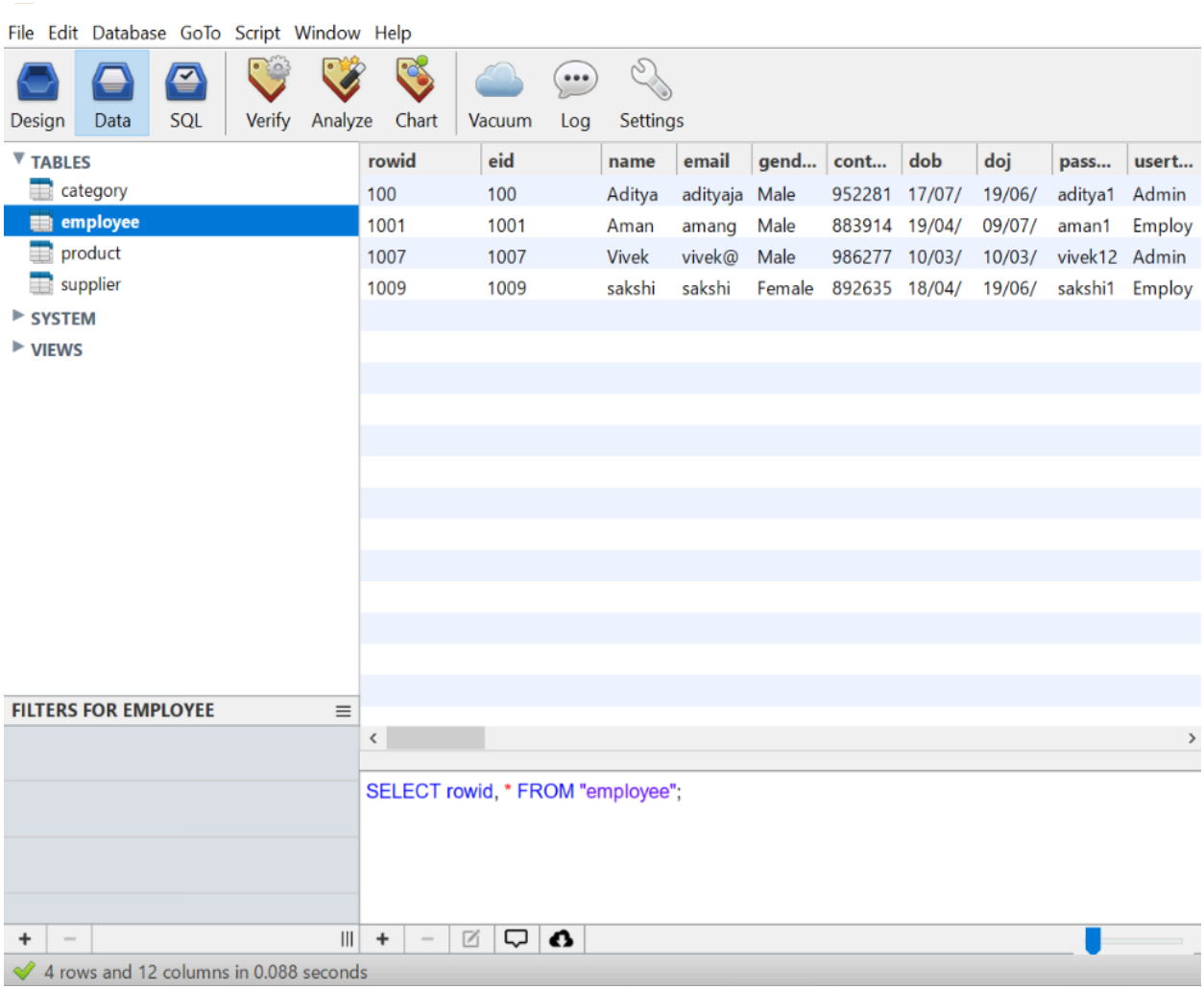
It stores the variety of products.

