



EAST WEST UNIVERSITY

Course Code : CSE480
Section : 02

Project Report

Group Members	
Name	Id
Adnan Saif	2018-1-60-157
Md. Mahmudur Rahman Limon	2018-1-60-253

Submitted to

Jesan Ahmed Ovi

Senior Lecturer

Department of Computer Science & Engineering

East West University

Date of Submission

22nd May 2023

Project Description

Here we have created an ecommerce website called “TechStore”. This is a prototype model for selling tech products. The basic working principle of the site is anyone can visit the site without registration. They can scroll through various products. They can get details of the products. But for buying, they must register and then, they will be able to add products to their cart. Then finally the cart summary will show the added products and then they can submit for buying.

System Requirements

To build the site we have used the machine of following specifications-

Processor	:	AMD Ryzen 5 5600G with Radeon Graphics 3.90GHZ
Installed Ram	:	8.00 Gb (7.40 Gb usable)
System Type	:	64- bit Operating System, x64-based processor
Operating System	:	Windows 10.

For the project we have used-

IDE - Pycharm version 2023.1 (A dedicated Python Integrated Development Environment),
Python (3.11).

System Design

The project was completed using HTML, CSS, JavaScript, Bootstrap, Python Flask and MongoDB.

For the designing of the website, we have used HTML and CSS. We have used Bootstrap to make the website responsive. All the web pages are dynamically created. For that we have used JavaScript. Using the database, we have pulled all the data from the database. Although the database was manually updated.

For backend uses, we have used python framework Flask.

The design and workflow are given below:

