

Shop Management System

1. Problem Statement

The conventional shop/store management methods include hectic, tedious and time-consuming manual calculation/operation which is a heavy task for the Shop manager. Main features of Shop/Store Management are Inventory, Employee leave Records and Shopping History.

So, we have to design the Shop Management System which reduces the workload of Shop Manager and also helps him to manage the entire Shop more effectively and efficiently by shifting it to a digital and secured platform.

And it would be much better if we can include some user-friendly functionalities like Wish List which are popular on online shopping.

This software will enable the shop manager to manage the entire shop in an efficient and organized manner by providing functionalities such as- Inventory Management(Add/Remove/Update Items), check Shopping History, approve/reject Leave requests, Add new Employee, etc.

This software provides many features to employees and customers as well. Employees can sell items, update profile and also apply for leave using this. It also reduces workload of customers in remembering which items to buy by the help of Wishlist feature and also helps in managing their monthly shopping history. The customer can check product availability and shopping history at home with the help of this software.

This software can be accessed by Employee, Customer, Admin(Shop Owner) and also it will store Customer/Employee profiles which can also be updated.

2. Tasks Done

Shop Manager/Admin:

- Create account
- Account Login
- Inventory
- Add Employee
- Add/Remove/Update Item.
- Approve/Reject Leave
- Shopping History
- Feedback

Shop Employee:

- Update Profile
- Sell Items
- Account Login
- Apply for leave

Customer:

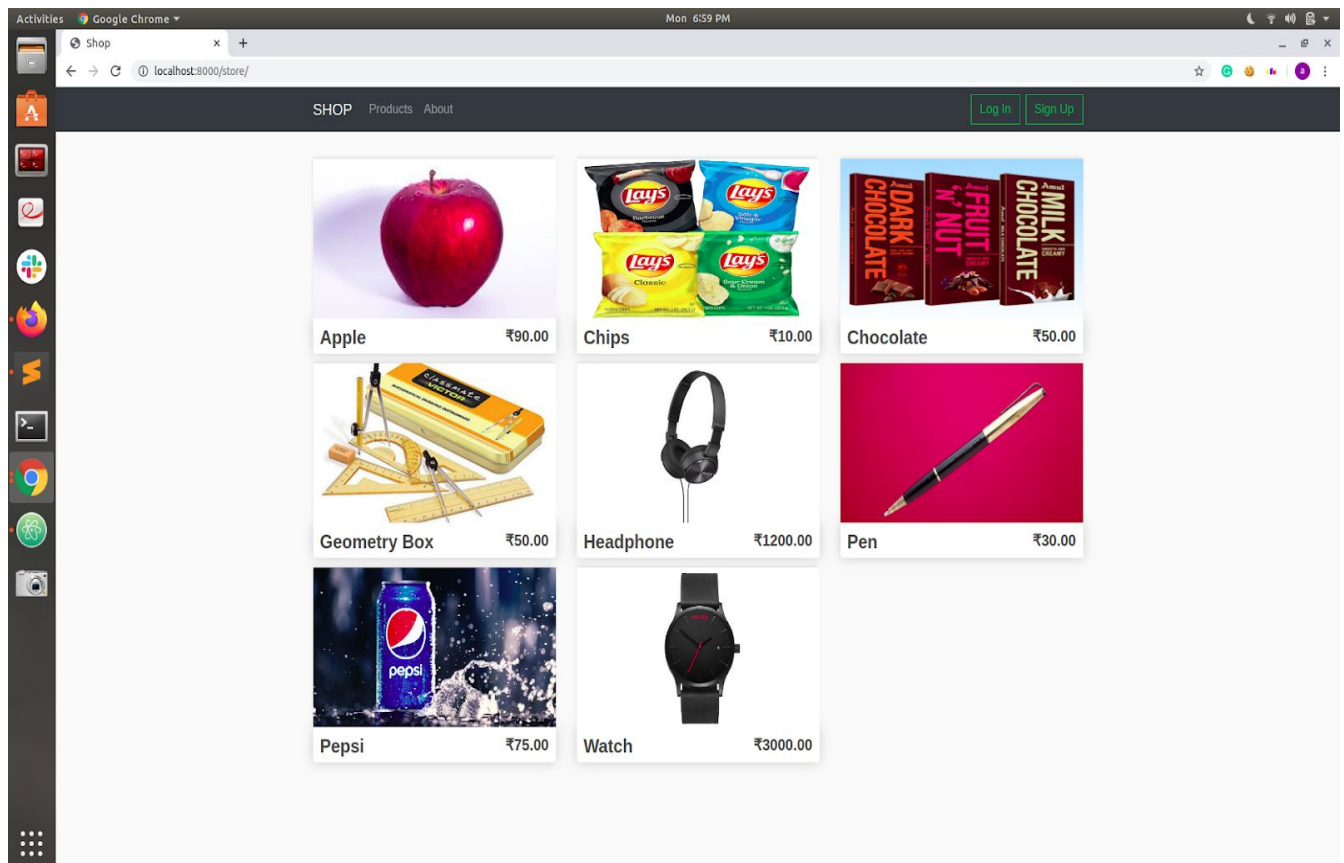
- Create Account
- Account Login
- Update Profile
- Product Detail/availability
- Check Shopping History
- Wish list

