Online Product Locator

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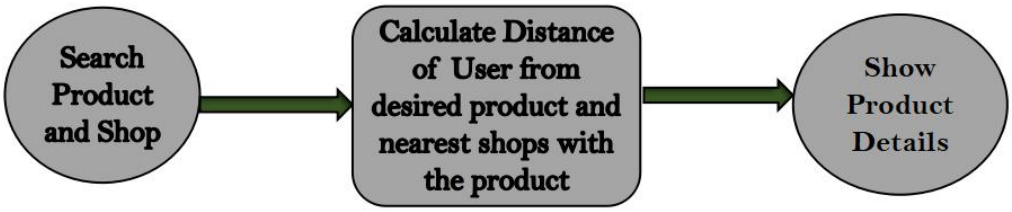
Process Documents

Vision Statement

Our project is a commercial web application. This application provides user with the facility to search a variety of products. The search results in a list of shops, sorted by distance, where the specific product can be found. It provides retailers with a platform to advertise their products to the customers.

Project Charter

Basic workflow of our project is :



Software Requirements Specification (SRS)

Key feature of our project :

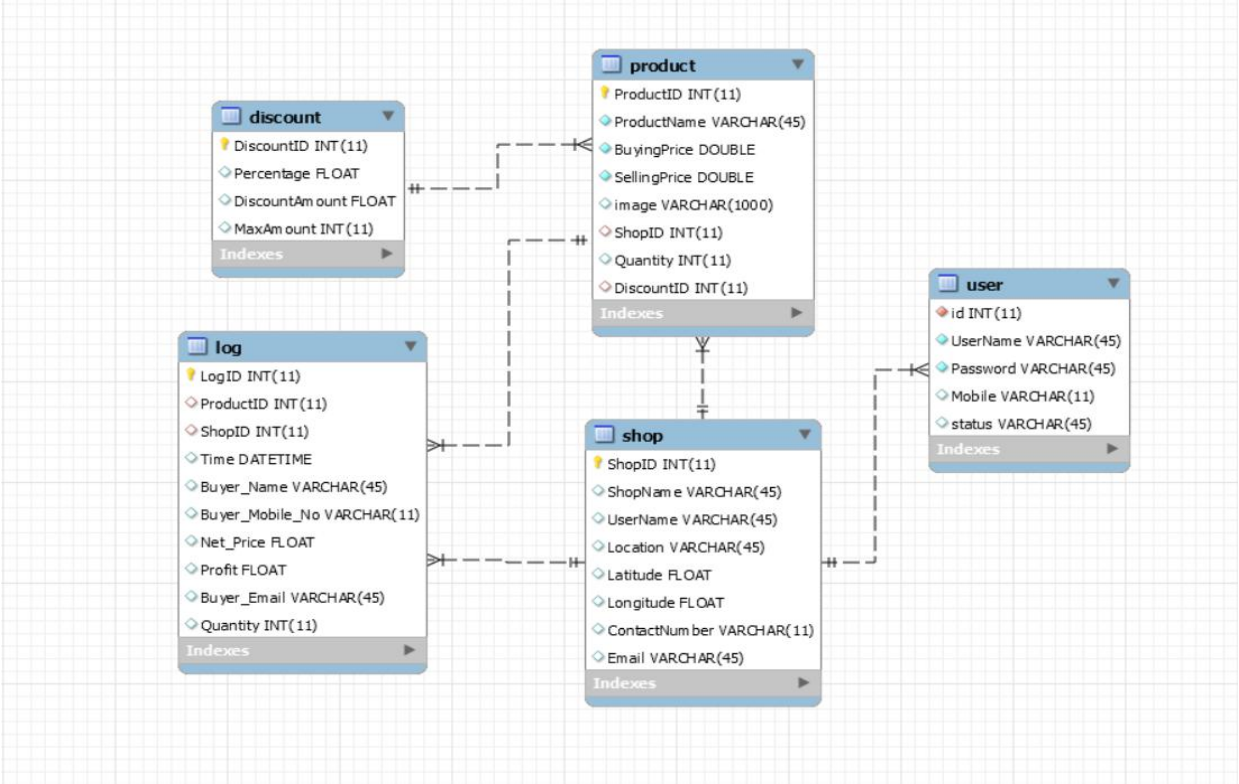
- **Authentication**: This subsystem includes login of users and it's validation , updating information and feedback of the system.
- **Product Searching**: This is the main subsystem of the application. Users can search a product and get the result based on location. They can also order the product and review it.
- **Shop Data Storage**: This subsystem includes shop activities such as adding , removing shop and products.