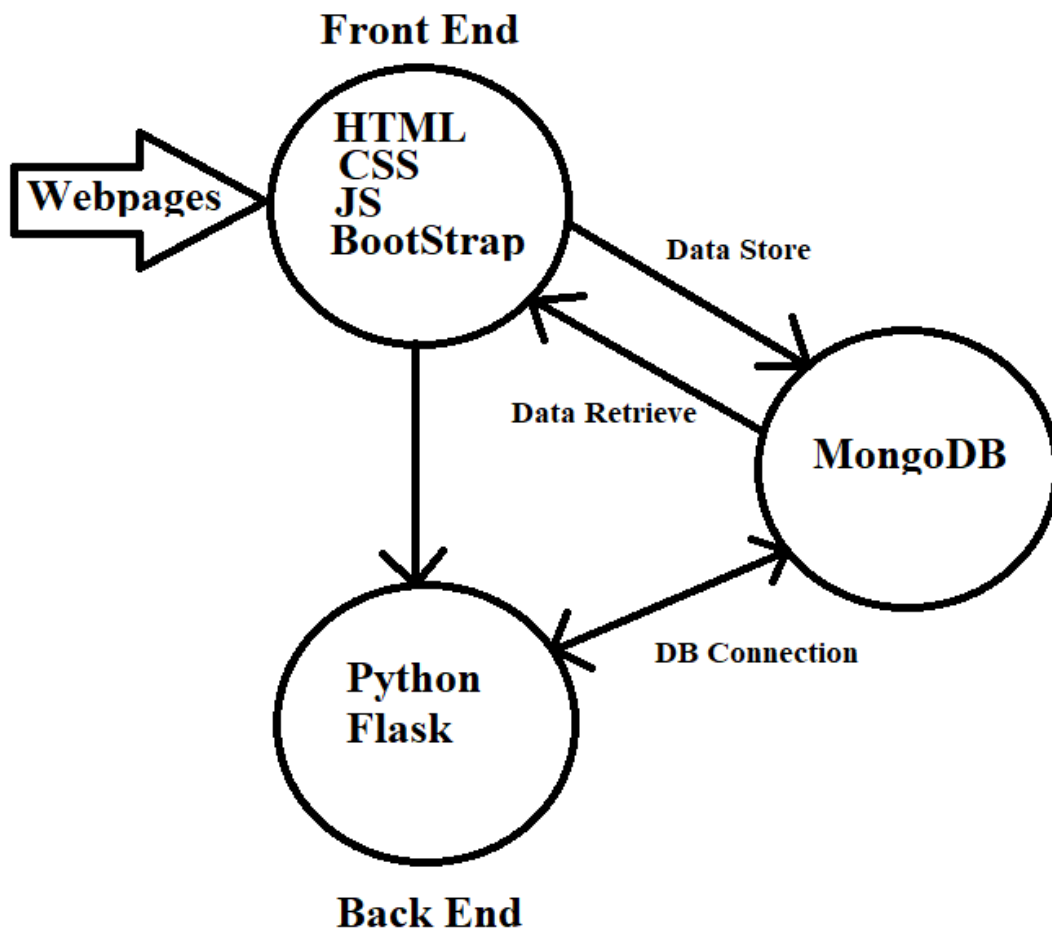
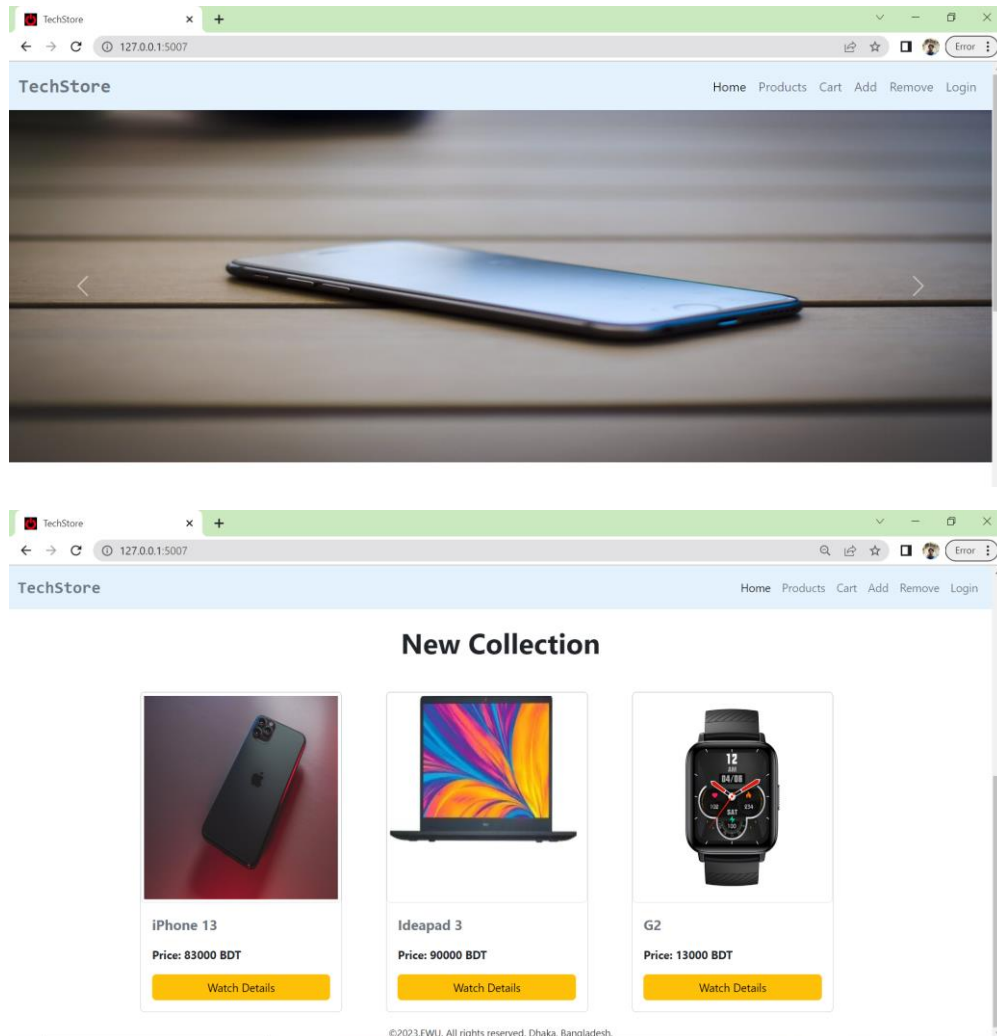