*Employee cannot create account because Shop Owner(admin) can only add new Employees to its shop.

3. Descriptions

I. FRONT-END

Homepage



Default Navbar



- Employee cannot sign up or create account because only admin can add employees to the shop.

Customer's Signup

When you click signup you will be redirected to customer Signup

[SHOP](#) [Products](#) [About](#) [Log In](#) [Sign Up](#)

Customer's Signup

Profile Info

Username*

Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.

Email*

Password*

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation*

Enter the same password as before, for verification.

Name*

Age*

City

Login Page

On clicking login button

[SHOP](#) [Products](#) [About](#) [Log In](#) [Sign Up](#)

Log In

Username*

Password*


Don't Have an Account? [Register](#)

Customer

(logged in as Customer)


Homepage

[SHOP](#) [Products](#) [History](#) [About](#) Wishlist **cus1** ▼




Apple

[Add to Wishlist](#) **₹90.00**




Chips

[Add to Wishlist](#) **₹10.00**




Chocolate

[Add to Wishlist](#) **₹50.00**




Geometry Box

[Add to Wishlist](#) **₹50.00**





Headphone

[Add to Wishlist](#) **₹1200.00**



Pen

[Add to Wishlist](#) **₹30.00**



Customer can add items to their wishlist by clicking on Add to Wishlist button.

Navbar

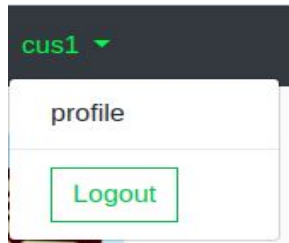
[SHOP](#) [Products](#) [History](#) [About](#) Wishlist **cus1** ▼

Here History denotes customer shopping History

Products: Available product list with price


Wishlist: Items which customer wants to buy

cus1 is the username of customer by clicking on this:-



Profile

here we can update our profile.



vijay

johncenha3210@gmail.com

[Edit Profile](#)

Profile Info

Username*

Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.

Email*

Image*

Currently: [profile_pics/download_st9Wm7m.jpeg](#)

Change:










Choose file

No file chosen

Update

Wishlist

By Clicking on Wishlist in Navbar.

← Continue Shopping				
Back				
	Item	Price	Quantity	Total
	Watch	₹3000.00	2  	₹6000.00
	Headphone	₹1200.00	1  	₹1200.00
	Apple	₹90.00	1  	₹90.00

Shopping History



By clicking on History in Navbar

Shopping History:

ID	Name	Email	Date & Time	Total (₹)
12	vijay	johncentha3210@gmail.com	May 25, 2020, 2:05 p.m.	1290.00
4	vijay	johncentha3210@gmail.com	May 24, 2020, 6:53 a.m.	50.00

Customers can see [order details](#) by clicking on order id.