Actors for those sub-system is :

- Authentication
1. Shop Owner
2. Admin
- Product Searching
1. User
2. Admin
- Shop Data Storage
1. Shop Owner

2. Admin

Entity Relationship Diagram for our project :



Software Project Management Plan (SPMP)

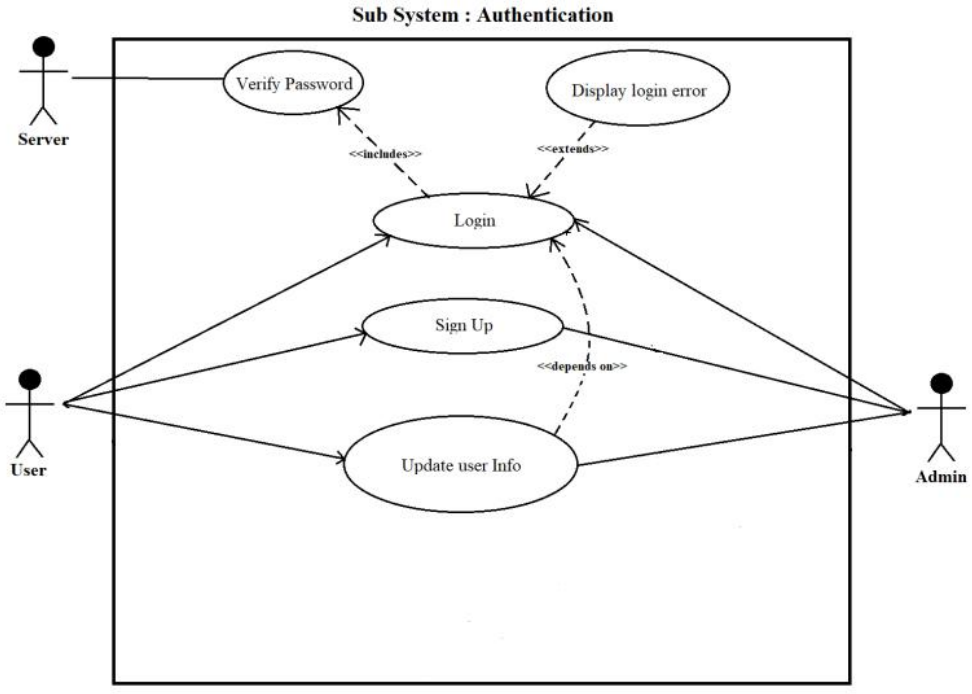
GANTT TABLE

Activity	Detailed Activity	Days Required
Authentication	Validate login	3
	Display error	2
	Update user info	3
Shop Data Storage	Create shop	6