Image: Design and Workflow of TechStore

Features and Results

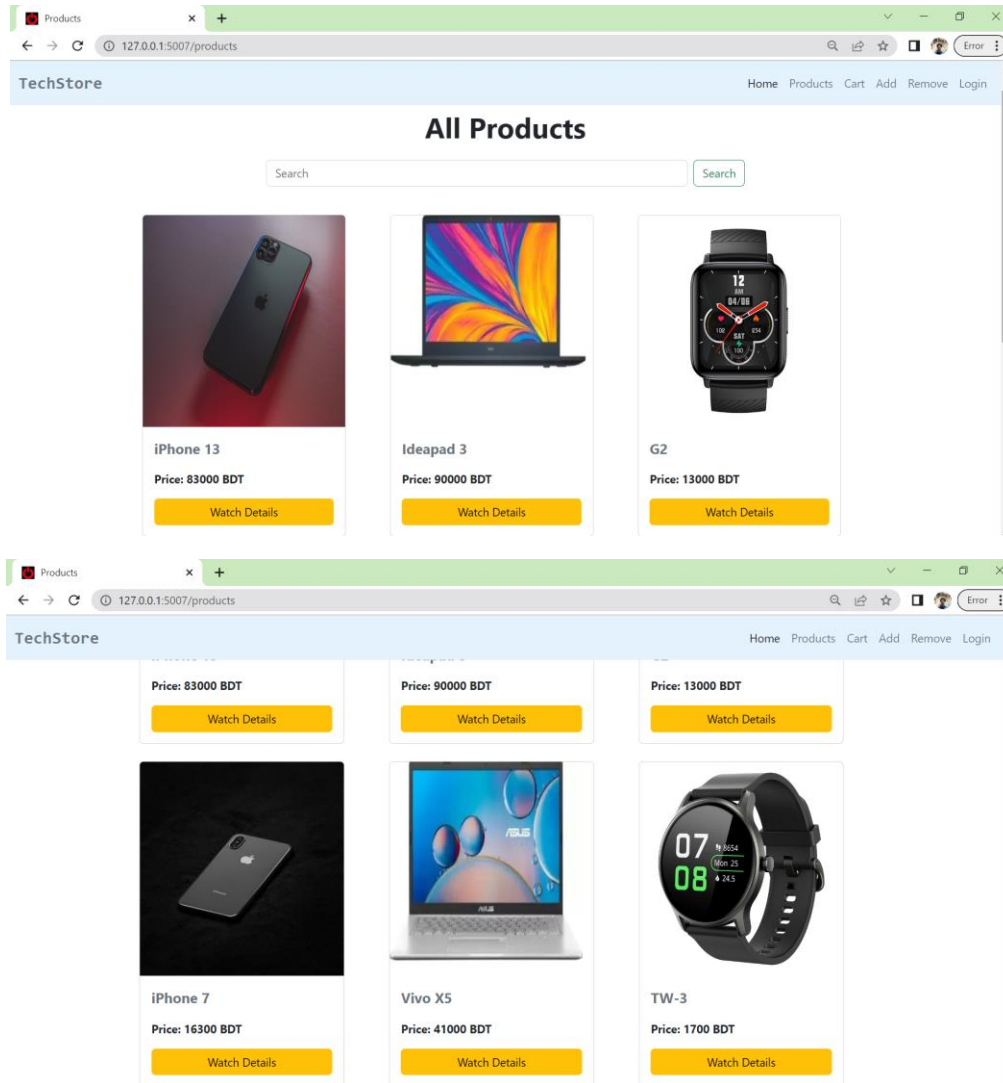
Homepage

There are several features to this website. Anyone can visit the site without any registration. With a carousal, new products are displayed, and new collection of products is displayed on the homepage. The website will look like this-

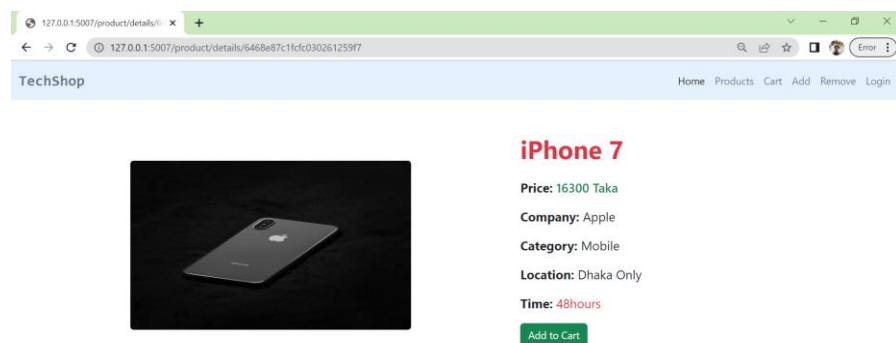


Products

In the products page, all the products are displayed. There is a search option that can search the product by category (There are three categories on the website: Mobile, Laptop and Smart Watch), also by the name of the product. The page will look like this-