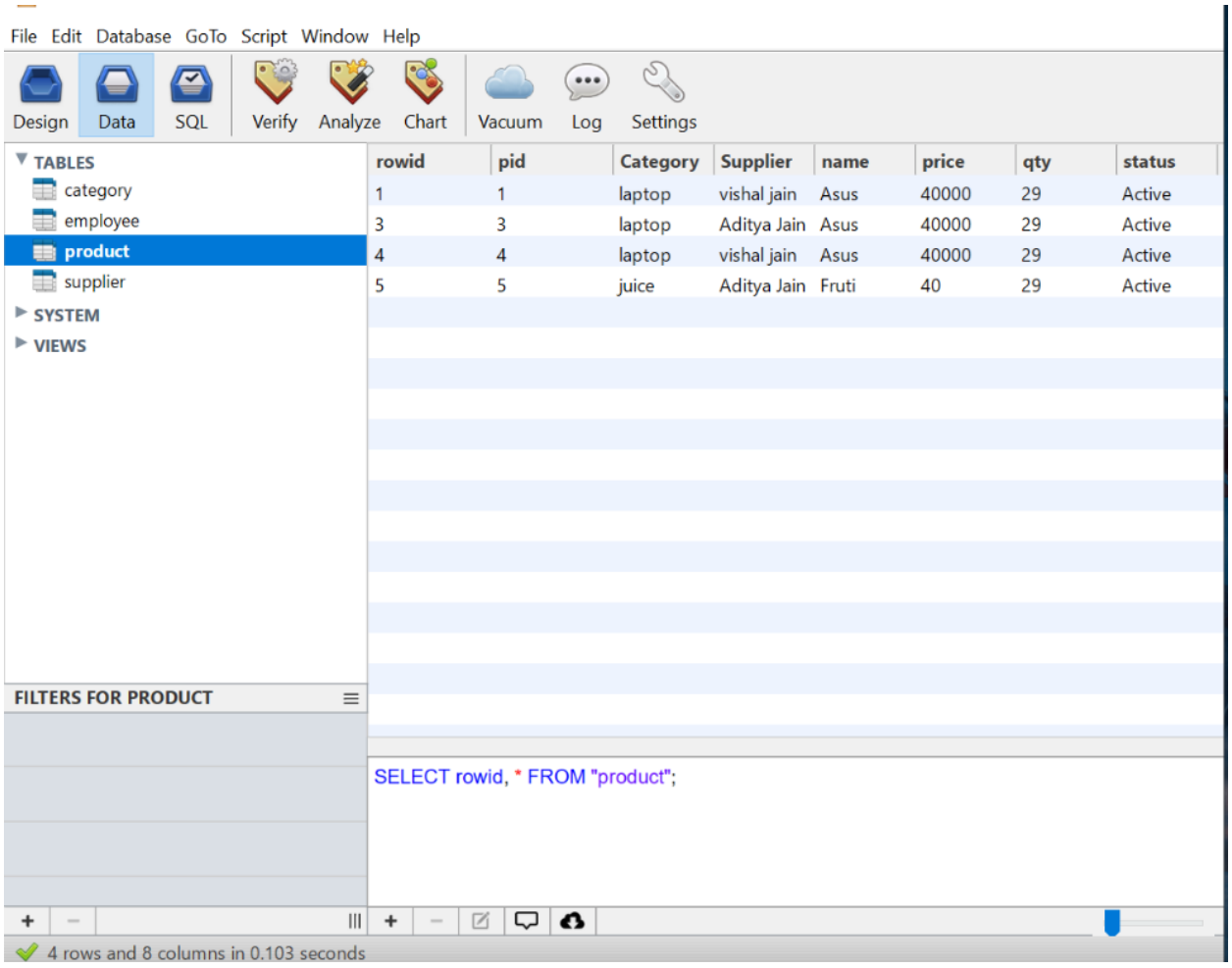
Fourth table:- Product

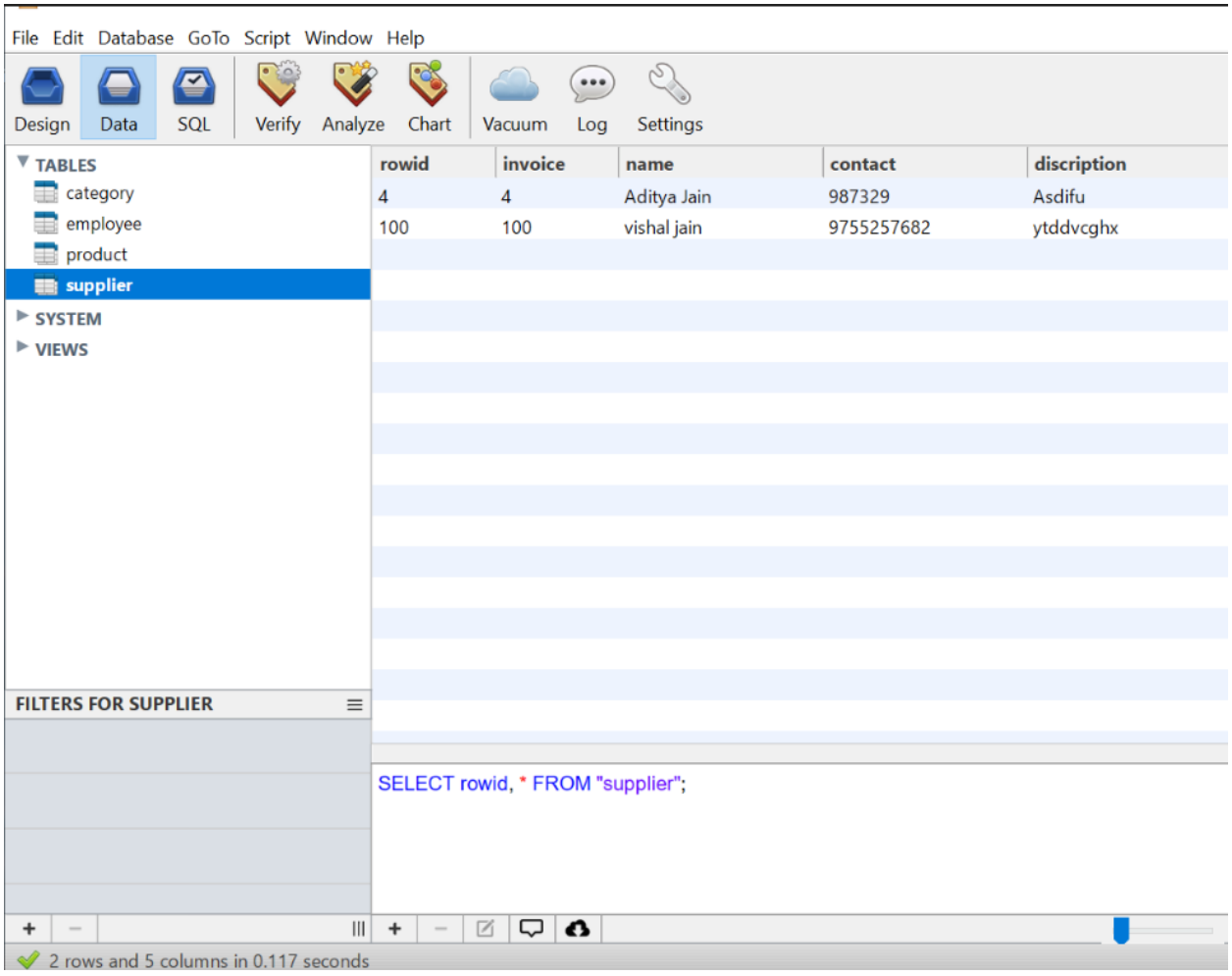
It stores the data about various products like category ,supplier ,name ,price ,quantity , status.