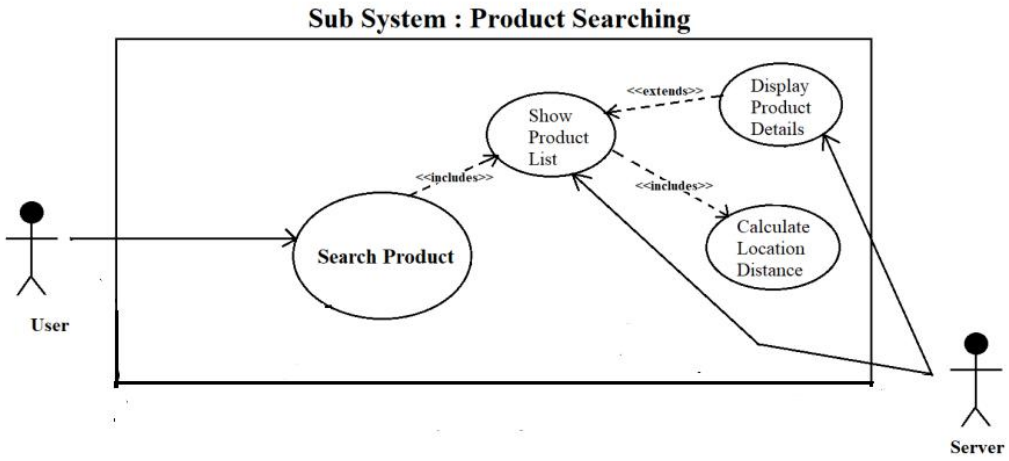
	Remove shop	6
	Add product	6
	Remove product	6
	Query product details	7
Product searching	Query product	7
	Calculate location distance	4
	Display product list	4
	Show product details	3

USE CASES

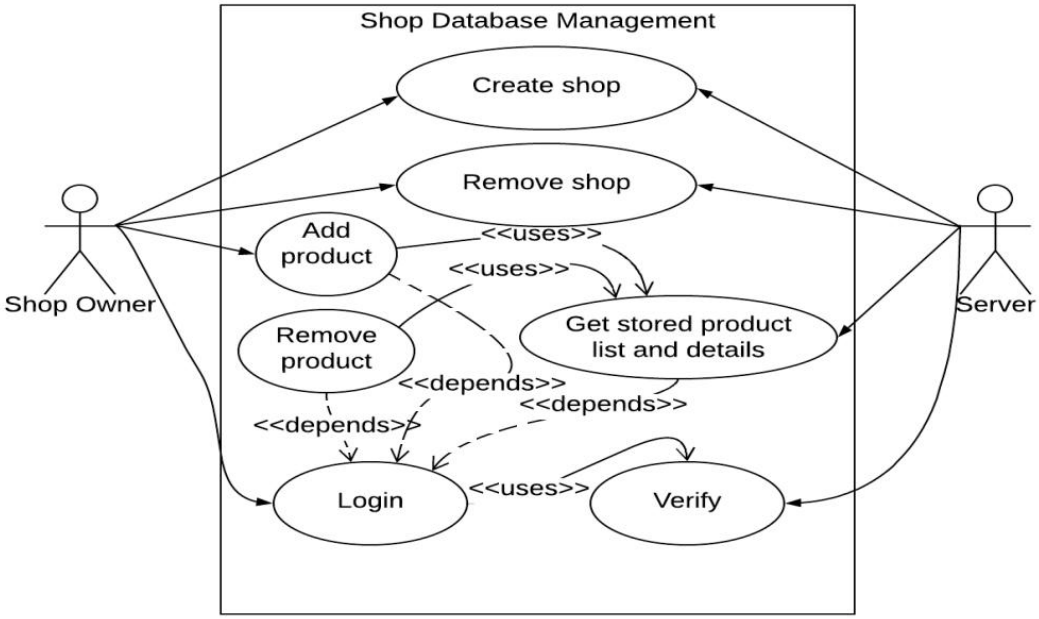
AUTHENTICATION : Shop Owner creates an account or logs into the application. Server (Admin) verifies it and displays necessary errors. Shop Owner can update his/her information and provide feedback to the system.



PRODUCT SEARCHING : User (the client) searches a product by name . The application shows the result based on location . The search result is prioritized by the distance from user to the shop where the product is available .



SHOP DATA STORAGE : Shop owner creates or removes shop. This process is validated by the server. Shop owner adds , removes or views products .