Shopping History :

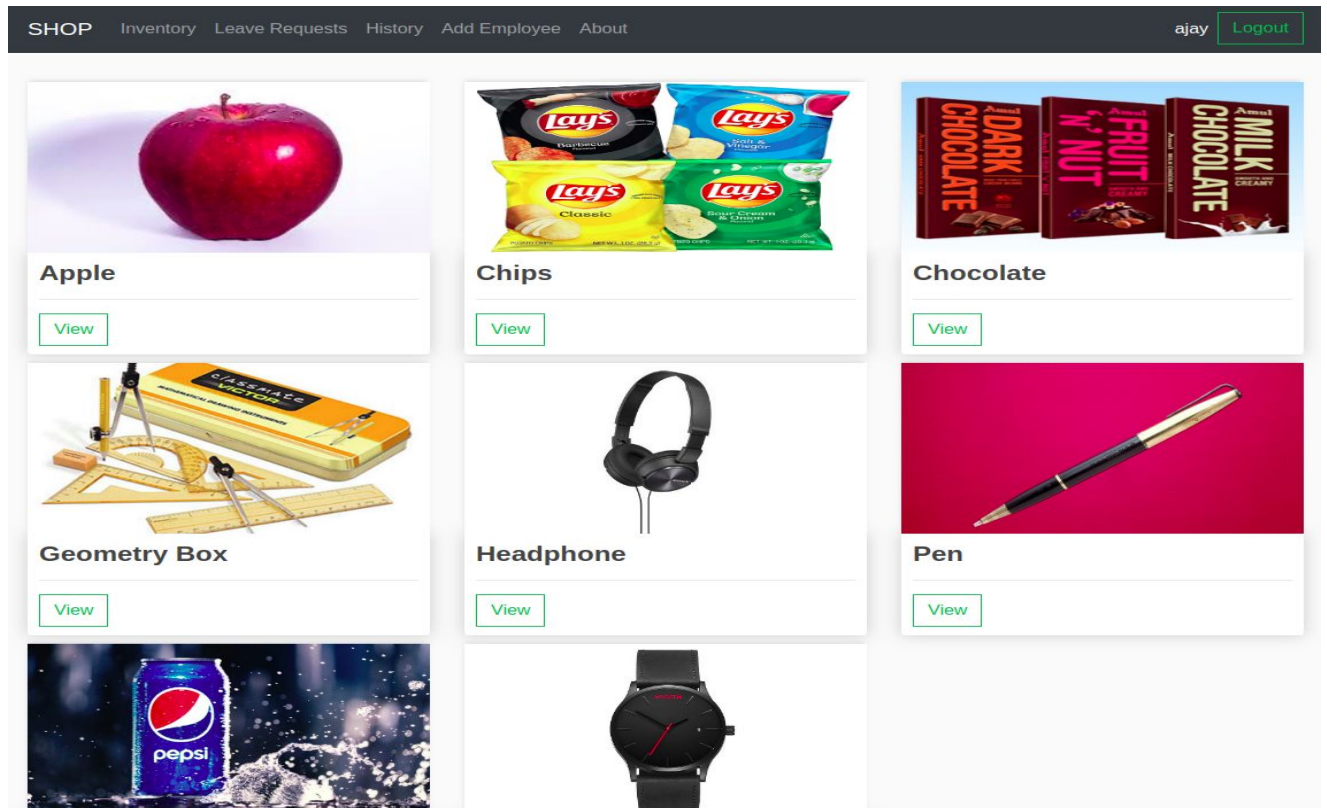
	product : Apple quantity : 1 price : 90.00	90.00
	product : Headphone quantity : 1 price : 1200.00	1200.00
		Total : 1290.00