SCREENSHOTS OF DATABASE

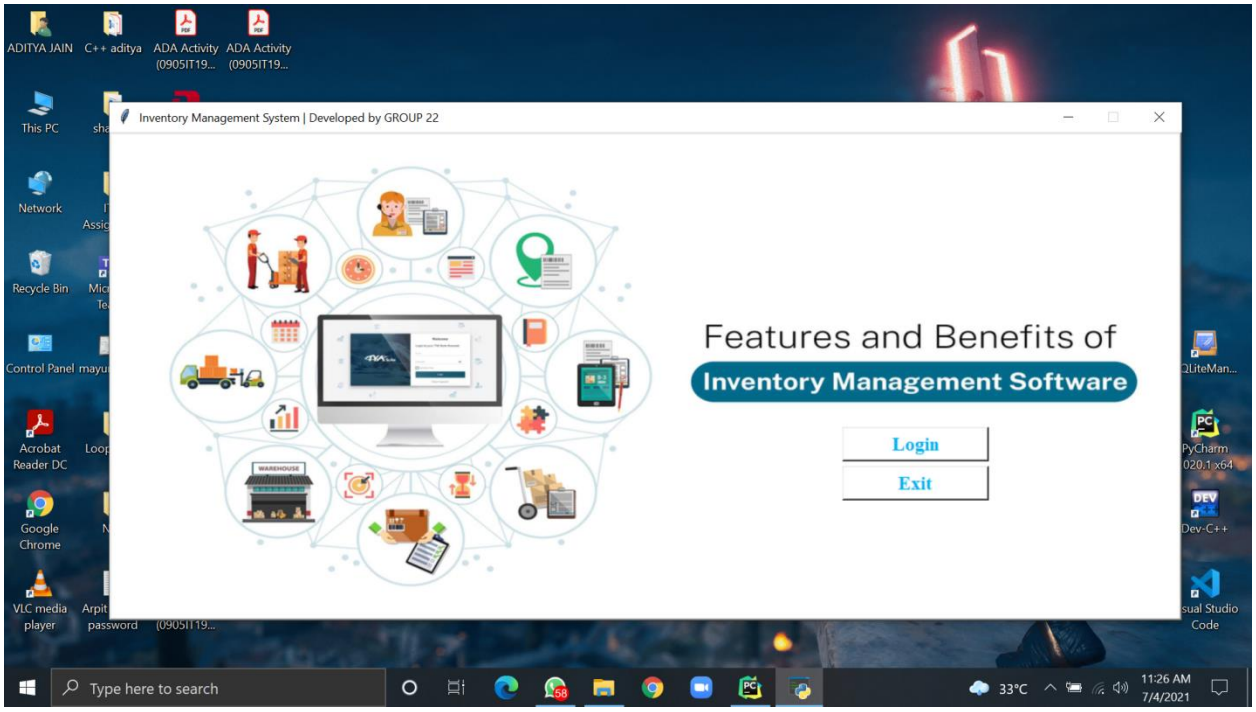


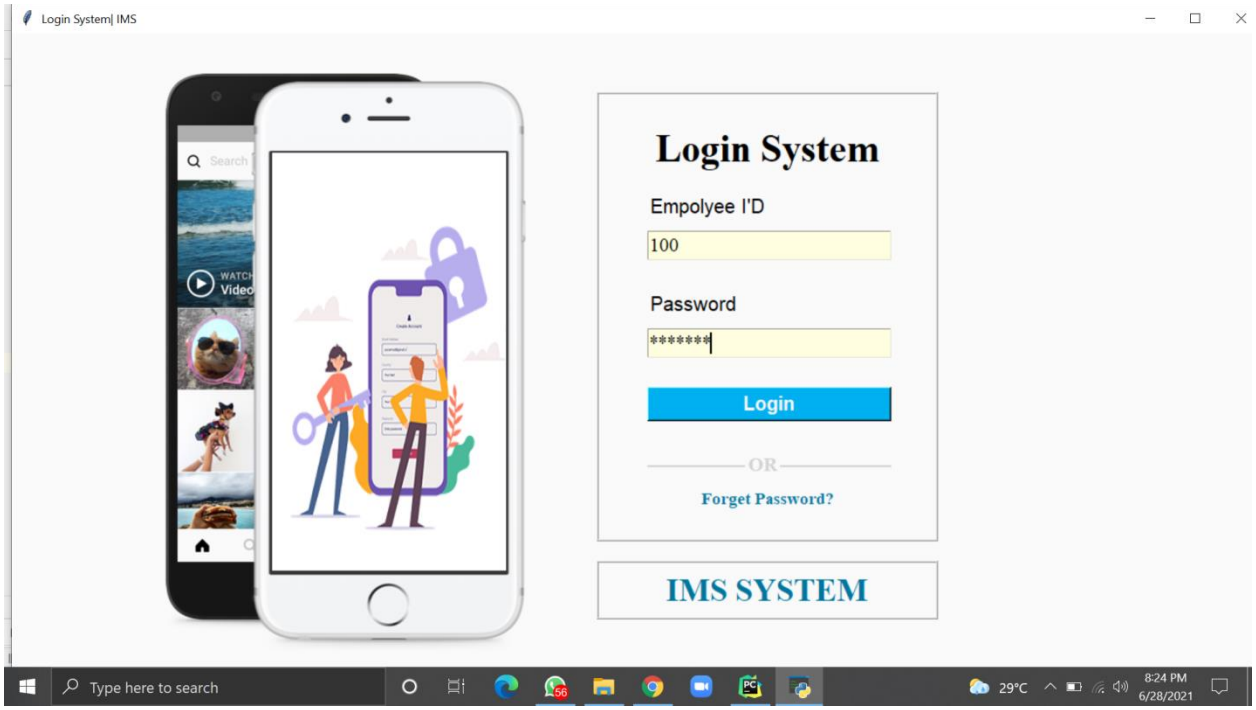

File Edit Database GoTo Script Window Help
Design
Data
SQL
Verify
Analyze
Chart
Vacuum
Log
Settings
TABLES
category
employee
product
supplier
SYSTEM
VIEWS
rowid eid name email gend... cont... dob doj pass... usert...
100 100 Aditya adityaja Male 952281 17/07/ 19/06/ aditya1 Admin
1001 1001 Aman amang Male 883914 19/04/ 09/07/ aman1 Employ
1007 1007 Vivek vivek@ Male 986277 10/03/ 10/03/ vivek12 Admin
1009 1009 sakshi sakshi Female 892635 18/04/ 19/06/ sakshi1 Employ
FILTERS FOR EMPLOYEE
SELECT rowid, * FROM "employee";
4 rows and 12 columns in 0.088 seconds


File Edit Database GoTo Script Window Help
Design
Data
SQL
Verify
Analyze
Chart
Vacuum
Log
Settings
TABLES
category
employee
product
supplier
SYSTEM
VIEWS
rowid pid Category Supplier name price qty status
1 1 laptop vishal jain Asus 40000 29 Active
3 3 laptop Aditya Jain Asus 40000 29 Active
4 4 laptop vishal jain Asus 40000 29 Active
5 5 juice Aditya Jain Fruti 40 29 Active
FILTERS FOR PRODUCT
SELECT rowid, * FROM "product";
4 rows and 8 columns in 0.103 seconds