Release Plan & Iteration Plan

Timing of iterations and a rough allocation of product features to iterations :

WEEK	DELIVERABLES
1	ER Diagram and Database Implementation using MySQL
2	Server setup and integration with Database
3	Prototype with authentication and initial page setup and Unit testing
4-5	Shop Database setup and Shop owner's end implementation
6	Prototype with product searching

7-8	Shop location feature and Integration testing
9	Finalization and testing

Project Success Criteria

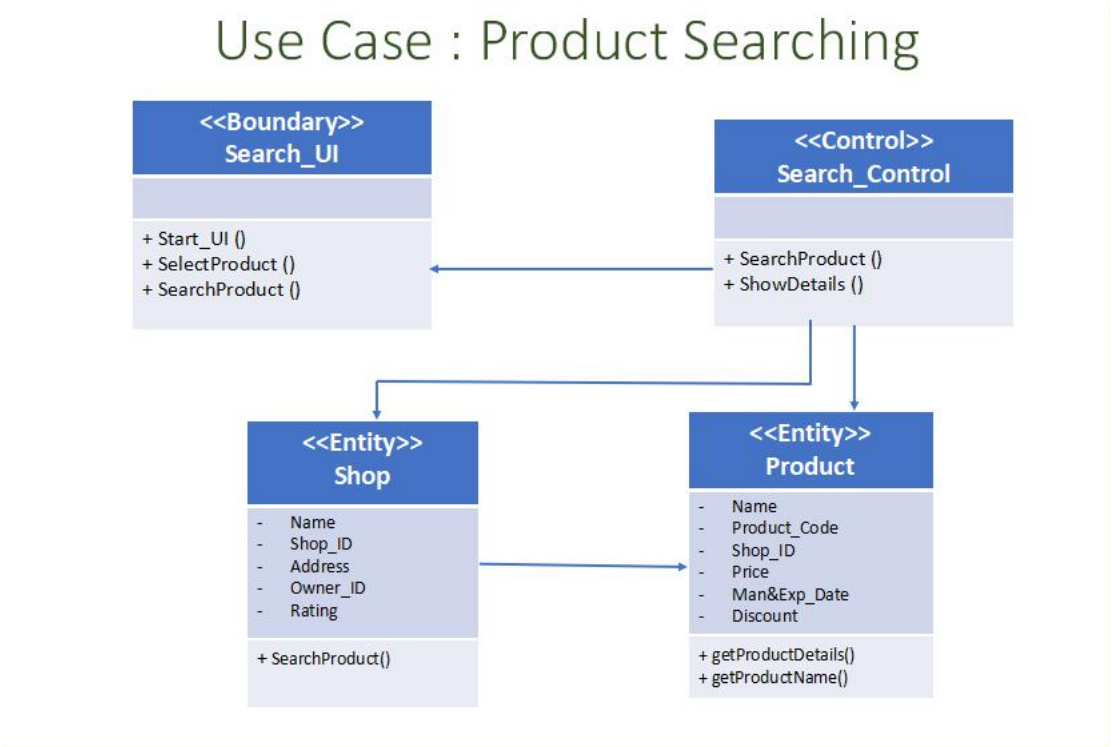
The project is finished in due time . And all the functions that were planned to be integrated has been working just fine . Our supervisor has guided us during this whole time and he has made sure that we are maintaining the “milestones” . So we think our project is quite successful .