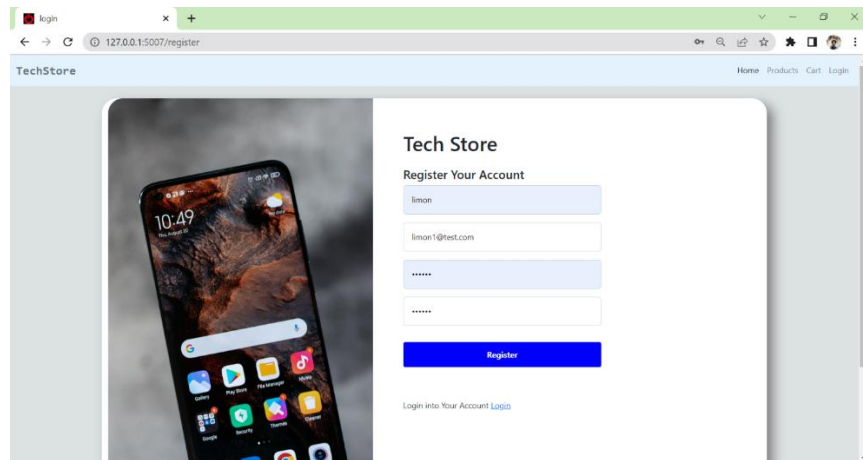
There is an option under all the products to view the details just by clicking on “Watch Details” option under each product. That will redirect to the details of the product which looks like this-



Now if “Add to Cart” button under the product is clicked, it will redirect to the login page. For the first use, the user will have to register first in order to login to the system.

Registration

For display purposes, we have registered several accounts.

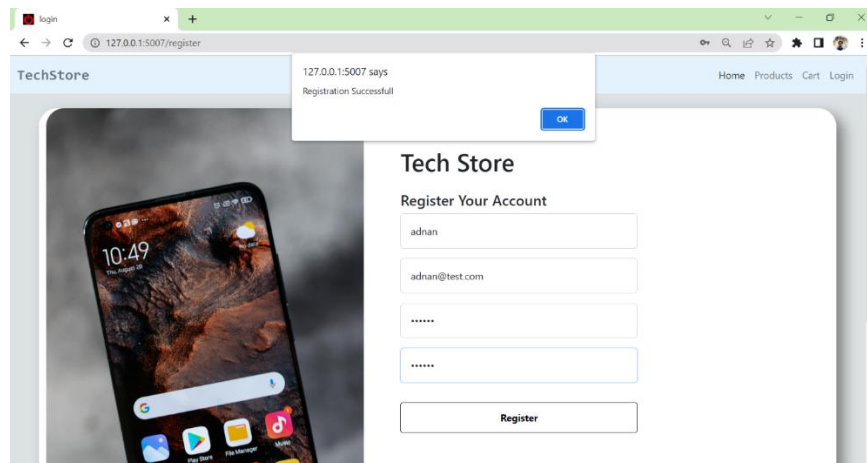


After successful registration, website will show a message-

127.0.0.1:5007 says
Registration Successfull

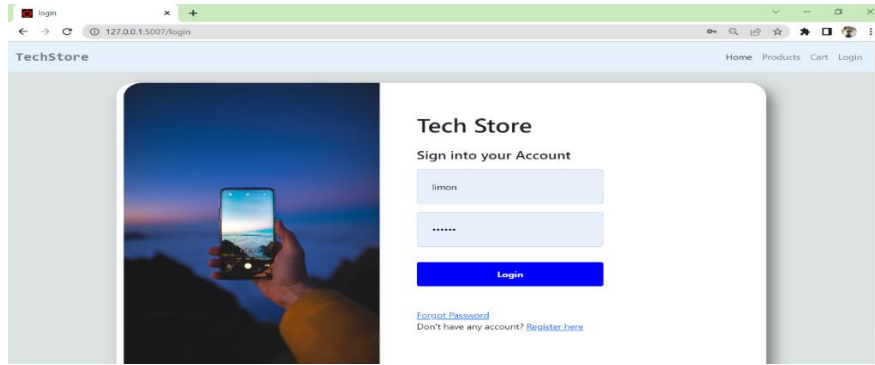


Another registration:

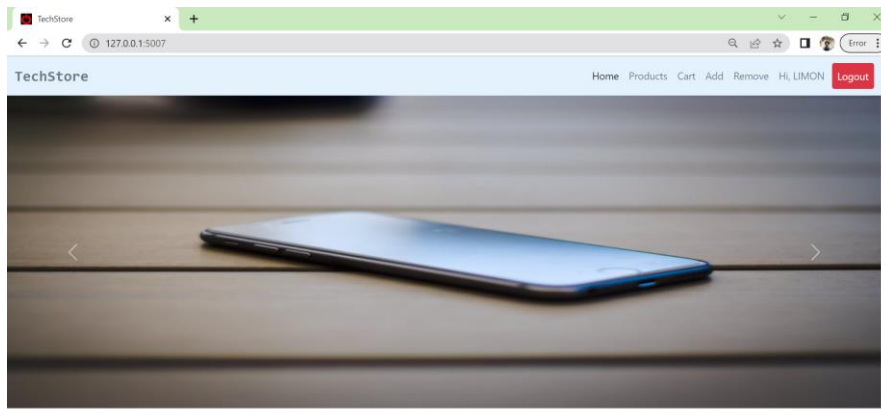


Login

After successful registration, the user will be able to login to the system.



This time the system will show the name of the user on the website.



After the registration process, the database will look this-

MongoDB Compass - localhost:27017/TechStore.users

Connect Edit View Collection Help

localhost:27017 Documents TechStore.users

My Queries Databases Search

TechStore product_list users admin config local

TechStore.users 3 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Explain Plan Indexes Validation

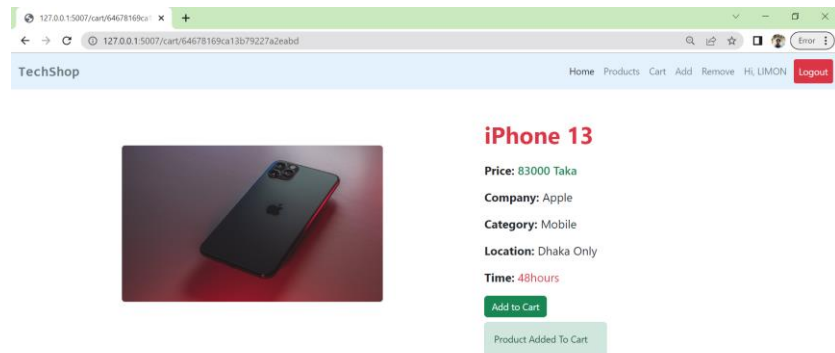
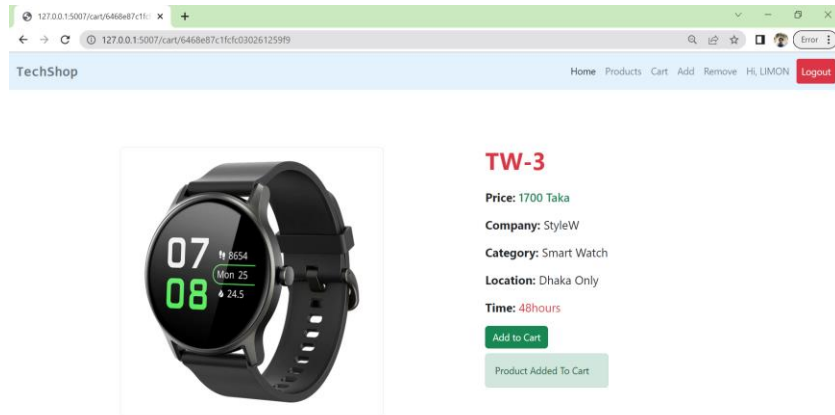
Filter Type a query: { field: 'value' } Reset Find More Options

