East West University

Department of Computer Science and Engineering
CSE347: Information System Analysis & Design
Section- 1, FALL 2022

Project report

Virtual store System for a Supershop

Submitted To:

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Senior Lecturer,
Department of CSE

Submitted By:

Group No-4

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Date of Submission: 01/ 01 / 2023

Project title: Virtual store system for a supershop

1. Introduction:

Our project is about developing a website that maintains a Virtual store system of a super shop through live interactions. Our aim is to give people a platform where they can have easy shopping through online. It helps to buy easily for people as they can buy their required goods or products without going to shop as well as without difficulties. Our plan is to having some main station of the shop at some places. People have to create account in our online platform. Where they have to give their details as they will order goods and the order will be delivered at their required place within required time. Again, for quick delivery service, there will be some substations of the platform, situated at certain distance from each. This system can also be a cost- efficient way to a marketing. As in our virtual store, we don't need many outlets also therefore we just need delivery men not a group of staffs to run each outlets. Moreover, electricity bill, space rent and staff salary will also reduce. We can have a cost-efficient virtual store system.

However, there will be an admin panel from which everything will be operated. Admin panel will upload a product with details like, category, color, size, material, price, available or not etc. They will always up to date with their availability of the required products. They will also keep the information of the customers and the orders they made. Also they will keep a history of the order which a customer made, cart system, payment system and also provide online tracking system. However a customer can order his required items by first time signing p and afterwards login to his account. He can take required items in the cart also get the idea of the bill amount. After ordering he will also able to keep the order be tracked. Besides, sponsors can promote their goods.

Nevertheless, our main challenge is to do the work according to our plan. So that we can build an efficient system without getting stuck anywhere or without having any lags. Security implementation, concurrent transaction, loading speed, return and refund policy, sustainability and data privacy are also some of the big challenges that we have to overcome. However, any online based virtual shop can get and use the platform. It helps them to do a good business. As the platform will be very user friendly and a perfect system of an online shop.

2. Non-Functional Requirements

Product Requirements:

- **Usability:** This system should be user friendly and easy to use. The system should not seem intimidating to new users. It should be easy enough to use and operate while being pleasing to the eye.
- **Performance & Efficiency:** The performance should be smooth. The website's load time should not be more than one second for users. This can be achieved through proper planning and having clean code.
- **Security & Safety:** The system has to be secured and safe. No one can access to the other personal information. Only the users with the role "site admin" can view the users' and publisher verified information.
- **Dependability:** Clients can depend on this system indubitably. The website should not have complicated methods of doing the same thing in various ways. Rather, having a single and easy way to do it makes it less complicated towards the users thus increasing their dependability.
- **Reliability:** Users can access the system and their needed things 99% of the time without failure.

Organizational Requirements:

- **Environmental:** The system should efficiently the use the hardware and have less impact on the environment. So, the code has to be clean and as simple as possible not only for environmental purposes, but also for the other developers who are working on it.
- **Operational:** This system should work for different types of users.

External Requirements:

- **Regulatory:** The system should be complied with the laws of country. The website should only allow modest products to be uploaded which can be verified using machine learning algorithms in the future if we want to continue developing this.
- **Ethical:** This system should be built in a way that the result does not get biased. To ensure this, we again have to ensure the security as the structure of the website is unbiased otherwise.
- **Accounting:** This system should follow rules of banking and accounting system of the country. There will be also E-currency**,** so there should be no any lack in accounting.