Shop Owner(Admin)

(Default Admin username:ajay password: ajay)

Homepage

(logged in as admin)



Admin can see item details by clicking on view button

Navbar



Inventory: item list will be shown with details

Leave Request: Approve/Reject leave requests

History: Purchase History can seen

Add Employee: to recruit new employee

Inventory


SHOP Inventory Leave Requests History Add Employee About				ajay Logout
All products				
Name	Description	Stock	Price (₹)	
Apple	healthy and tasty	123	90.00	
Chips	potato chips	120	10.00	
Chocolate	Tasty	150	50.00	
Geometry Box	contains-scale,eraser,compass,etc	30	50.00	
Headphone	nice sound quality, remove noise.	12	1200.00	
Pen	to write something	230	30.00	
Pepsi	Beverage	70	75.00	
Watch	Time is precious	12	3000.00	
Create new Product				

Admin can add new items by clicking on Create new Product button.
and view item details by clicking on item name.

Item Details

SHOP Inventory Leave Requests History Add Employee About

ajay [Logout](#)



Name	Watch
Description	Time is precious
Quantity	12
Price (₹)	3000.00

[Edit Product](#)

[Delete Product](#)

[Back](#)

Add Item

SHOP

Inventory

Leave Requests

History

Add Employee

About

ajay

Logout

Name*

Orange

Description*

Price*

Image

Choose file

No file chosen

Stock*

0

Submit

Cancel

Leave Requests

Here we can approve or reject leave request and also write comment.

SHOP

Inventory

Leave Requests

History


Add Employee

About

ajay

Logout

Leave Requests :




Employee : ajay kumar

Date & Time : 28 may 10am-2pm

comments : okay

Status : approved

Edit Comments




Employee : ajay kumar

Date & Time : 5 june

comments : not possible

Status : rejected

Edit Comments



Employee : Vishwas

Date & Time : 3 june

comments :

Status : pending

Approve Reject

Edit Comments

Purchase History

we can check shopping records of all customers here.

SHOP Inventory Leave Requests History Add Employee About					ajay Logout
Purchase History:					
ID	Name	Email	Date & Time	Total (₹)	
13	Naman	namanjain@gmail.com	May 25, 2020, 2:17 p.m.	3075.00	
12	vijay	johncenha3210@gmail.com	May 25, 2020, 2:05 p.m.	1290.00	
4	vijay	johncenha3210@gmail.com	May 24, 2020, 6:53 a.m.	50.00	