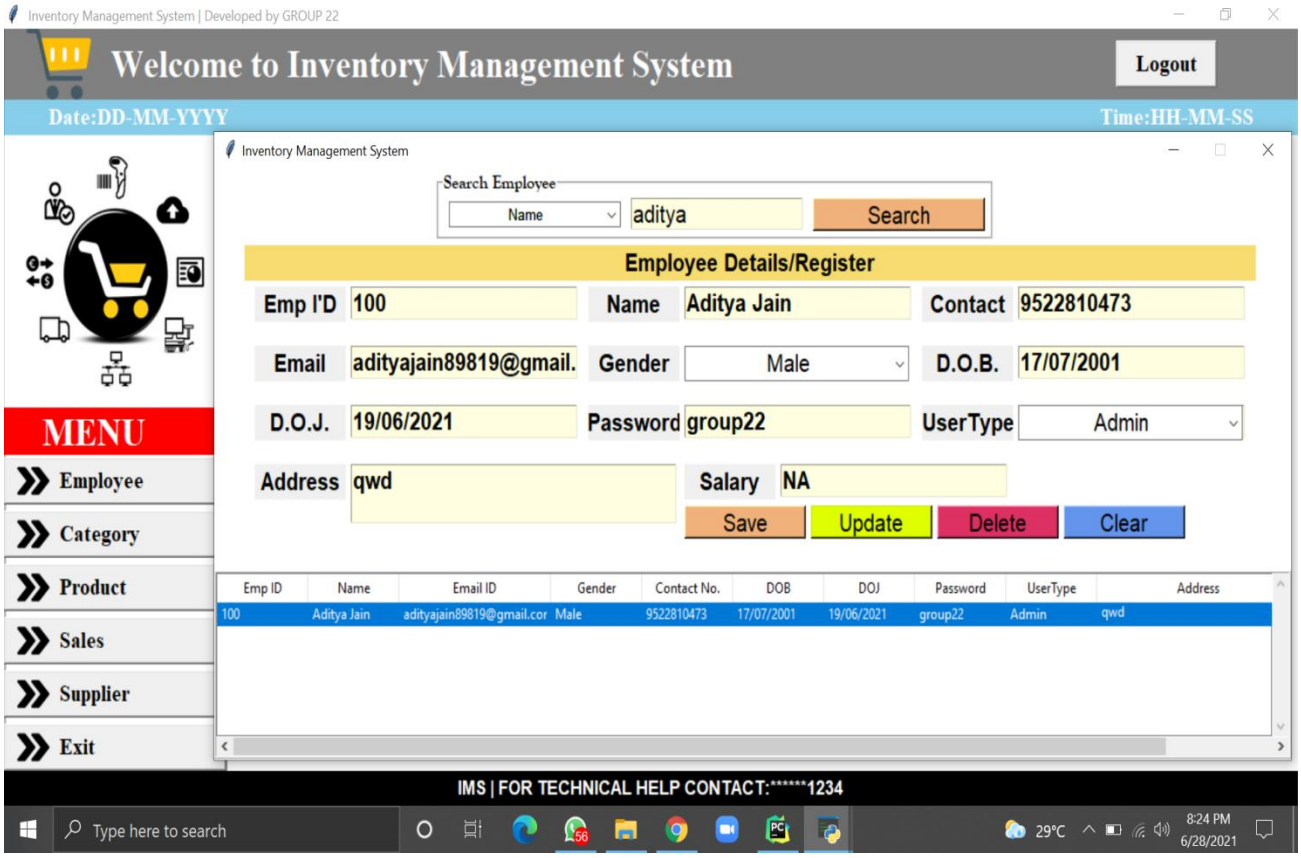

File Edit Database GoTo Script Window Help
Design
Data
SQL
Verify
Analyze
Chart
Vacuum
Log
Settings
TABLES
category
employee
product
supplier
SYSTEM
VIEWS
rowid
invoice
name
contact
discription
4
4
Aditya Jain
987329
Asdifu
100
100
vishal jain
9755257682
ytddvcghx
FILTERS FOR SUPPLIER
SELECT rowid, * FROM "supplier";
2 rows and 5 columns in 0.117 seconds