ADD DATA EXPORT COLLECTION 1-3 of 3

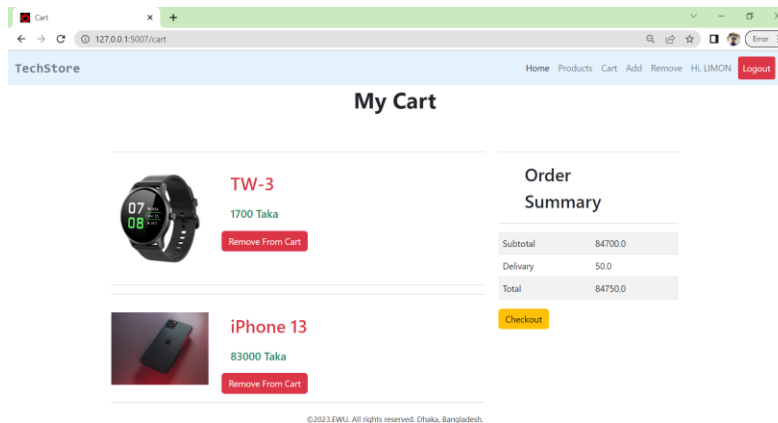
#	users	_id ObjectId	username String	password String	email String
1		ObjectId("64601539a01220fa057...")	"limon"	"123456"	"limon@test"
2		ObjectId("6460251822554829801d...")	"limon2"	"999999"	"limon2@test.com"
3		ObjectId("6460259622554829801d...")	"adnan"	"666666"	"adnan@test.com"

Cart

For display purposes, we have taken two products in the cart. Once a product is added, a little message is shown below saying “Product Added to Cart”.



All the products in the cart will look like this-



Add Product

We can add new products in the website and the data gets saved in the mongoDB database.

TechStore

Home Products Cart Add Remove Hi, LIMON Logout

Create a New Product

Image URL

Product Name

Price

Mobile

Company

upload

The add product form with valid information looks like this:

TechStore

Home Products Cart Add Remove Hi, LIMON Logout

Create a New Product

https://libb.co/9BZ8cvk/apple-watch-series-8-7

Apple watch

17000

Smart Watch

Apple

upload

The DB and the website after adding the product looks like this:

localhost:27017

Documents TechStore.product...

My Queries

Databases

TechStore

product_list

users

admin

config

local

TechStore.product_list

Documents Aggregations Schema Explain Plan Indexes Validation

Filter Type a query: { field: 'value' }

ADD DATA EXPORT COLLECTION

1-7 of 7

#	product_list	_id ObjectId	category String	image_url String	price Mongodb	compan
1	ObjectId("64678180a21b79227a...")	"Mobile"	"https://l.libb.co/yMBSDV/med..."	63000	"Apple"	
2	ObjectId("6468e80a1fc6030261...")	"Laptop"	"https://l.libb.co/nkLq30/lap..."	90000	"Lenovo"	
3	ObjectId("6468e80a1fc6030261...")	"Smart Watch"	"https://l.libb.co/9Bk7Th/sel..."	13000	"GIC"	
4	ObjectId("6468e80a1fc6030261...")	"Mobile"	"https://l.libb.co/gp0v0b/med..."	16300	"Apple"	
5	ObjectId("6468e80a1fc6030261...")	"Laptop"	"https://l.libb.co/VVt3X3/lap..."	41000	"Acer"	
6	ObjectId("6468e80a1fc6030261...")	"Smart Watch"	"https://l.libb.co/rvLCM07/sel..."	1700	"Hytel"	
7	ObjectId("6468e80a1fc6030261...")	"Smart Watch"	"https://l.libb.co/9BZ8cvk/app..."	17000	"Apple"	

