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Sanskruti Shete

Class: XII

SYSTEM REQUIREMENTS

HARDWARE:

- 1) Processor: Pentium (R) G2030@3.70 GHz
- 2) RAM: 6.00 GB
- 3) System Architecture: 64 bit Operating System

SOFTWARE:

- 1) Operating System: Any Operating System (x64 or x86) with Python (Version > 3.2.0) installed will work.
- 2) MS EXCEL

OBJECTIVE OF THE PROJECT

This project is developed in Python platform with MS -EXCEL and Notepad as backend and has been designed to help automate the process of purchasing products, billing and to make the purchased transaction fast with accuracy, to keep and secure the sales records.

It allows the shop owners to keep a track of all products in stock and to organize the products on the basis of the purpose served.

It helps the employee and the owner to easily manage or manipulate the transaction of the business.

In a nutshell, the project is aimed to ease the management of a grocery store, which would turn into a hectic job otherwise.

PROPOSED SYSTEM

All the modules of systems have been automated and efforts have been made to minimize the manual working.

MODULES:-

- **Customer Info**

- 1) Customer id: It is a number which will uniquely identify a specific customer in the records.
- 2) First name: The first name of the customer will be displayed on.
- 3) Last name: The last name will be displayed in the same manner.
- 4) Mobile No: mobile number will be listed.
- 5) Address: Customer's address will be mentioned

- **Employee Info**

- 1) Employee id: It uniquely identifies each employee working with the store.
 - 2) Name
 - 3) Salary
 - 4) Job Title
- _____ All this information related to the employee will be displayed

- **Product Info**

- 1) Product ID: It uniquely identifies each item provided by the store.
- 2) Product Name: It mentions the name of the product.
- 3) Cost: Cost of one unit of product is also made available.
- 4) Stock: It allows to keep a track of the quantity of items available in stock so that they can be made available for provision to the customers.

BENEFITS OF THE PROPOSED SYSTEM

- 1) **Less Paper Work:** The paper work is reduced to minimal level. Computer stores all the records.
- 2) **Reduced Manual Work:** Manual work is reduced to a minimum level. Most of the work is done by the management system.
- 3) **User-friendly Software:** The software is GUI and very convenient to use.
- 4) **Data remains organized:** Data is now stored at one place. Any information regarding anything can be easily available to the user.
- 5) **Time Management:** It will avoid wasting of time just to write all the important information and data of the business transaction and customer.
- 6) **Flexibility:** The system is more flexible than the manual system being used presently.
- 7) **Beneficial:** The system is easy to use and reduces the user's workload a lot. It provides timely and accurate information.

MENU DESIGN

Sr. No	Function	Purpose
1.	Add Customer Details	Allows to add new records of customers and also to keep a track of old records.
2.	Add Product Details	Allows to add details of new product and to keep a track of other products.
3.	Add Employee Details	Allows to add and maintain the details of employees working under the group.
4.	Create Grocery List	Allows the customers to create a personalized list of items to be purchased.
5.	Display Customer, Employee and Product Details	Allows to view all the existent records simultaneously.
6.	Delete Details of customer, employee or product	Allows to delete the records of a specific customer, employee or a product using the uniquely identified ID.
7.	Exit	Allows the user to quit the run once their purpose is served.