Product Documents

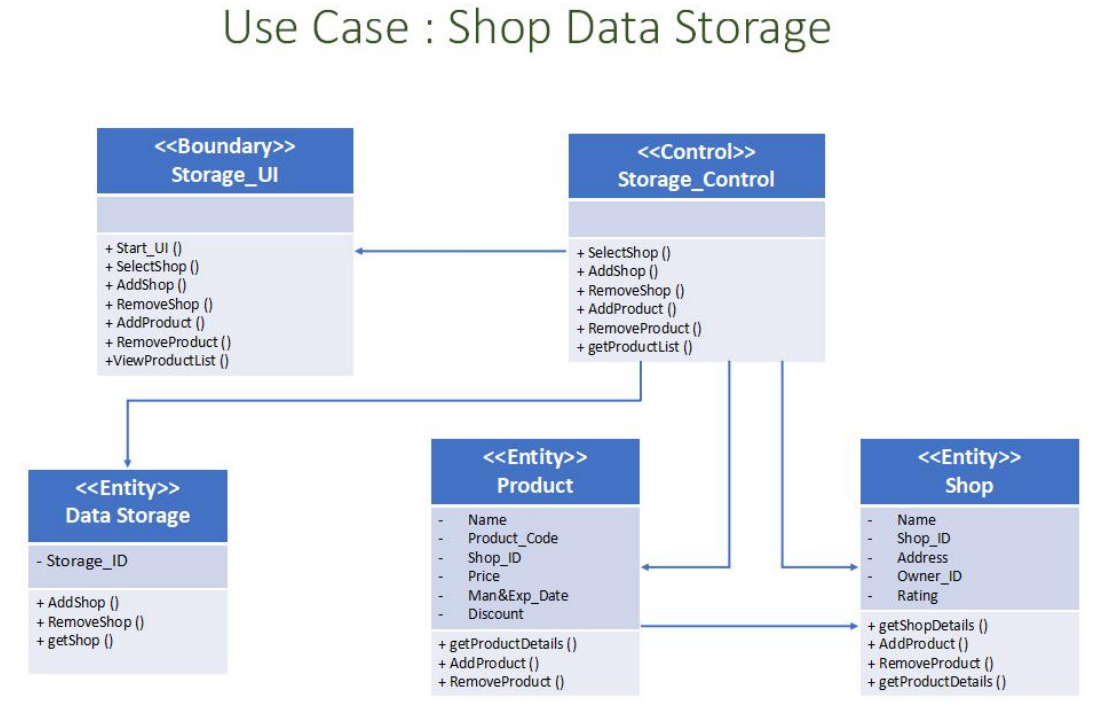
Architecture and Design

Our design consists of following classes :

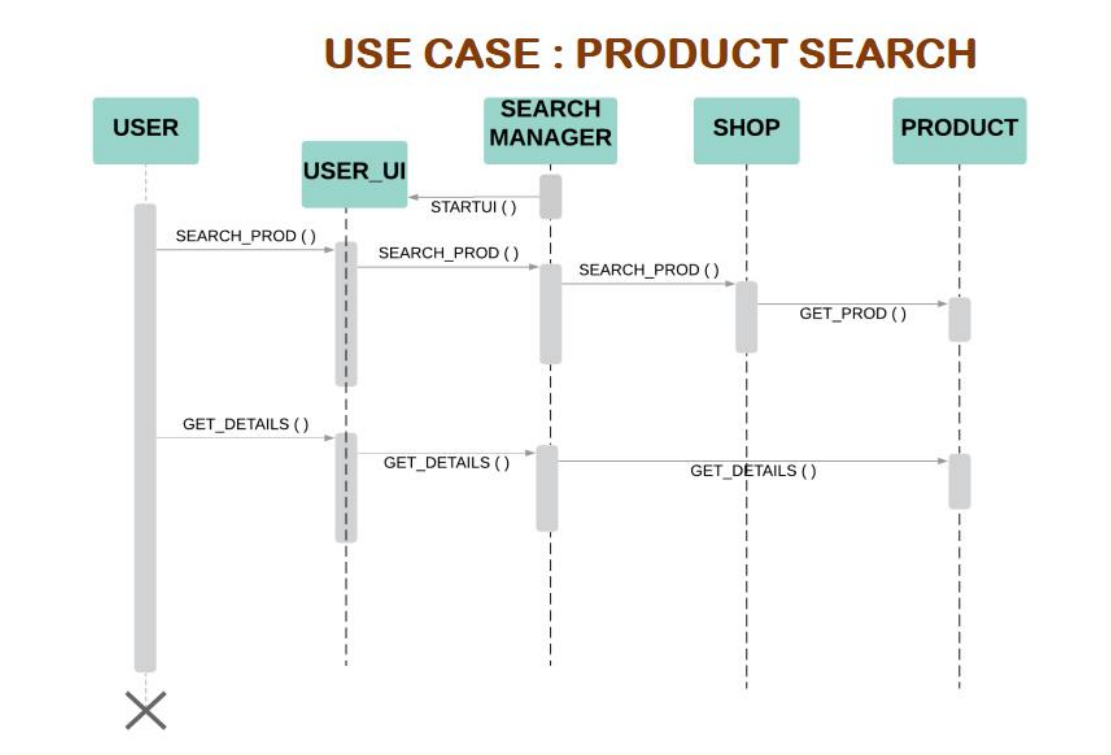
Course of action for the task of “Product Searching” :