Add Employee

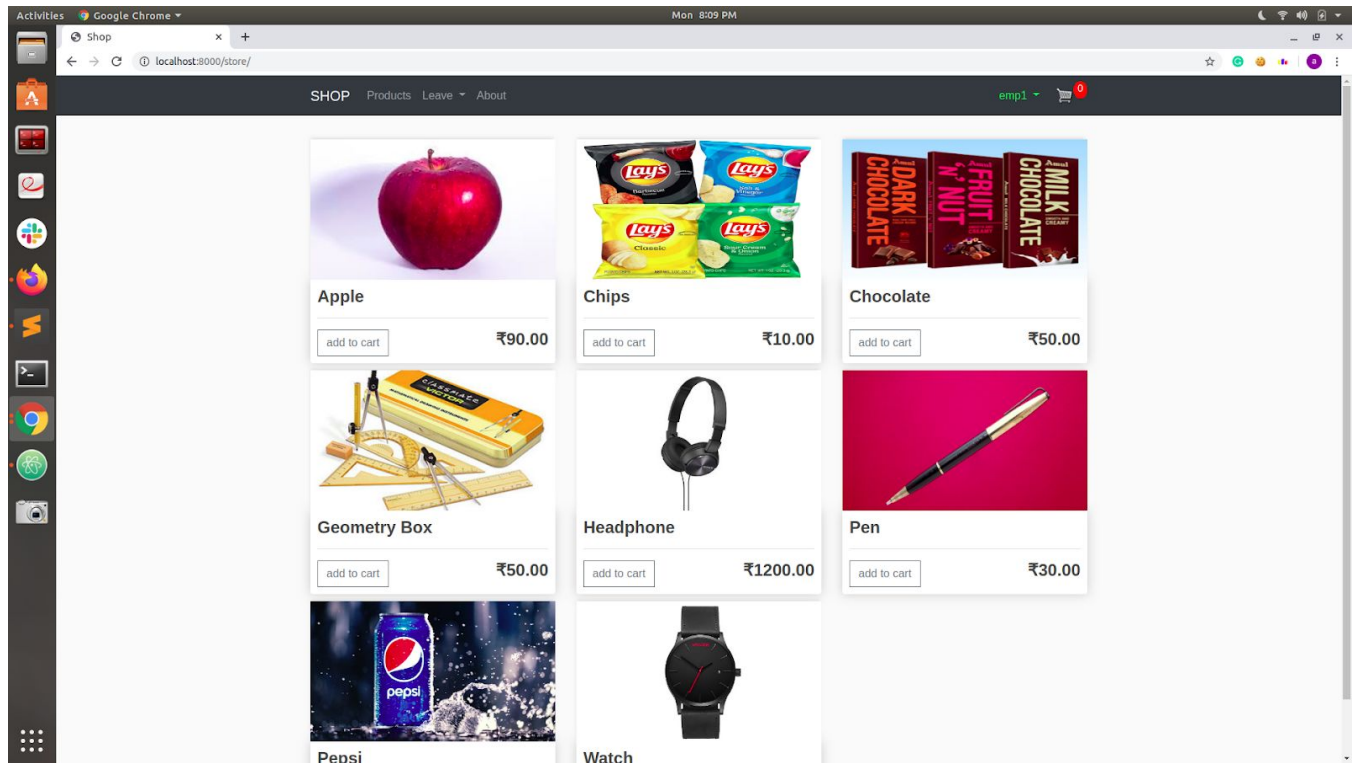
Add a new employee for the shop.

SHOP Inventory Leave Requests History Add Employee About		ajay Logout
<h3>Employee's Signup</h3>		
Profile Info		
Username*		
<input type="text" value="ajay"/>		
<small>Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.</small>		
Email*		
<input type="text"/>		
Password*		
<input type="password" value="...."/>		
<ul style="list-style-type: none">• Your password can't be too similar to your other personal information.• Your password must contain at least 8 characters.• Your password can't be a commonly used password.• Your password can't be entirely numeric.		
Password confirmation*		
<input type="text"/>		
<small>Enter the same password as before, for verification.</small>		
Name*		
<input type="text"/>		
Phone		
<input type="text"/>	ext. <input type="text"/>	
<small>Contact phone number</small>		
Age*		
<input type="text"/>		

Employee

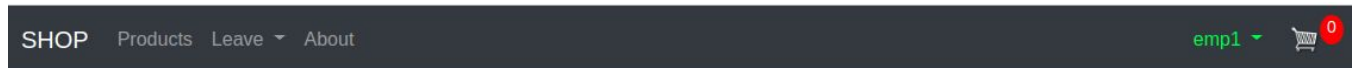
Homepage

(logged in as employee)



Employee can add items to cart by clicking on add to cart button
And anytime visit the cart by clicking on cart-icon(on top-right).

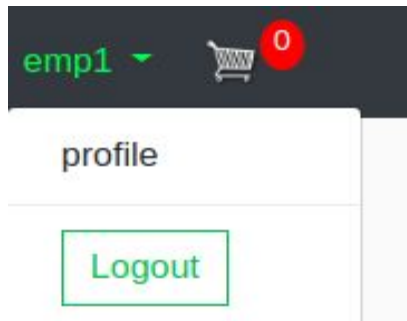
Navbar



Products: to items list(same as homepage)
Leave: apply for leave or check leave status
Update profile by clicking on username then profile button
Cart-icon can be seen at rightmost of navbar.