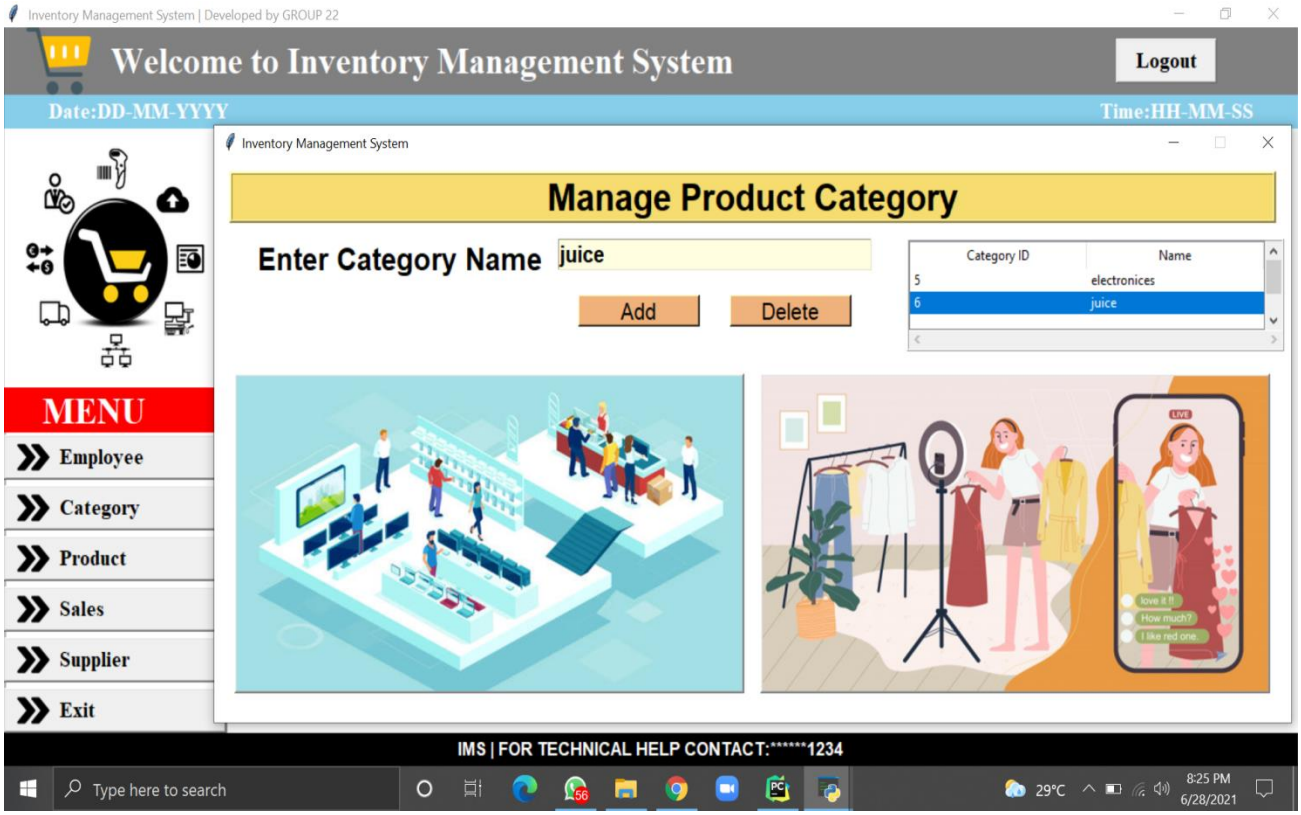
PROJECT SCREEN SHOT

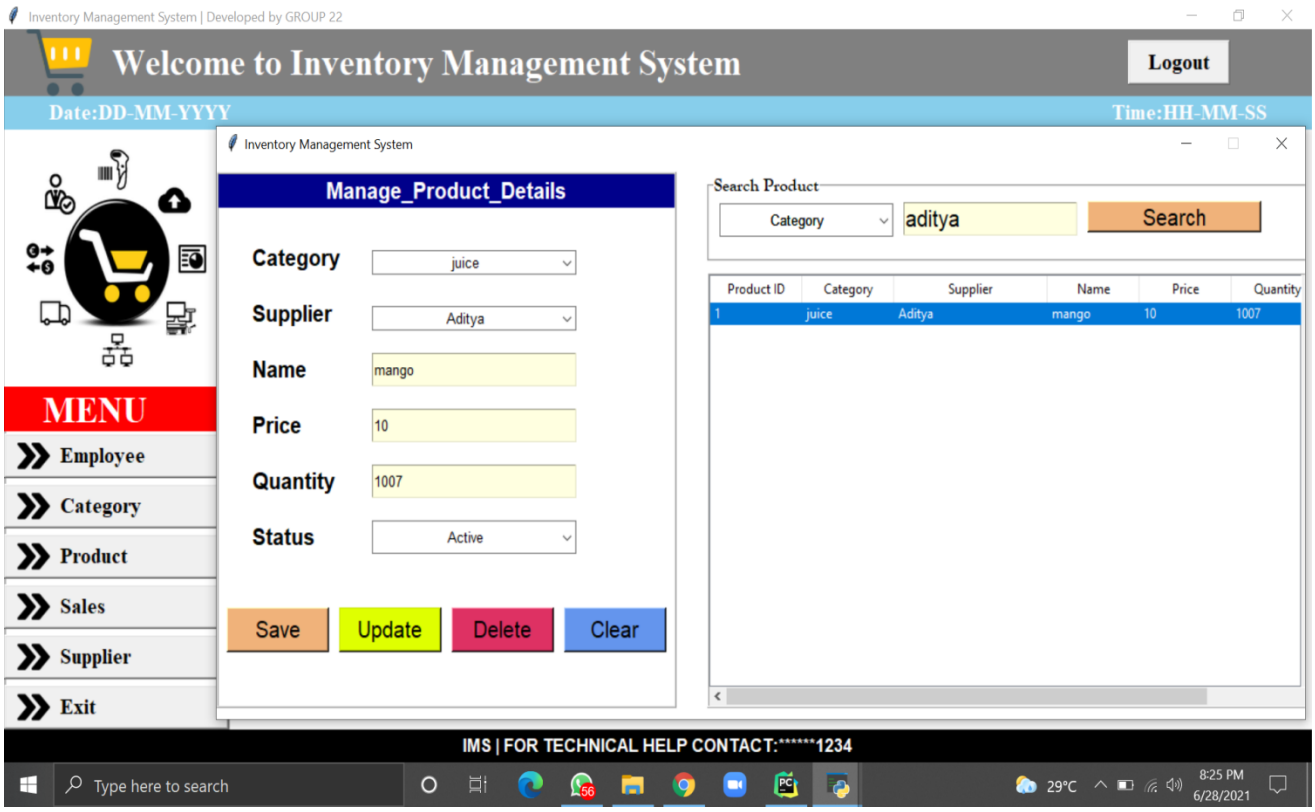


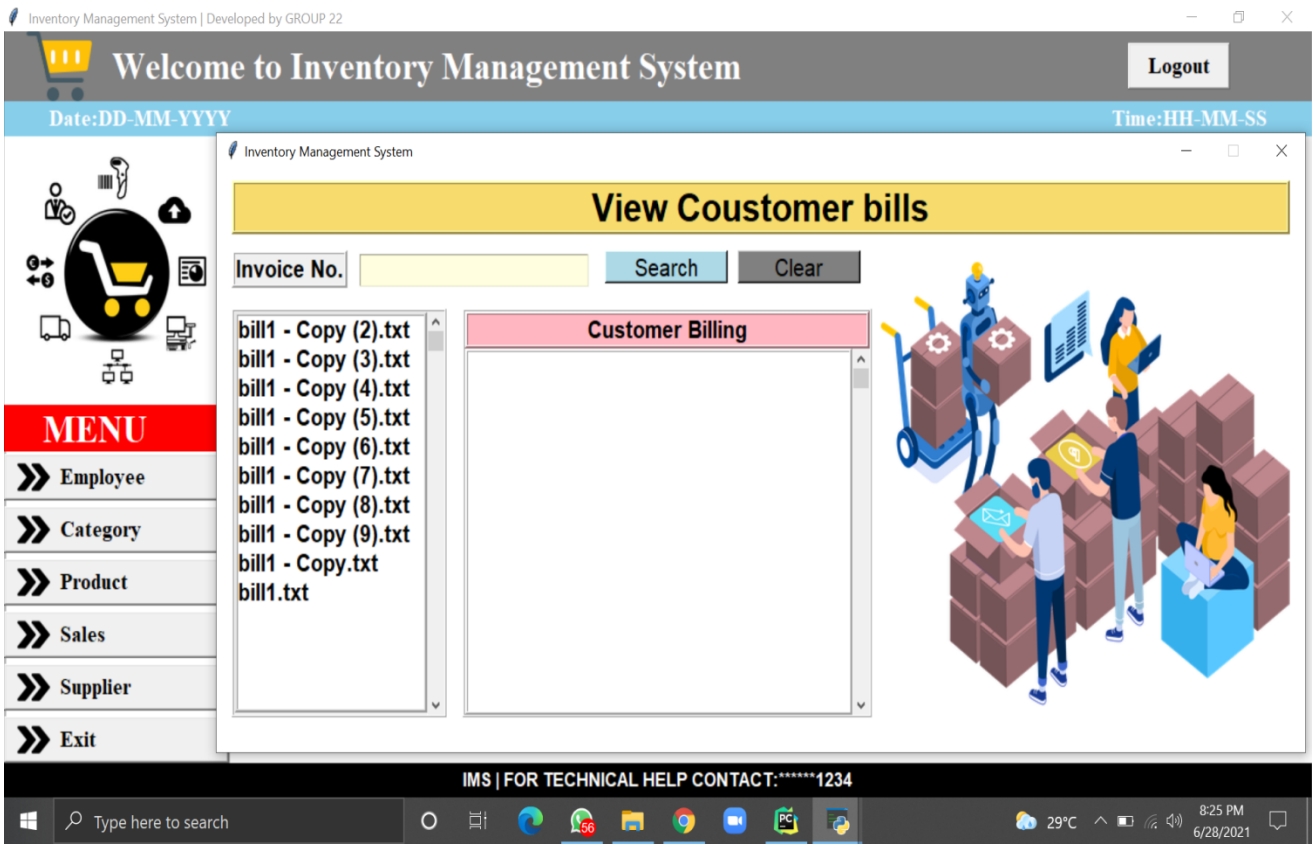


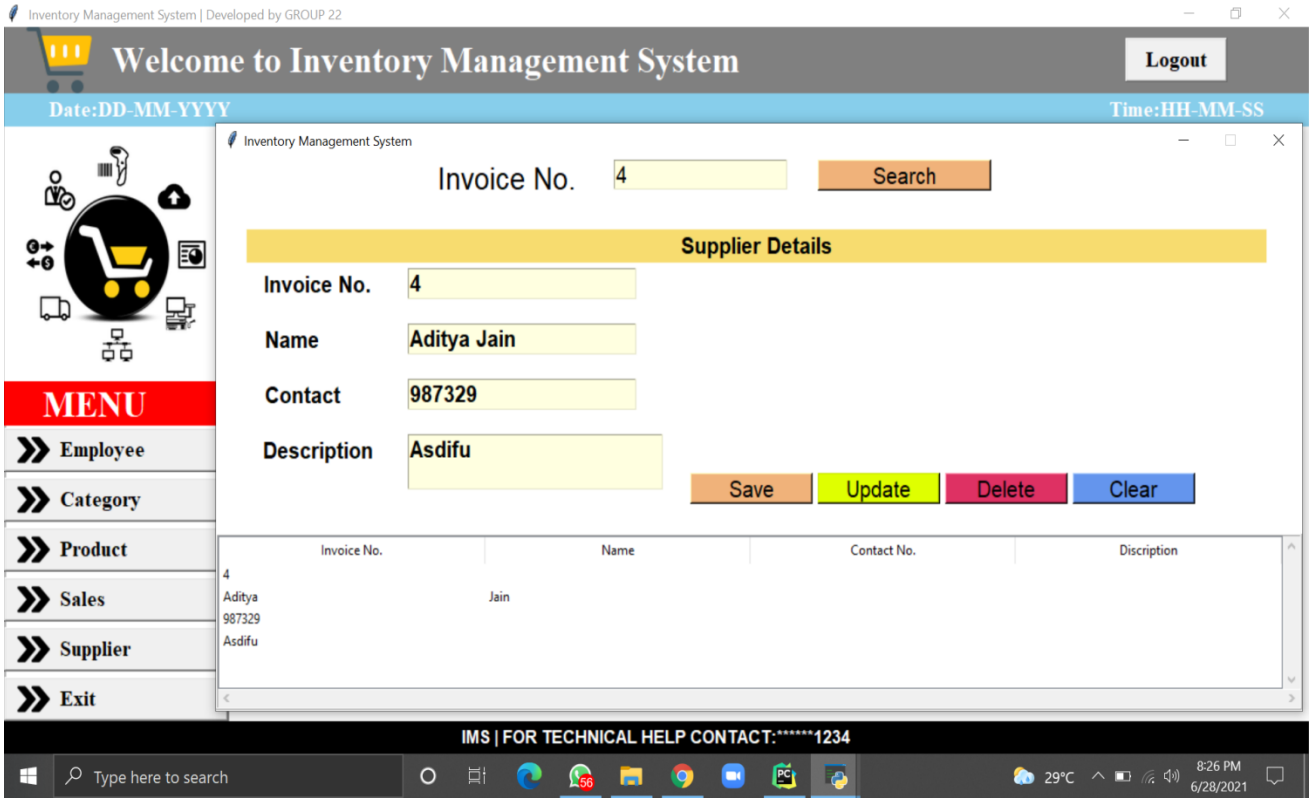

Inventory Management System | Developed by GROUP 22
Welcome to Inventory Management System
Logout
Inventory management system
DATE:04-07-2021
TIME:11:26:54
Total Employee [5]
Total category [5]
Total Product [4]
Total Sales [1]
Total Supplier [2]
MENU
Employee
Category
Product
Sales
Supplier
Exit
IMS | FOR TECHNICAL HELP CONTACT:******1234
Type here to search
33°C
11:26 AM
7/4/2021