SOURCE CODE

```
while True:
    print()
    print("WELCOME TO THE GROCERY STORE")
    print("|| आपका हार्दिक स्वागत है ||")
    print(""" Follow the given instructions:
    Press the respective numbers to carry out the given functions:

    1. Add Customer details
    2. Add Product details
    3. Add Employee details
    4. Create Grocery List
    5. Display all customer details
    6. Display all product details
    7. Display all employee details
    8. Delete customer details
    9. Delete Product details
    10.Delete Employee details
    11. Exit""")

    choice=int(input("Enter your choice: "))
    if choice==1: #Adding Customer Details
        import csv
        customer=open("Customer.csv",'a')
        cuswriter=csv.writer(customer)
        cuswriter.writerow(['Customer Name','Customer ID','Phone Number','Address'])
        count1=int(input("How many customers do you want to add: "))
        for i in range(count1):
            C_name=input("Enter the name of customer: ")
            C_ID=int(input("Enter customer Id: "))
            C_No=int(input("Enter customer's phone number: "))
            C_Address=input("Enter customer address: ")
            rec1=[C_name,C_ID,C_No,C_Address]
            cuswriter.writerow(rec1)
        customer.close()

    if choice==2: #Adding Product Details
        import csv
        product=open("Product.csv",'a')
        prowriter=csv.writer(product)
        prowriter.writerow(['Product Name','Product ID','Product Cost','Stock'])
        count2=int(input("How many products do you want to add: "))
        for i in range(count2):
            P_name=input("Enter name of the product: ")
            P_ID=int(input("Enter product code: "))
            P_cost=float(input("Enter cost of 1 unit of product: "))
            P_stock=int(input("Enter the stock of the product: "))
            rec2=[P_name,P_ID,P_cost,P_stock]
            prowriter.writerow(rec2)
        product.close()
```



```

if choice==3:  #Adding Employee Details
    import csv
    employee=open("Employee.csv",'a')
    empwriter=csv.writer(employee)
    empwriter.writerow(['Employee Name','ID','Age','Post','Monthly Salary'])
    count3=int(input("How many employees do you want to add: "))
    for i in range(count3):
        E_name=input("Enter name of the employee: ")
        E_ID=int(input("Enter Employee ID: "))
        E_age=int(input("Enter age of the employee: "))
        E_post=input("Enter the post of the employee: ")
        E_salary=int(input("Enter monthly salary of the employee: "))
        rec3=[E_name,E_ID,E_age,E_post,E_salary]
        empwriter.writerow(rec3)
    employee.close()

if choice==4:  #Making Grocery List
    grocery_list=open("Grocery List.txt",'w')
    print("Enter * to stop adding items to the list and complete the list")
    while True:
        item=input("Enter the item to be added: ")
        rec4=item+'\n'
        grocery_list.write(rec4)
        if item=='*':
            break
    grocery_list.close()

if choice==5:  #Display data of all customers
    import csv
    with open("Customer.csv",'r') as f1:
        creader=csv.reader(f1)
        for rec in creader:
            print(rec)

if choice==6:  #Display data of all products
    import csv
    with open("Product.csv",'r') as f2:
        preader=csv.reader(f2)
        for rec in preader:
            print(rec)

```

```

if choice==7:    #Display data of all employees
    import csv
    with open("Employee.csv",'r') as f3:
        ereader=csv.reader(f3)
        for rec in ereader:
            print(rec)

if choice==8:    #Deleting customer details
    import csv
    lines = list()
    members= input("Please enter a customer's ID to be deleted.")
    with open('Customer.csv', 'r') as readFile:
        reader = csv.reader(readFile)
        for row in reader:
            lines.append(row)
            for field in row:
                if field == members:
                    lines.remove(row)
    with open('Customer.csv', 'w') as writeFile:
        writer = csv.writer(writeFile)
        writer.writerows(lines)

if choice==9:    #Deleting product details
    import csv
    lines=list()
    members=input("Please enter a product's ID to be deleted: ")
    with open('Product.csv','r') as readFile:
        reader=csv.reader(readFile)
        for row in reader:
            lines.append(row)
            for field in row:
                if field==members:
                    lines.remove(row)
    with open("Product.csv",'w') as writeFile:
        writer=csv.writer(writeFile)
        writer.writerows(lines)

```

```

if choice==10: #Deleting employee details
    import csv
    lines=list()
    members=input("Please enter a product's ID to be deleted: ")
    with open('Employee.csv','r') as readFile:
        reader=csv.reader(readFile)
        for row in reader:
            lines.append(row)
            for field in row:
                if field==members:
                    lines.remove(row)
    with open("Employee.csv",'w') as writeFile:
        writer=csv.writer(writeFile)
        writer.writerows(lines)

if choice==11: #Terminating the loop
    break

```

OUTPUT

WELCOME PAGE:

```
WELCOME TO THE GROCERY STORE
|| आपका हार्दिक स्वागत है ||
Follow the given instructions:
    Press the respective numbers to carry out the given functions:

    1. Add Customer details
    2. Add Product details
    3. Add Employee details
    4. Create Grocery List
    5. Display all customer details
    6. Display all product details
    7. Display all employee details
    8. Delete customer details
    9. Delete Product details
    10.Delete Employee details
    11. Exit
Enter your choice: |
```