Profile

(same as customer)

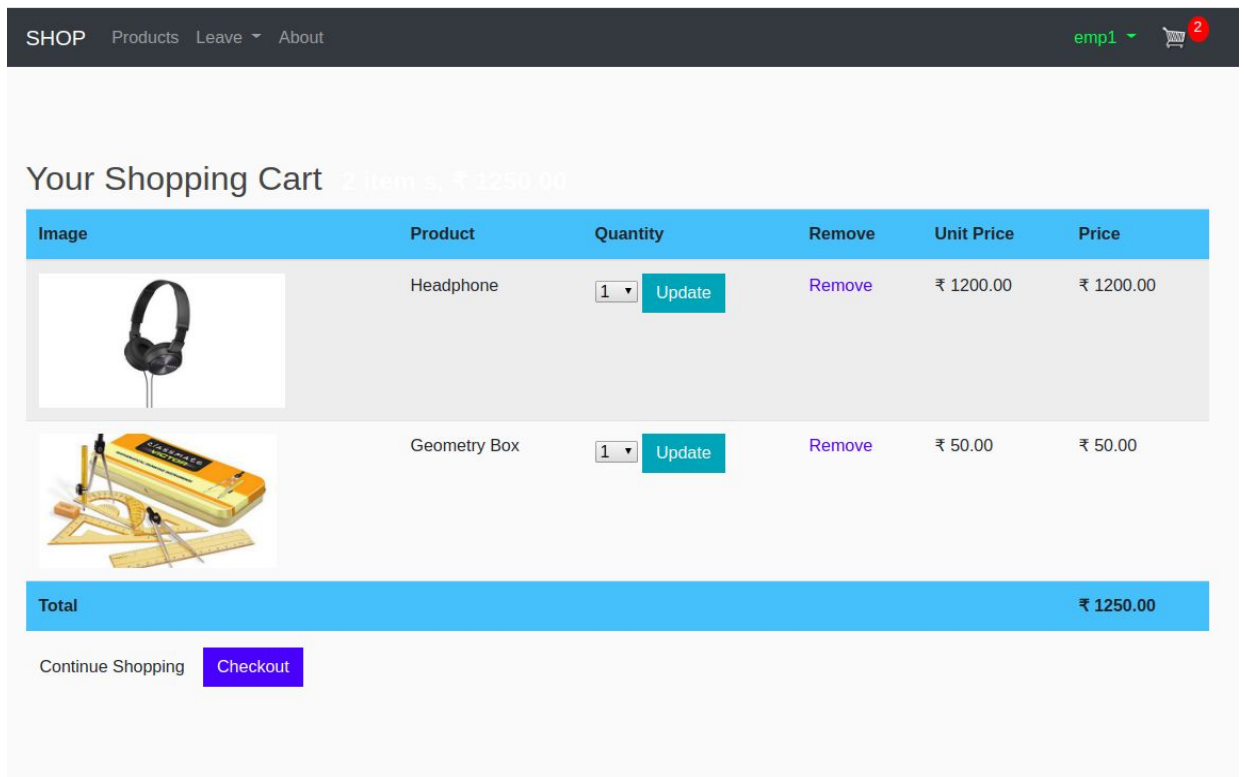


Sell Items

After adding items to the cart that the customer wants to buy just click on cart-icon.

1. Cart

Here we can add or remove items from cart and also check total price.



2. Checkout

Here the employee will fill customer details after asking him.