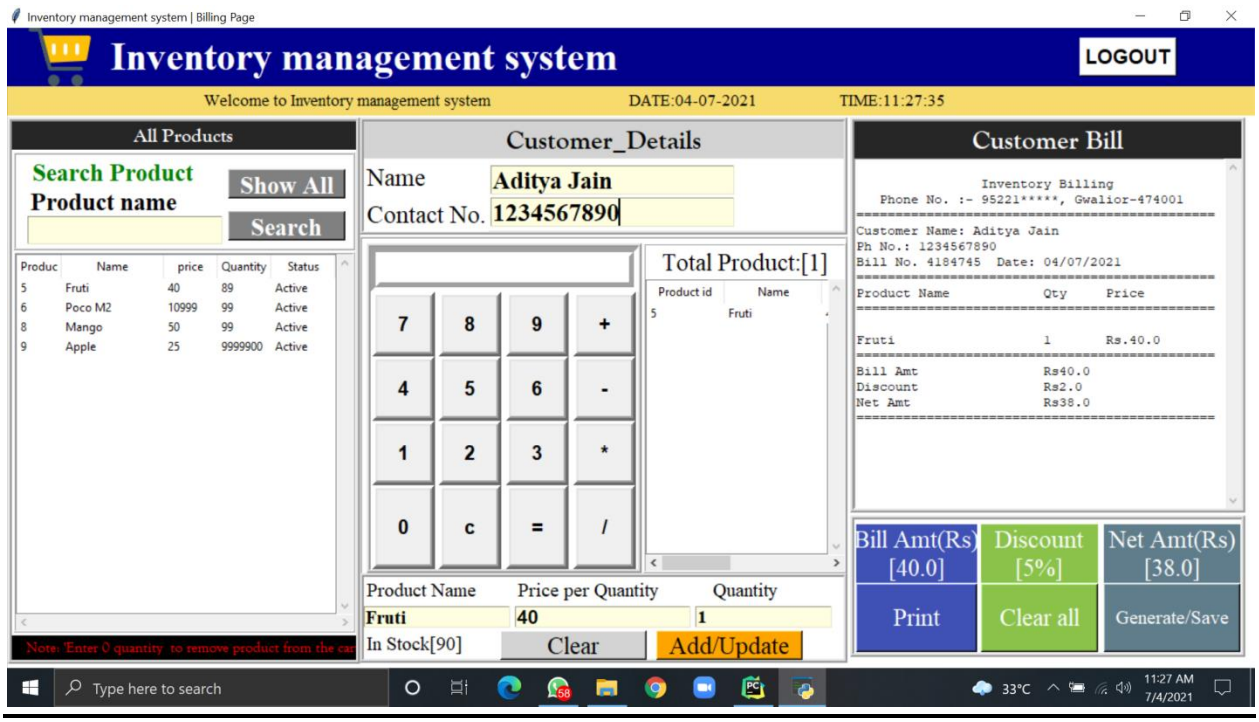

Inventory Management System | Developed by GROUP 22
Welcome to Inventory Management System
Logout
Date:DD-MM-YYYY
Time:HH-MM-SS
Inventory Management System
Search Employee
Name
aditya
Search
Employee Details/Register
Emp I'D
100
Name
Aditya Jain
Contact
9522810473
Email
adityajain89819@gmail.
Gender
Male
D.O.B.
17/07/2001
D.O.J.
19/06/2021
Password
group22
UserType
Admin
Address
qwd
Salary
NA
Save
Update
Delete
Clear
Emp ID
Name
Email ID
Gender
Contact No.
DOB
DOJ
Password
UserType
Address
100
Aditya Jain
adityajain89819@gmail.cor
Male
9522810473
17/07/2001
19/06/2021
group22
Admin
qwd
MENU
Employee
Category
Product
Sales
Supplier
Exit
IMS | FOR TECHNICAL HELP CONTACT:******1234
Type here to search
29°C
8:24 PM
6/28/2021


Inventory Management System | Developed by GROUP 22
Welcome to Inventory Management System
Logout
Date:DD-MM-YYYY
Time:HH-MM-SS
Inventory Management System
Manage Product Category
Enter Category Name
juice
Add
Delete
Category ID
Name
5
electronices
6
juice
MENU
Employee
Category
Product
Sales
Supplier
Exit
IMS | FOR TECHNICAL HELP CONTACT:******1234
Type here to search
29°C
8:25 PM
6/28/2021