Products

TechStore

Home Products Cart Add Remove Hi, LIMON Logout

Price: 16300 BDT

Watch Details

Price: 41000 BDT

Watch Details

Price: 1700 BDT

Watch Details

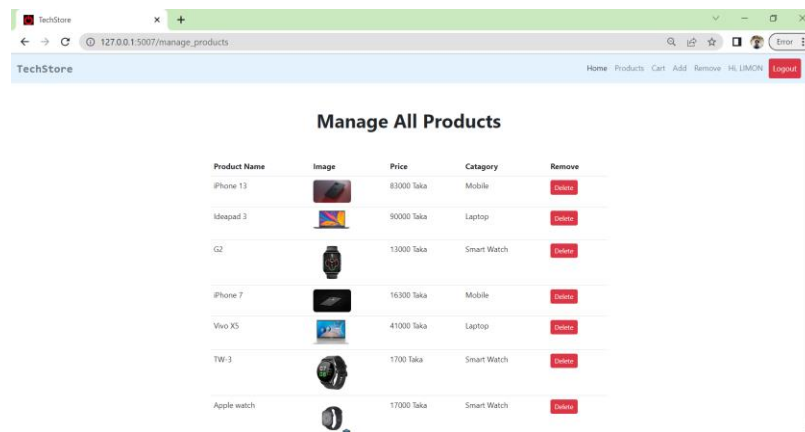
Apple watch

Price: 17000 BDT

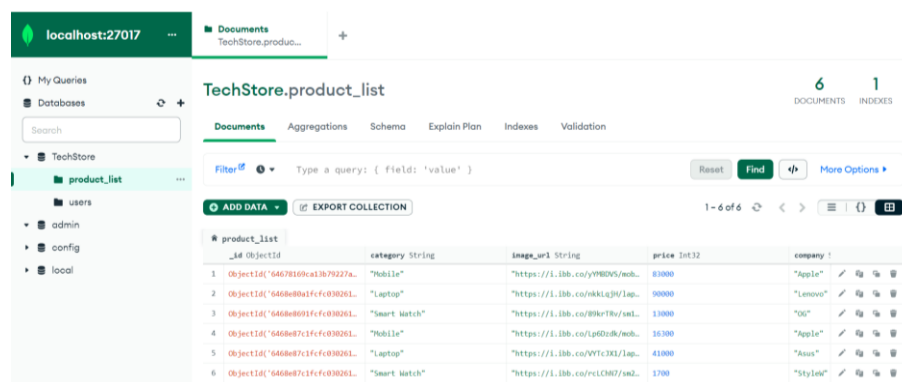
Watch Details

Remove Product

We can remove products from the website, it will remove the product from DB as well.

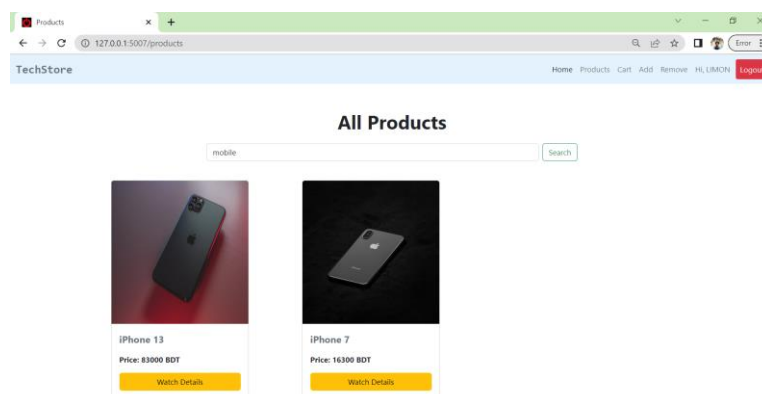


After removing the last added product, DB looks like this-



Search

We can search products by its category, title and company name.



Future Scopes

As it is a prototype model, there are several functionalities on the website that we haven't used. Those features can be pointed out as future scopes. Some of them are:

- Privilege management can be added.
- Edit product from the website can be implemented.
- Payment Method can be added.
- Discount coupon payment option can be implemented.
- Product details can be given in a more accurate and lucrative way.
- Security can be updated.

Conclusion

The objective of the project was to successfully develop an ecommerce website. This project successfully saves login information in database with the data being usable for future uses. It loads data of product information from the database into the webpage with the help of python flask. The features that are developed inside the project reflect most of the objectives of the projects. With time and resource all the objectives of the project can be achieved.