SHOPProductsLeave>About

emp1

2

Checkout

Cust*

Guest

Name*

komal kalyan

Email*

City*

Submit order

Your Order

1x Headphone ₹. 1200.00

1x Geometry Box ₹. 50.00

Total Cost: ₹. 1250.00

3. Thank You

SHOPProductsLeave>About

emp1

0

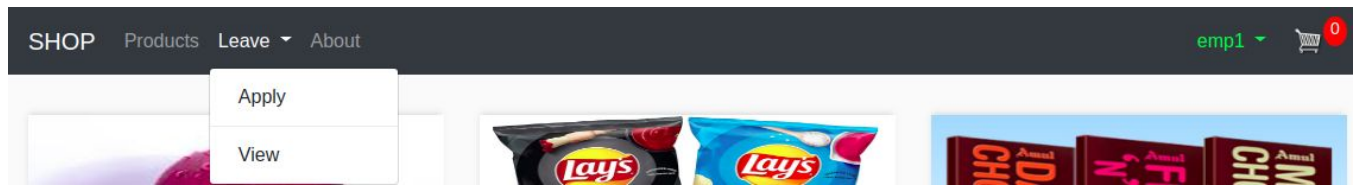
Thank You For Shopping With Us

Your order has been successfully completed. Your order number is 14.

store

Leave

On clicking leave button in navbar two options will appear:-



Apply

Here Employee can apply for leave with proper date.

A screenshot of the 'Apply for Leave' form. It features a title 'Apply for Leave' and a label 'Date time*' above a text input field. A 'Submit' button is located below the input field. The form is part of the same application interface as the previous screenshot, with the same navbar and placeholder images.

View

Check previous leave history and leave status.

A screenshot of the 'Leave History' page. The title 'Leave History :' is at the top. Below it, there are two entries, each with a profile picture of a person with long dark hair. The first entry shows 'Employee : ajay kumar', 'Date & Time : 28 may 10am-2pm', 'comments : okay', 'Status : approved', and a 'Cancel' link. The second entry shows 'Employee : ajay kumar', 'Date & Time : 5 june', 'comments : not possible', 'Status : rejected', and a 'Cancel' link. The page is part of the same application interface.

II. DATABASE

Database is implemented using sqlite, a prefeatured database given by django. All models for database are written in accounts/models.py, product_manager/views.py, orders/models.py, leave/model.py & wishlists/models.py

III. BACKEND

Backend is implemented using Python3.6.9 & Django2.2 . All functions are written with proper convention in accounts/views.py, product_manager/views.py, orders/views.py, leave/views.py & wishlists/views.py

In Django different modules are required to develop a system which are known as Apps. This system have 5 apps:-

- 1.accounts
- 2.product_manager
- 3.leave
- 4.cart
- 5.orders
- 6.wishlists

Github link: https://github.com/ajaykumarr123/shop_management

4. Guide to run project

(if some problem/error arises in first 3 steps then you can move directly to step4)

Step 1. Install python virtual environment :

```
python -m pip install --user virtualenv
```

Step 2. Go to the directory where project is saved and create a new virtual environment new_v using the following command:

```
python3 -m venv envv
```

Step 3. Activate the virtual environment(on linux):