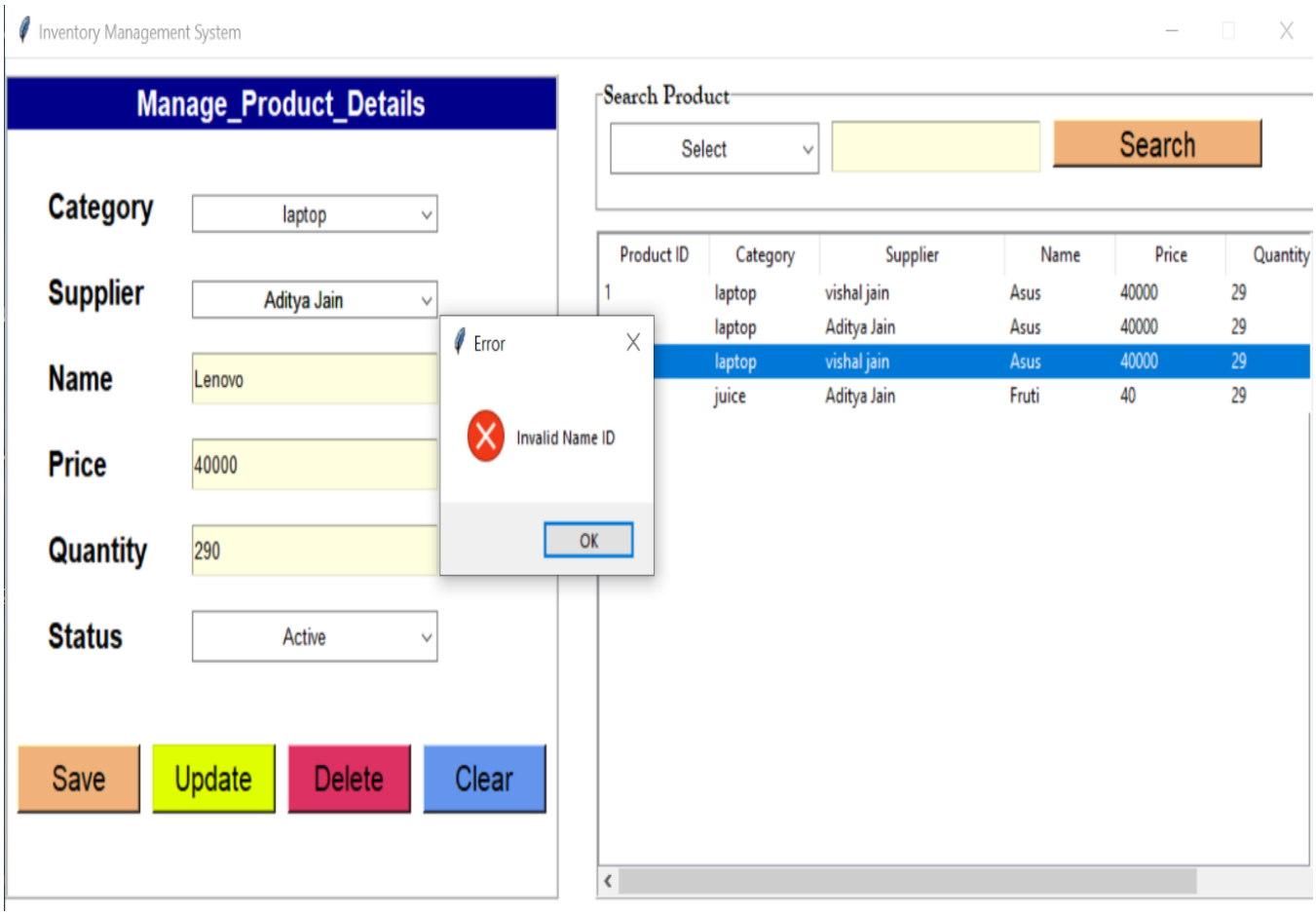

Inventory Management System | Developed by GROUP 22
Welcome to Inventory Management System
Logout
Date:DD-MM-YYYY
Time:HH-MM-SS
Inventory Management System
Manage_Product_Details
Category
juice
Supplier
Aditya
Name
mango
Price
10
Quantity
1007
Status
Active
Save
Update
Delete
Clear
Search Product
Category
aditya
Search
Product ID
Category
Supplier
Name
Price
Quantity
1
juice
Aditya
mango
10
1007
MENU
Employee
Category
Product
Sales
Supplier
Exit
IMS | FOR TECHNICAL HELP CONTACT:******1234
Type here to search
29°C
8:25 PM
6/28/2021


Inventory Management System | Developed by GROUP 22
Welcome to Inventory Management System
Logout
Date:DD-MM-YYYY
Time:HH-MM-SS
Inventory Management System
View Coustomer bills
Invoice No.
Search
Clear
bill1 - Copy (2).txt
bill1 - Copy (3).txt
bill1 - Copy (4).txt
bill1 - Copy (5).txt
bill1 - Copy (6).txt
bill1 - Copy (7).txt
bill1 - Copy (8).txt
bill1 - Copy (9).txt
bill1 - Copy.txt
bill1.txt
Customer Billing
MENU
Employee
Category
Product
Sales
Supplier
Exit
IMS | FOR TECHNICAL HELP CONTACT:******1234
Type here to search
29°C
8:25 PM
6/28/2021


Inventory Management System | Developed by GROUP 22
Welcome to Inventory Management System
Logout
Date:DD-MM-YYYY
Time:HH-MM-SS
Inventory Management System
Invoice No.
4
Search
Supplier Details
Invoice No.
4
Name
Aditya Jain
Contact
987329
Description
Asdifu
Save
Update
Delete
Clear
Invoice No.
Name
Contact No.
Discription
4
Aditya
Jain
987329
Asdifu
MENU
Employee
Category
Product
Sales
Supplier
Exit
IMS | FOR TECHNICAL HELP CONTACT:******1234
Type here to search
29°C
8:26 PM
6/28/2021


Inventory management system | Billing Page
Inventory management system
LOGOUT
Welcome to Inventory management system
DATE:04-07-2021
TIME:11:27:35
All Products
Search Product
Product name
Show All
Search
Produc Name price Quantity Status
5 Fruti 40 89 Active
6 Poco M2 10999 99 Active
8 Mango 50 99 Active
9 Apple 25 9999900 Active
Note: 'Enter 0 quantity' to remove product from the cart
Customer_Details
Name Aditya Jain
Contact No. 1234567890
7 8 9 +
4 5 6 -
1 2 3 *
0 c = /
Total Product:[1]
Product id Name
5 Fruti
Product Name Price per Quantity Quantity
Fruti 40 1
In Stock[90]
Clear
Add/Update
Customer Bill
Inventory Billing
Phone No. :- 95221*****, Gwalior-474001
Customer Name: Aditya Jain
Ph No.: 1234567890
Bill No. 4184745 Date: 04/07/2021
Product Name Qty Price
Fruti 1 Rs.40.0
Bill Amt Rs40.0
Discount Rs2.0
Net Amt Rs38.0
Bill Amt(Rs) [40.0]
Discount [5%]
Net Amt(Rs) [38.0]
Print
Clear all
Generate/Save
Type here to search
33°C
11:27 AM
7/4/2021

TESTING


Inventory Management System
Manage_Product_Details
Category
laptop
Supplier
Aditya Jain
Name
Lenovo
Price
40000
Quantity
290
Status
Active
Save
Update
Delete
Clear
Error
Invalid Name ID
OK
Search Product
Select
Search
Product ID
Category
Supplier
Name
Price
Quantity
1
laptop
vishal jain
Asus
40000
29
laptop
Aditya Jain
Asus
40000
29
laptop
vishal jain
Asus
40000
29
juice
Aditya Jain
Fruti
40
29

FUTURE SCOPE

- We can add printer in future.
- We can give more advance software for Inventory Management System including more facilities.
- We will host the platform on online servers to make it accessible worldwide.
- Integrate multiple load balancers to distribute the loads of the system.
- Create the master and slave database structure to reduce the overload of the database queries.
- Implement the backup mechanism for taking backup of codebase and data baseon regular basis on different servers.

REFERENCES:-

Google.

Youtube

W3schools.com