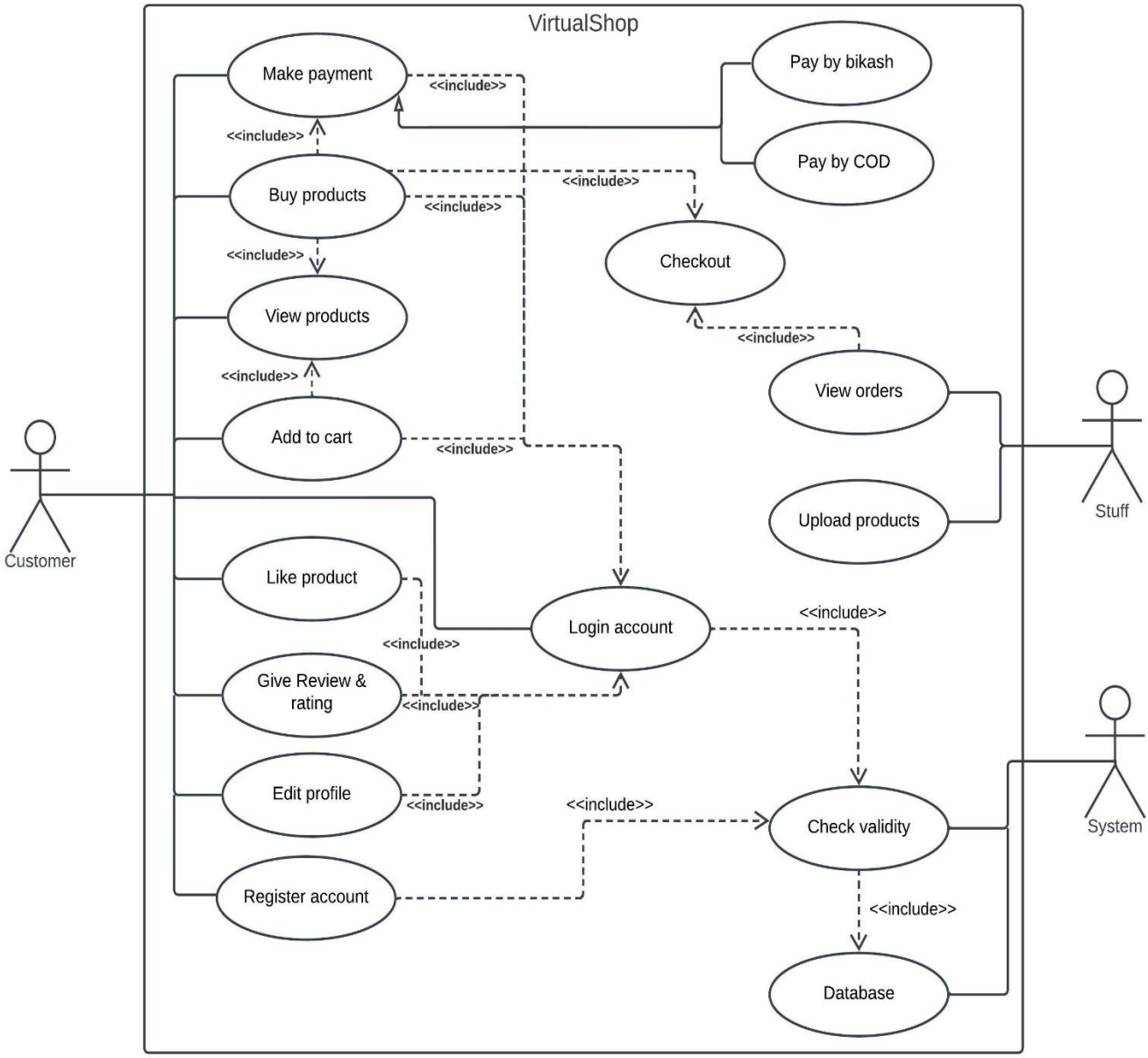
3. Functional Requirements

- User registration page which will take name, Phone no, email, and password as input. This will create a new record in the users table of the database.
- User login page that will take email, password as inputs and check if there exists a user in the database with the entered credentials. This will also check if the credentials are correct or incorrect. From Admin user side for login page there will be an option of admin login which will take email of admin and password as inputs and check if there exist that admin user in the admin user database with the entered credentials. This will check the given credentials are correct or incorrect and give a message if it is incorrect.
- Admin can add products, banner, category, brand and others from administration page
- The system will show banner and top products on the home page.
- There can be variation of a single products based on color, size and price.
- User can see different product list of brand and categories. They can search products using search box.
- Users can filter products based on color, size, brand and price.
- Users can see details and the related products by clicking on a product.
- User can update their profile and add their new address, payment method.
- User can add products by Add to Cart, able to delete them and save cart item order in database.
- User can order products from the Cart page.
- User can add review, give ratings and add desire products in their wish list.
- User can see the previous order from history.
- User can checkout and able to payment by mobile financial system like Paypal.

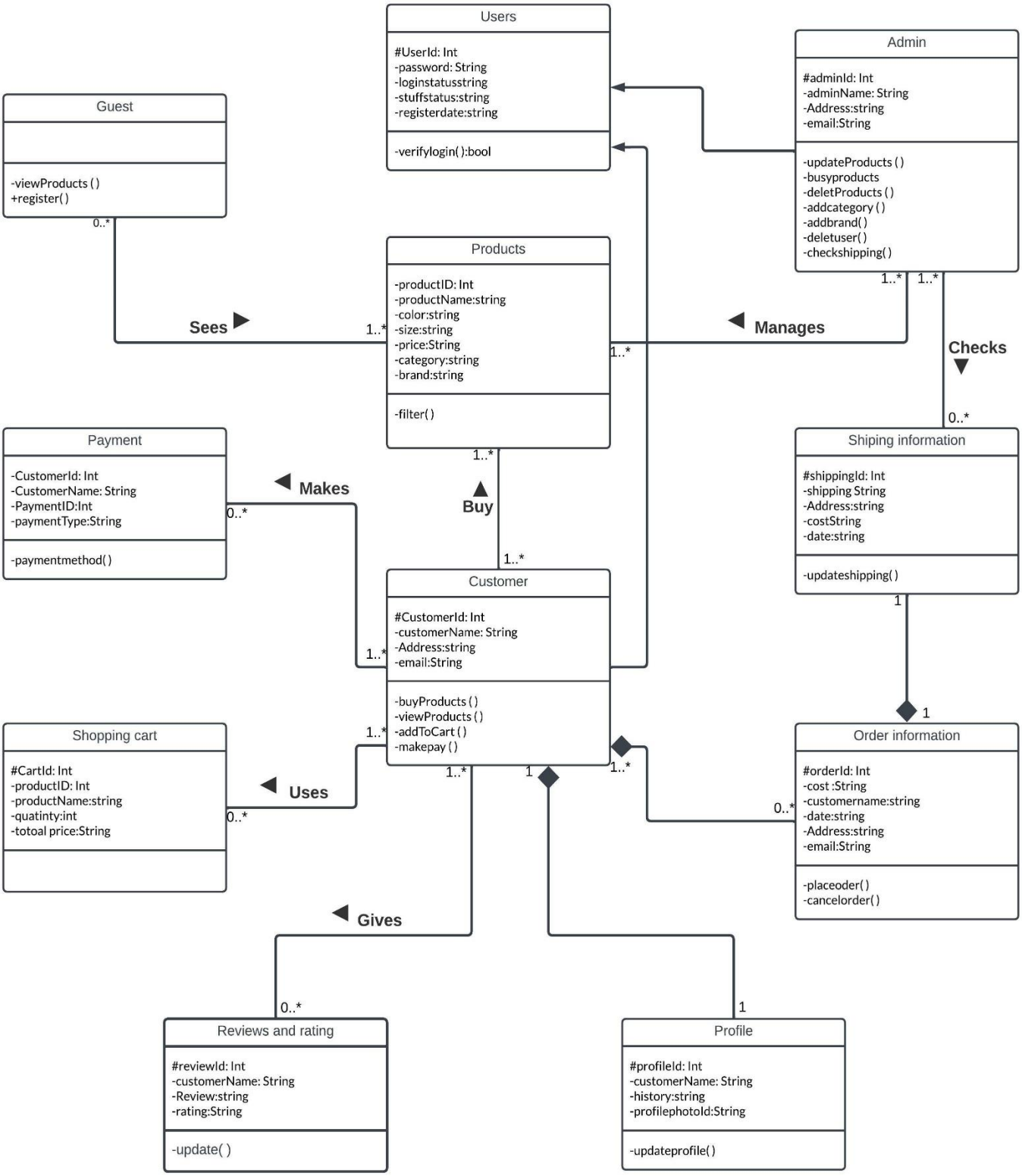
4. Technologies:

- **Programming language:** Python, JavaScript
- **Database**: Sqlite3
- **Others:** HTML, CSS and Django framework