1) ADD CUSTOMER DETAILS:

```
Enter your choice: 1
How many customers do you want to add: 2
Enter the name of customer: A
Enter customer Id: 1
Enter customer's phone number: 87567453
Enter customer address: DSFVHDSFVHDM
Enter the name of customer: B
Enter customer Id: 2
Enter customer's phone number: 234554656
Enter customer address: FDFVGXVBGF
```

Customer Name	Customer ID	Phone Number	Address
A	1	87567453	DSFVHDSFVHDM
B	2	234554656	FDFVGXVBGF

2) ADD PRODUCT DETAILS:

Enter your choice: 2
 How many products do you want to add: 2
 Enter name of the product: A
 Enter product code: 1
 Enter cost of 1 unit of product: 23
 Enter the stock of the product: 55
 Enter name of the product: B
 Enter product code: 2
 Enter cost of 1 unit of product: 44
 Enter the stock of the product: 34

	A	B	C	D	E
1					
2	Product Name	Product ID	Product Cost	Stock	
3					
4	A	1	23	55	
5					
6	B	2	44	34	
7					

3) ADD EMPLOYEE DETAILS:

Enter your choice: 3
 How many employees do you want to add: 2
 Enter name of the employee: A
 Enter Employee ID: 1
 Enter age of the employee: 22
 Enter the post of the employee: Cashier
 Enter monthly salary of the employee: 4500
 Enter name of the employee: B
 Enter Employee ID: 2
 Enter age of the employee: 33
 Enter the post of the employee: Manager
 Enter monthly salary of the employee: 30000

	A	B	C	D	E	F
1						
2	Employee ID	Age	Post	Monthly Salary		
3						
4	A	1	22 Cashier	4500		
5						
6	B	2	33 Manager	30000		
7						

4) CREATE GROCERY LIST:

Enter your choice: 4
 Enter * to stop adding items to the list and complete the list
 Enter the item to be added: Dettol
 Enter the item to be added: Oil
 Enter the item to be added: Rice
 Enter the item to be added: Shampoo
 Enter the item to be added: Pepsi
 Enter the item to be added: *

Grocery List - Notepad
 File Edit Format View Help
 Dettol
 Oil
 Rice
 Shampoo
 Pepsi
 *

5) DISPLAY ALL CUSTOMER DETAILS:

```
Enter your choice: 5
[]
['Customer Name', 'Customer ID', 'Phone Number', 'Address']
[]
['pramila', '123', '987', 'qwer']
[]
['sansu', '45', '455', 'err']
[]
['stu', '6', '56', 'rt']
[]
['Customer Name', 'Customer ID', 'Phone Number', 'Address']
[]
['A', '1', '87567453', 'DSFVHDSFVHDM']
[]
['B', '2', '234554656', 'FDVFGXVBGF']
[]
```

6) DISPLAY ALL PRODUCT DETAILS:

```
Enter your choice: 6
[]
['Product Name', 'Product ID', 'Product Cost', 'Stock']
[]
['A', '1', '23.0', '55']
[]
['B', '2', '44.0', '34']
[]
```

7) DISPLAY ALL EMPLOYEE DETAILS:

```
Enter your choice: 7
[]
['Employee Name', 'ID', 'Age', 'Post', 'Monthly Salary']
[]
['A', '1', '22', 'Cashier', '4500']
[]
['B', '2', '33', 'Manager', '30000']
[]
```

8) DELETE CUSTOMER DETAILS:

Enter your choice: 8

Please enter a customer's ID to be deleted: 2

15				
16				
17	Customer	Customer ID	Phone Number	Address
18				
19				
20				
21	A	1	87567453	DSFVHDSFVHDM
22				

9) DELETE PRODUCT DETAILS:

Enter your choice: 9

Please enter a product's ID to be deleted: 2

2				
3	Product Name	Product ID	Product Cost	Stock
4				
5				
6				
7	A	1	23	55
8				

10) DELETE EMPLOYEE DETAILS:

Enter your choice: 10

Please enter a product's ID to be deleted: 2

	A	B	C	D	E
1					
2					
3	Employee Name	ID	Age	Post	Monthly Salary
4					
5					
6					
7	A	1	22	Cashier	4500
8					

CONCLUSION

We can perform any operation like adding new data into the respective files, deleting specific data from the records, creating a grocery list and even display all the data at once.

All these features create a convenient work atmosphere and thus decrease the workload on an individual. It even offers a safe and reliable platform with the least source of error.

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