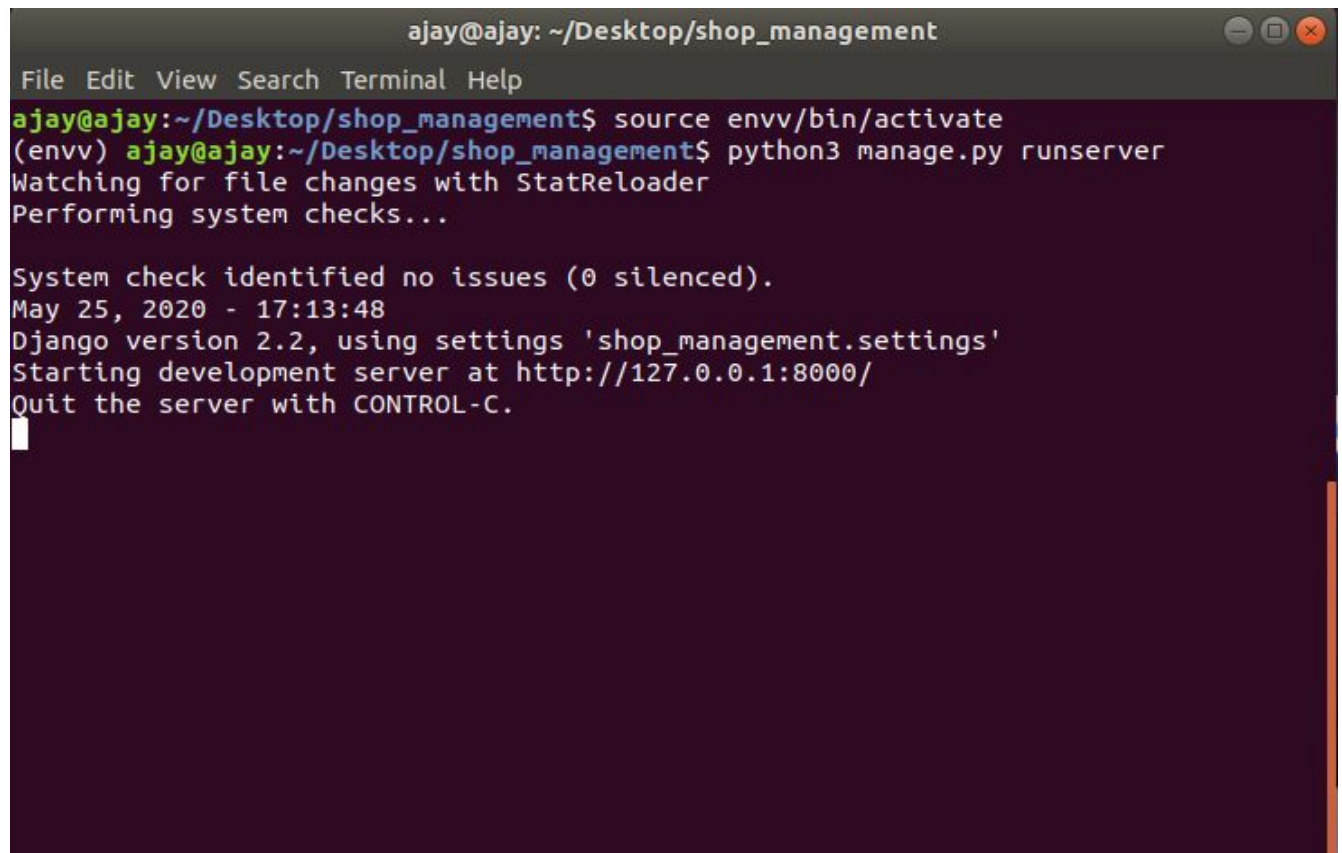
```
source envv/bin/activate
```


Step 4. Install django and its dependencies by these 2 commands:

```
pip3 install Django==2.2 django-autofixture django-extensions django-phone-field  
pip3 install celery==4.4.2 django-crispy-forms image django-rest-framework
```

Step 5. Execute the following command to run the server:

```
Python3 manage.py runserver
```

A screenshot of a terminal window titled 'ajay@ajay: ~/Desktop/shop_management'. The terminal shows the following commands and output:

```
ajay@ajay:~/Desktop/shop_management$ source envv/bin/activate  
(envv) ajay@ajay:~/Desktop/shop_management$ python3 manage.py runserver  
Watching for file changes with StatReloader  
Performing system checks...  
  
System check identified no issues (0 silenced).  
May 25, 2020 - 17:13:48  
Django version 2.2, using settings 'shop_management.settings'  
Starting development server at http://127.0.0.1:8000/  
Quit the server with CONTROL-C.
```

- Now just visit <http://localhost:8000/> in your browser.

5.Further Enhancements:-

- Email verification
- Sending mail to customer after shopping with order id and total price (mostly done)
- Sending mail to Employee after leave approval
- Plot item vs profit
- Managing Employee Salary Record

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