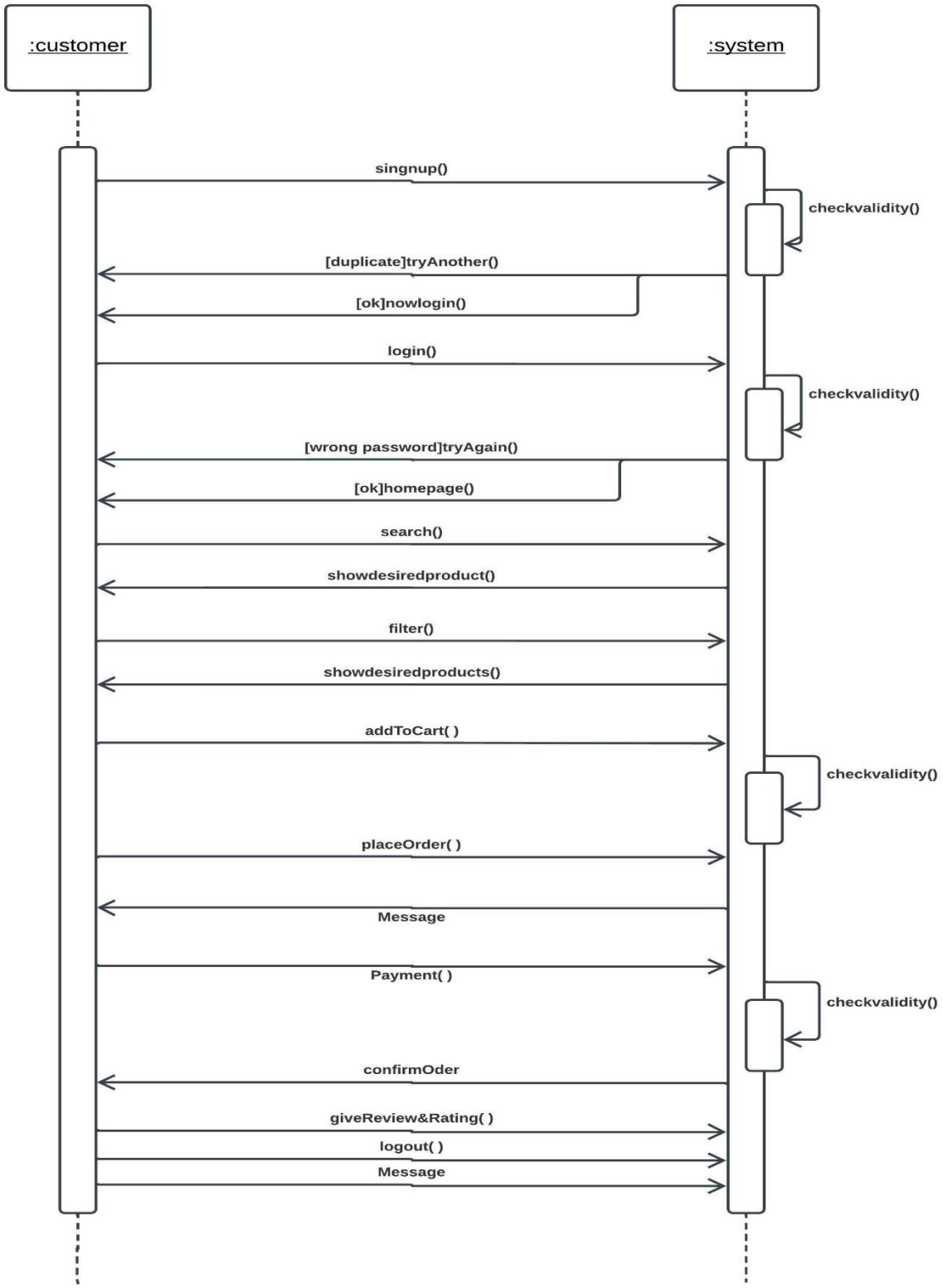
5. Use case diagram:



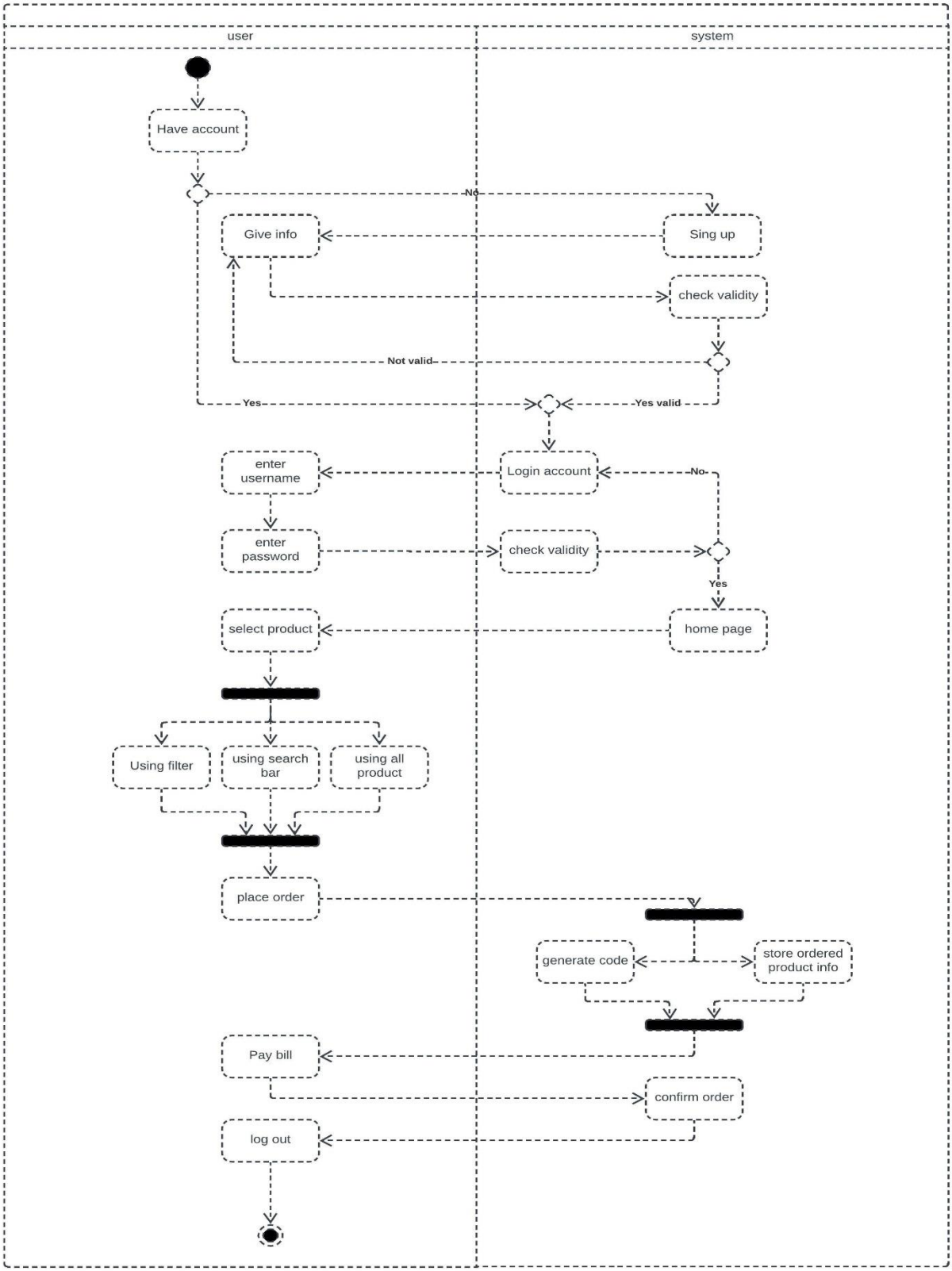
6. Class diagram:



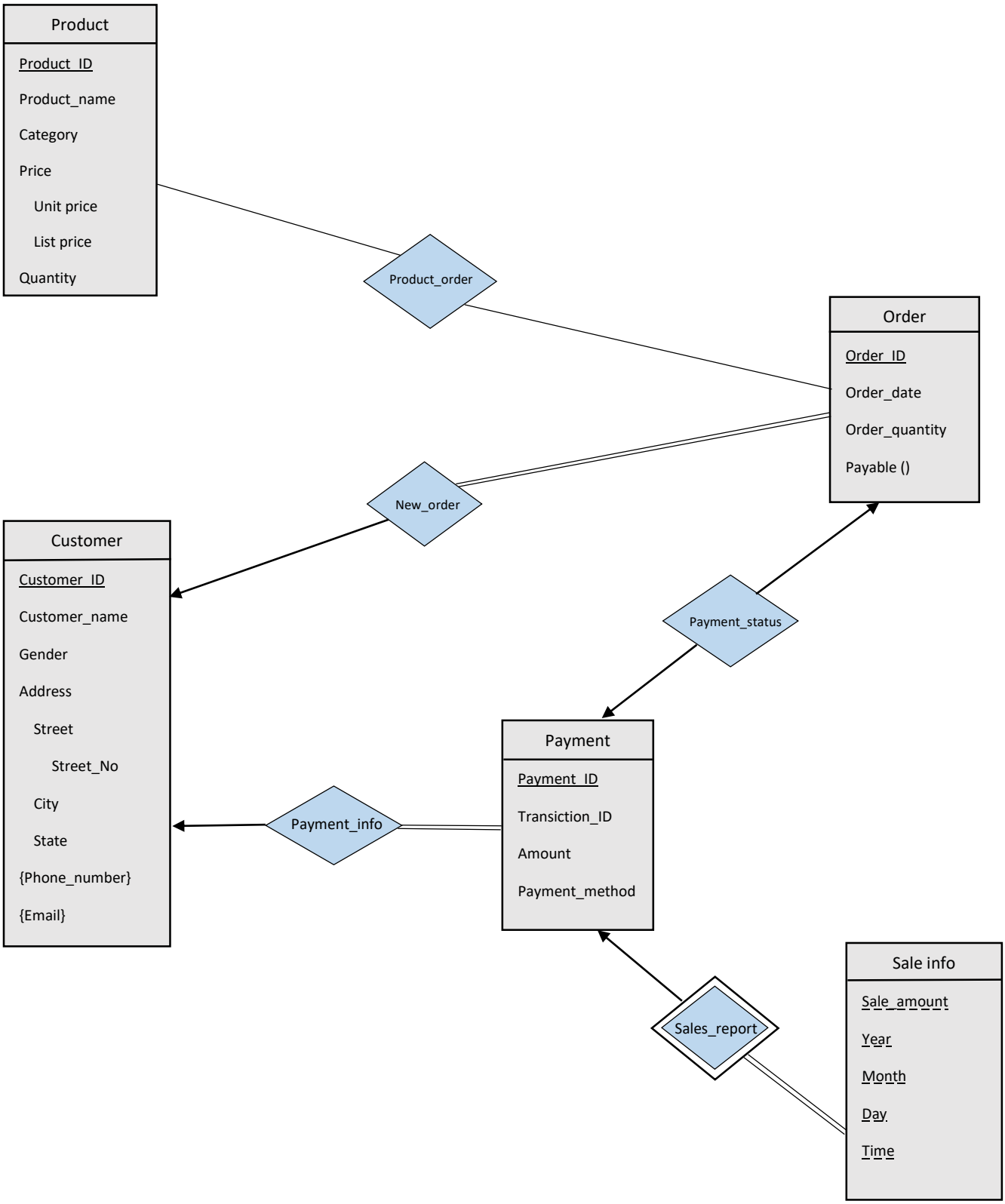
7. Sequence diagram:



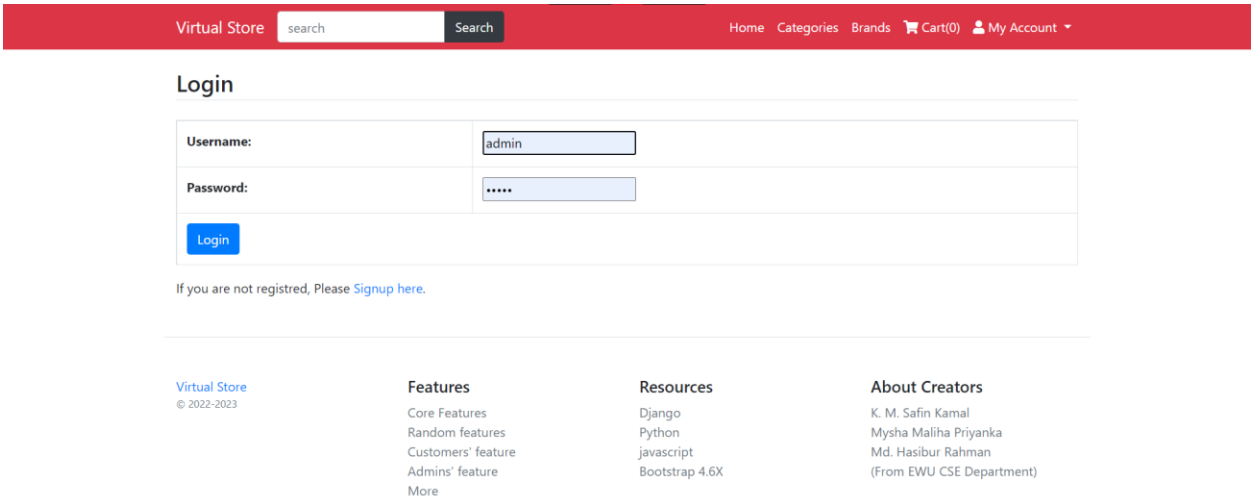
8. Activity diagram:

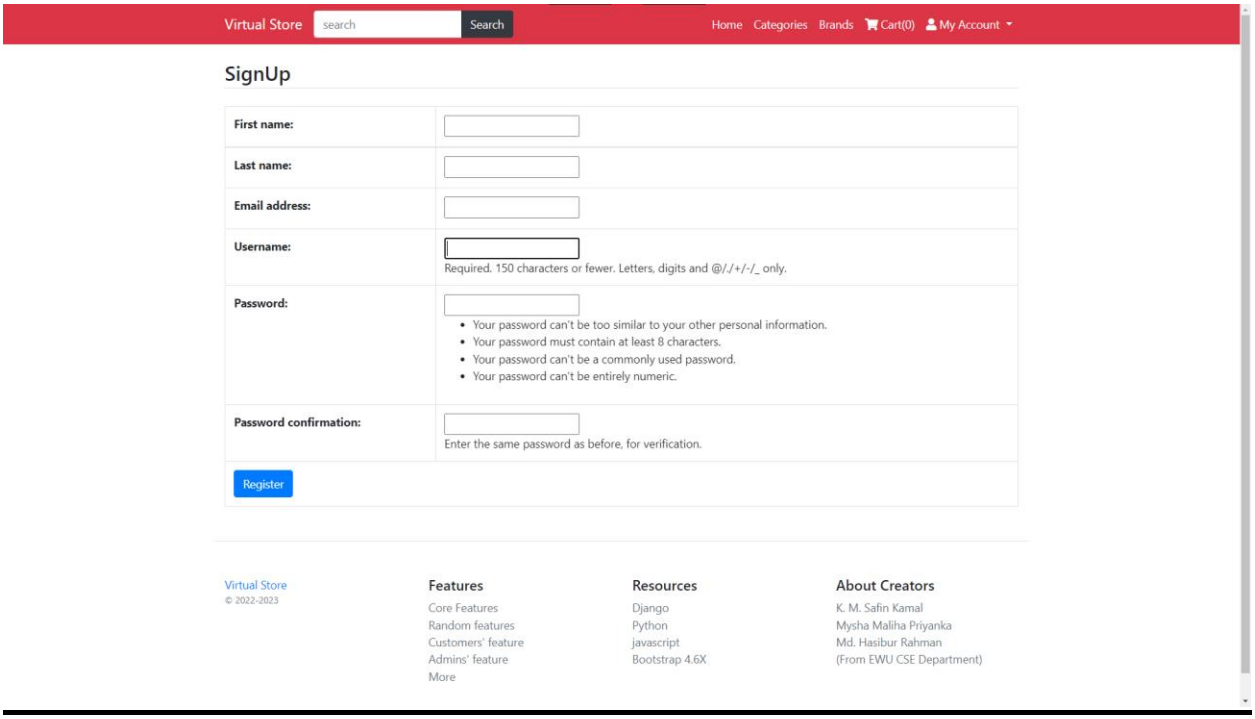


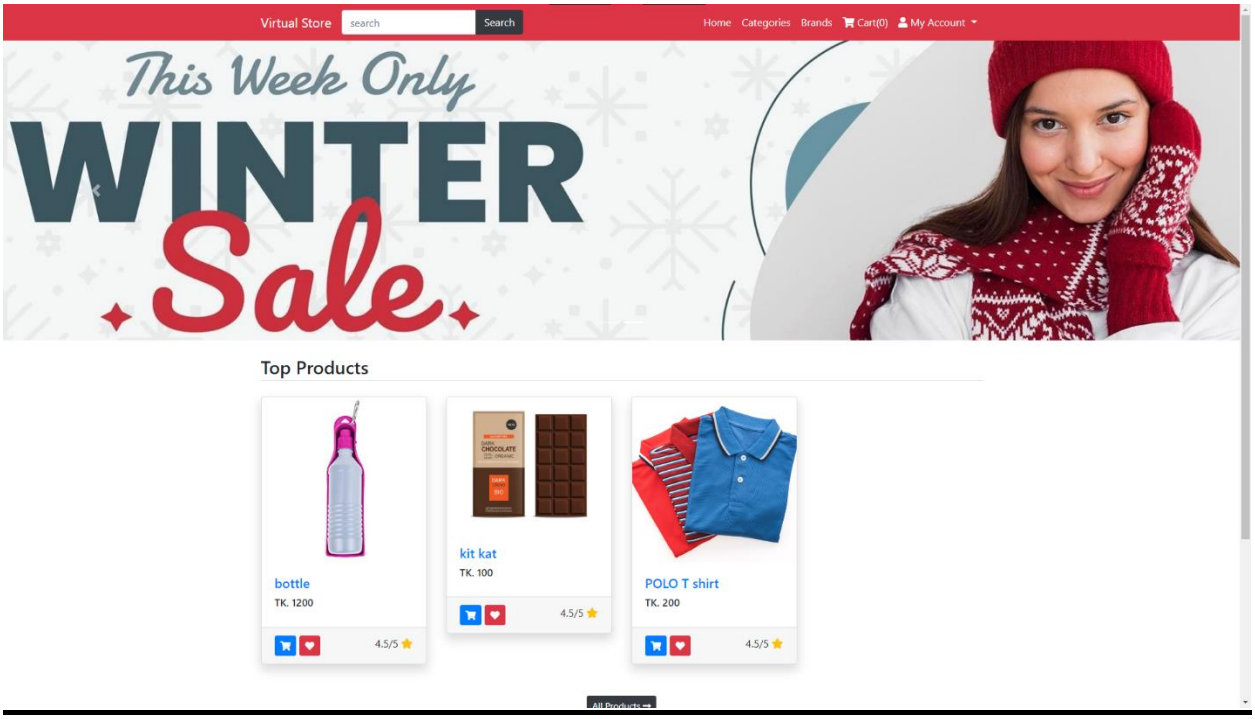
9. ER diagram:

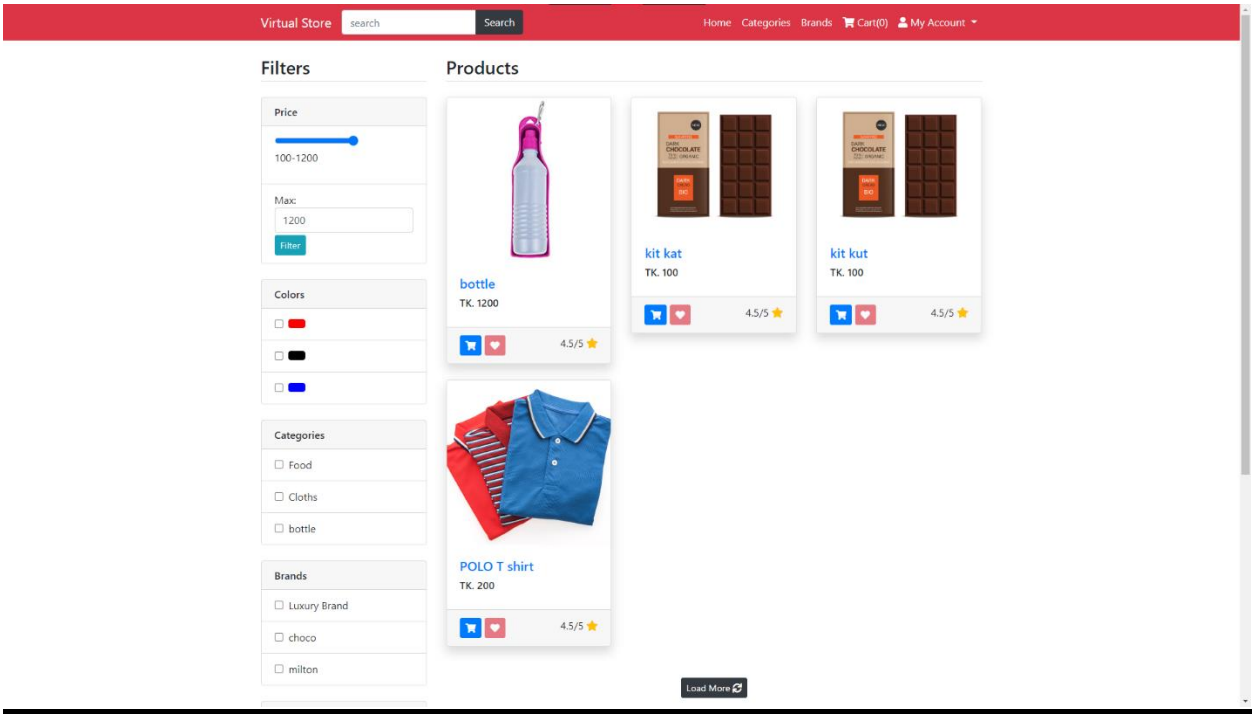

Product
Product_ID
Product_name
Category
Price
Unit price
List price
Quantity
Product_order
Order
Order_ID
Order_date
Order_quantity
Payable ()
New_order
Customer
Customer_ID
Customer_name
Gender
Address
Street
Street_No
City
State
{Phone_number}
{Email}
Payment_status
Payment
Payment_ID
Transiction_ID
Amount
Payment_method
Payment_info
Sale info
Sale_amount
Year
Month
Day
Time
Sales_report

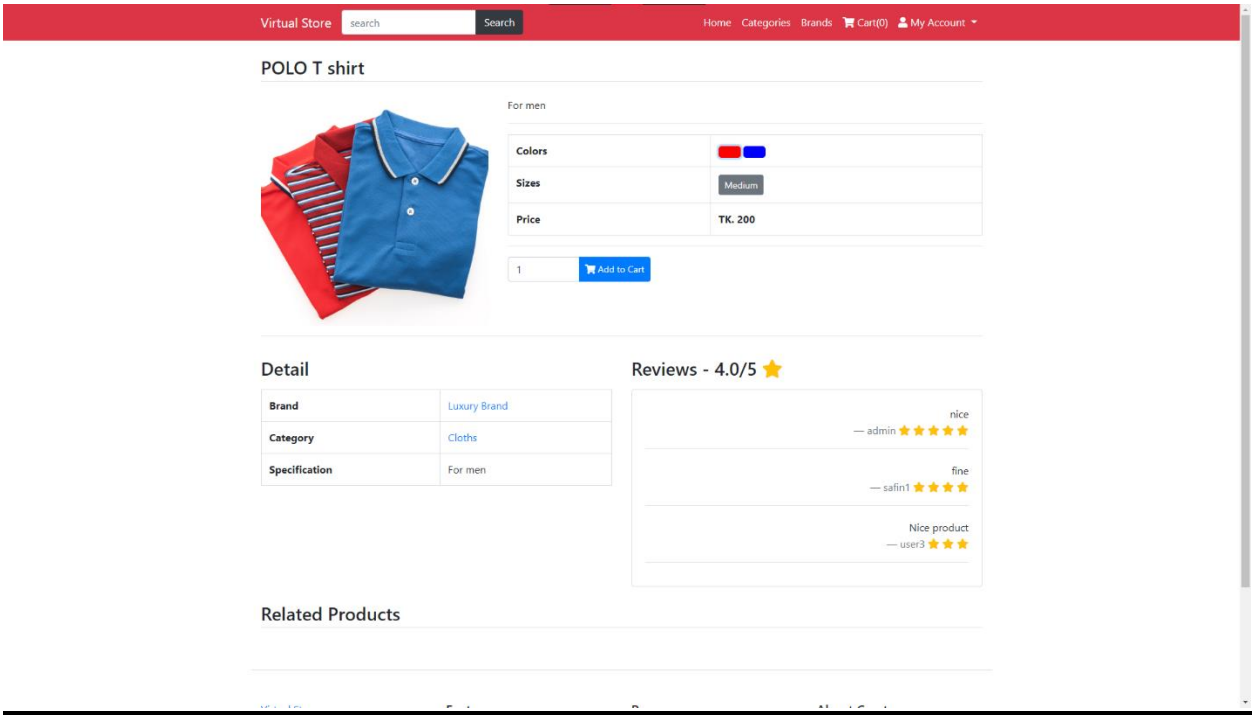
10. GUI screenshoots:

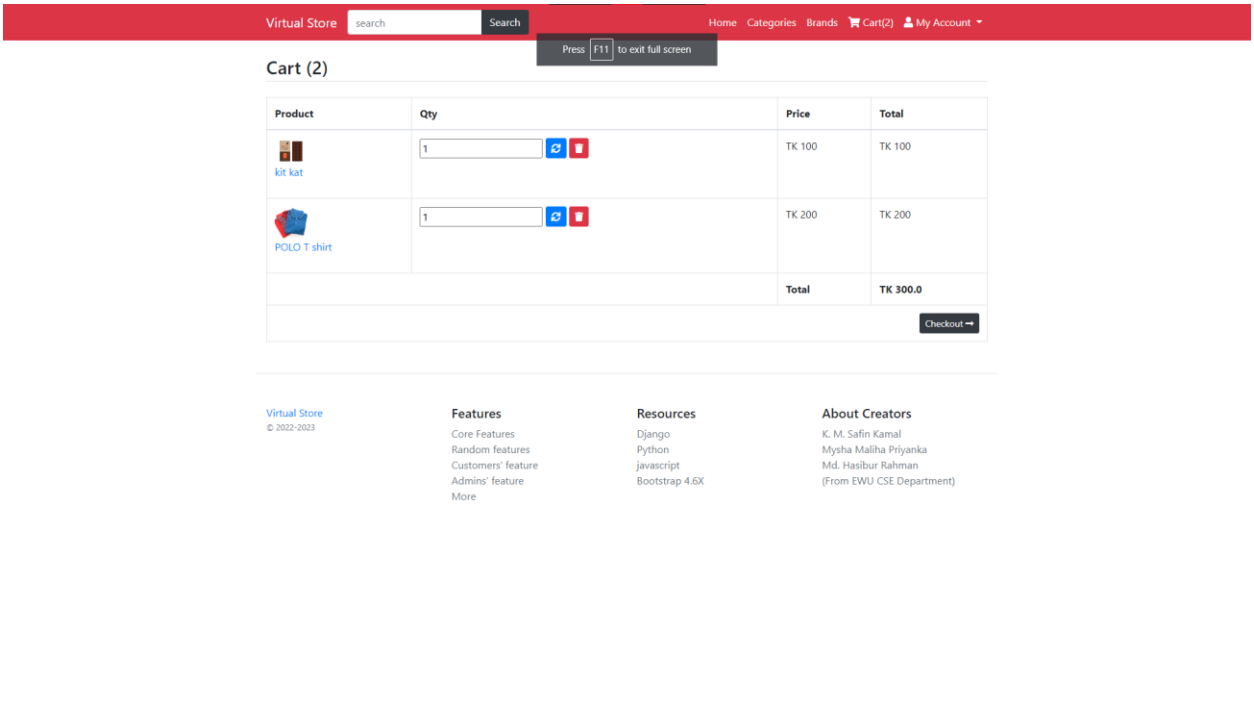


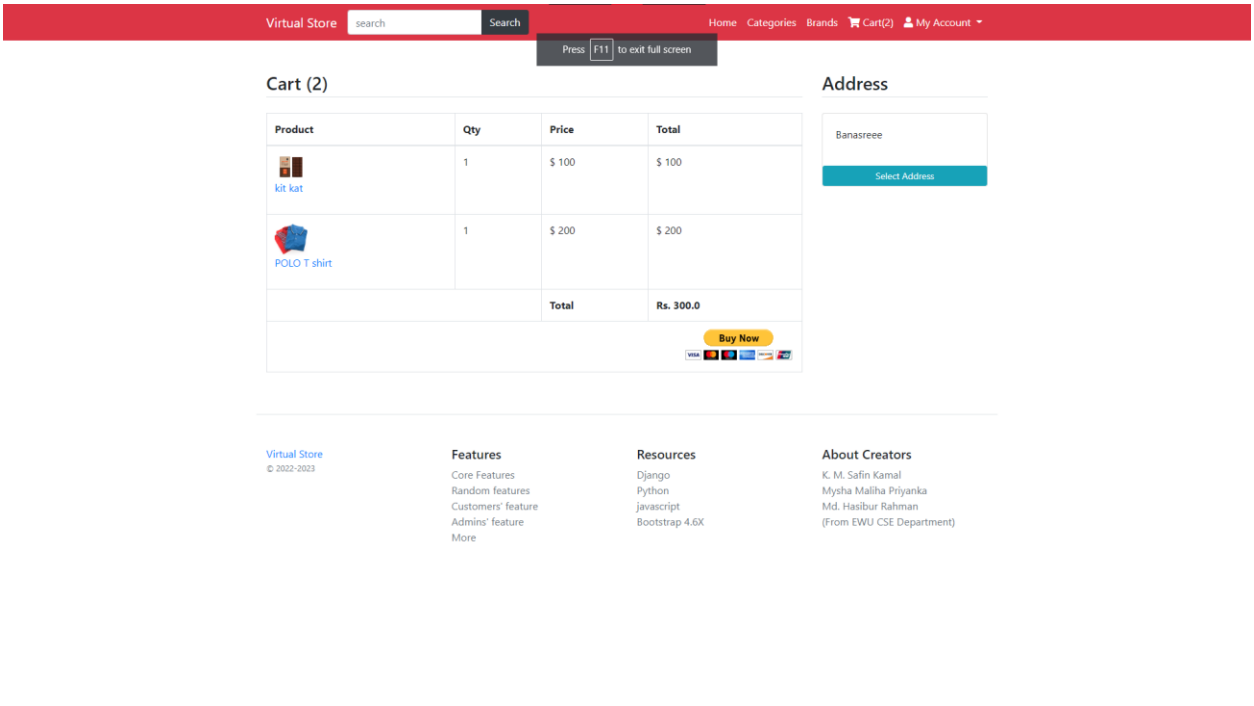



Virtual Store
search
Search
Home
Categories
Brands
Cart(0)
My Account
This Week Only
WINTER
Sale
Top Products
bottle
TK. 1200
4.5/5
kit kat
TK. 100
4.5/5
POLO T shirt
TK. 200
4.5/5
All Products


Virtual Store
search
Search
Home
Categories
Brands
Cart(0)
My Account
Filters
Price
100-1200
Max:
1200
Filter
Colors
Categories
Food
Cloths
bottle
Brands
Luxury Brand
choco
milton
Products
bottle
TK. 1200
4.5/5
kit kat
TK. 100
4.5/5
kit kut
TK. 100
4.5/5
POLO T shirt
TK. 200
4.5/5
Load More


Virtual Store
search
Search
Home
Categories
Brands
Cart(0)
My Account
POLO T shirt
For men
Colors
Sizes
Medium
Price
TK. 200
1
Add to Cart
Detail
Brand
Luxury Brand
Category
Cloths
Specification
For men
Reviews - 4.0/5
nice
— admin
fine
— safin1
Nice product
— user3
Related Products


Virtual Store
search
Search
Home
Categories
Brands
Cart(2)
My Account
Press F11 to exit full screen
Cart (2)
Product
Qty
Price
Total
kit kat
1
TK 100
TK 100
POLO T shirt
1
TK 200
TK 200
Total
TK 300.0
Checkout
Virtual Store
© 2022-2023
Features
Core Features
Random features
Customers' feature
Admins' feature
More
Resources
Django
Python
javascript
Bootstrap 4.6X
About Creators
K. M. Safin Kamal
Mysha Maliha Priyanka
Md. Hasibur Rahman
(From EWU CSE Department)


Virtual Store
search
Search
Home
Categories
Brands
Cart(2)
My Account
Press F11 to exit full screen
Cart (2)
Product
Qty
Price
Total
kit kat
1
$ 100
$ 100
POLO T shirt
1
$ 200
$ 200
Total
Rs. 300.0
Buy Now
Address
Banasreee
Select Address
Virtual Store
© 2022-2023
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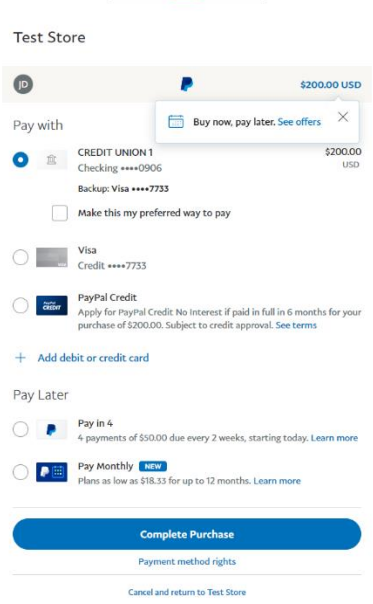
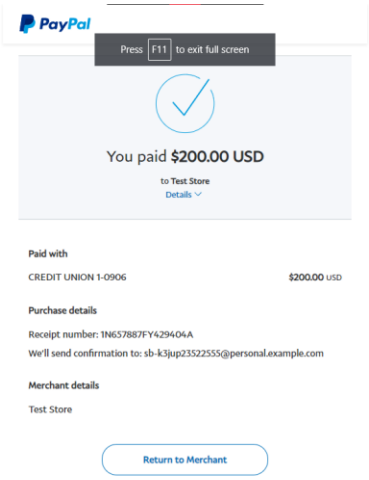
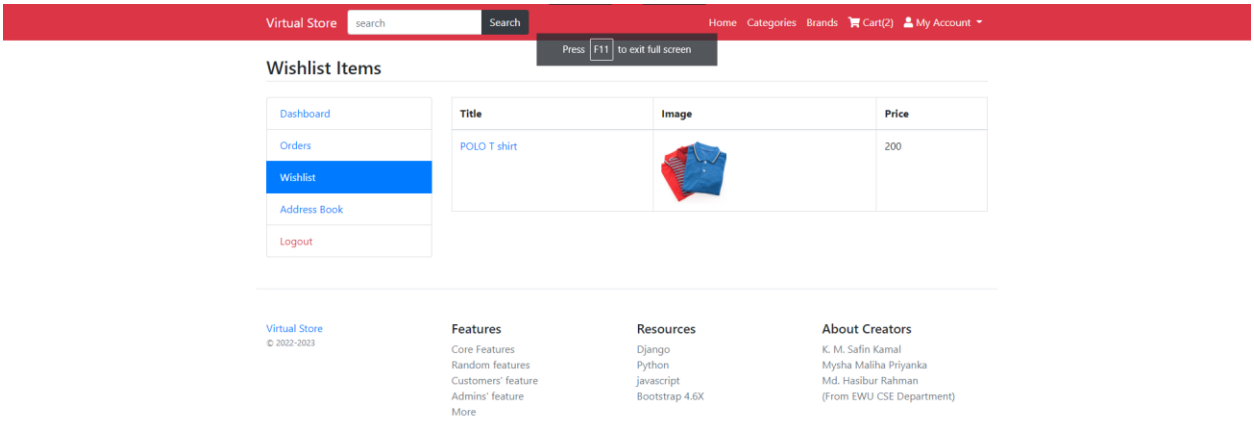

Test Store
$200.00 USD
Buy now, pay later. See offers
Pay with
CREDIT UNION 1
Checking ••••0906
Backup: Visa ••••7733
$200.00
USD
Make this my preferred way to pay
Visa
Credit ••••7733
PayPal Credit
Apply for PayPal Credit No interest if paid in full in 6 months for your purchase of $200.00. Subject to credit approval. See terms
Add debit or credit card
Pay Later
Pay in 4
4 payments of $50.00 due every 2 weeks, starting today. Learn more
Pay Monthly
NEW
Plans as low as $18.33 for up to 12 months. Learn more
Complete Purchase
Payment method rights
Cancel and return to Test Store


PayPal
Press F11 to exit full screen
You paid $200.00 USD
to Test Store
Details
Paid with
CREDIT UNION 1-0906
$200.00 USD
Purchase details
Receipt number: 1N657887FY429404A
We'll send confirmation to: sb-k3jup23522555@personal.example.com
Merchant details
Test Store
Return to Merchant


Virtual Store
search
Search
Home
Categories
Brands
Cart(2)
My Account
Press F11 to exit full screen
Wishlist Items
Dashboard
Orders
Wishlist
Address Book
Logout
Title
Image
Price
POLO T shirt
200
Virtual Store
© 2022-2023
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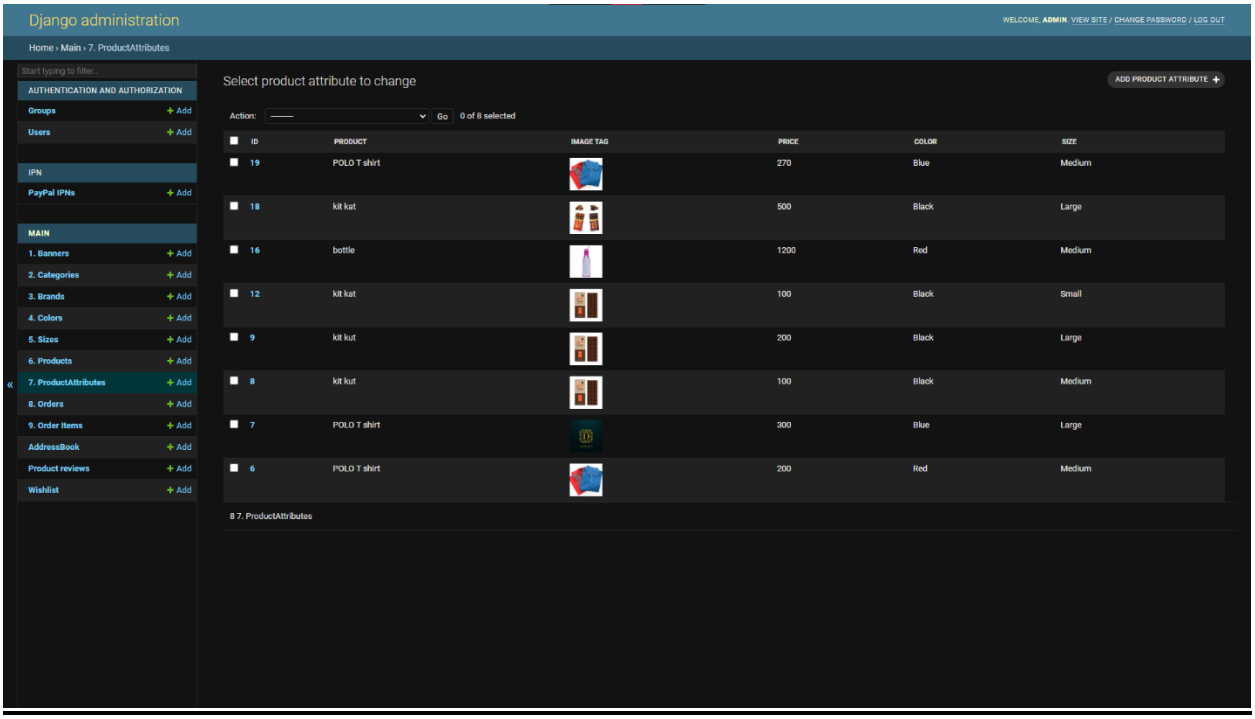
Django administration
WELCOME, ADMIN. VIEW SITE / CHANGE PASSWORD / LOG OUT
Home › Main › 7. ProductAttributes
Start typing to filter...
AUTHENTICATION AND AUTHORIZATION
Groups + Add
Users + Add
IPN
PayPal IPNs + Add
MAIN
1. Banners + Add
2. Categories + Add
3. Brands + Add
4. Colors + Add
5. Sizes + Add
6. Products + Add
7. ProductAttributes + Add
8. Orders + Add
9. Order Items + Add
AddressBook + Add
Product reviews + Add
Wishlist + Add
Select product attribute to change
ADD PRODUCT ATTRIBUTE +
Action: —— Go 0 of 8 selected
ID PRODUCT IMAGE TAG PRICE COLOR SIZE
19 POLO T shirt 270 Blue Medium
18 kit kat 500 Black Large
16 bottle 1200 Red Medium
12 kit kat 100 Black Small
9 kit kut 200 Black Large
8 kit kut 100 Black Medium
7 POLO T shirt 300 Blue Large
6 POLO T shirt 200 Red Medium
8 7. ProductAttributes