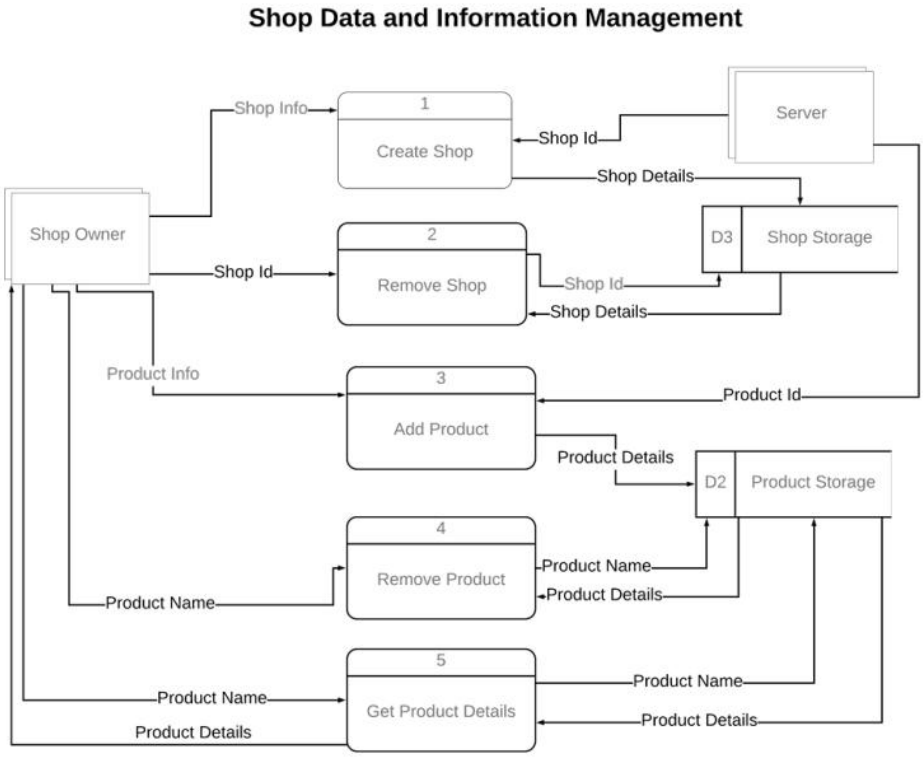
Breakdown of “Shop Data Storage” part :



Sequence Diagram for “Product Search” :



Dataflow diagram for understanding the interaction between components and overall flow of data through the system.



Coding Standards

We used MVC pattern for this project . Also for the software development , we followed “Agile” Software development lifecycle methodology . As a result , we have been able to produce ongoing release cycles, each featuring small, incremental changes from the previous release. At each iteration, the product is tested. The Agile model helps us identify and address small issues on projects before they evolve into more significant problems, and engage our supervisor and get his feedback throughout the development process.As part of our embrace of this methodology, we are also applying an Agile framework known as Scrum to help structure more complex development projects. We worked in “sprints,” which lasted one week, to complete assigned tasks. Daily Scrum meetings help the whole team monitor progress throughout the project. And our supervisor was the ScrumMaster who is tasked with keeping us focused on our weekly goal.

Our Implementation was done using :

- Django framework for server
- MySQL for database

Test Plan

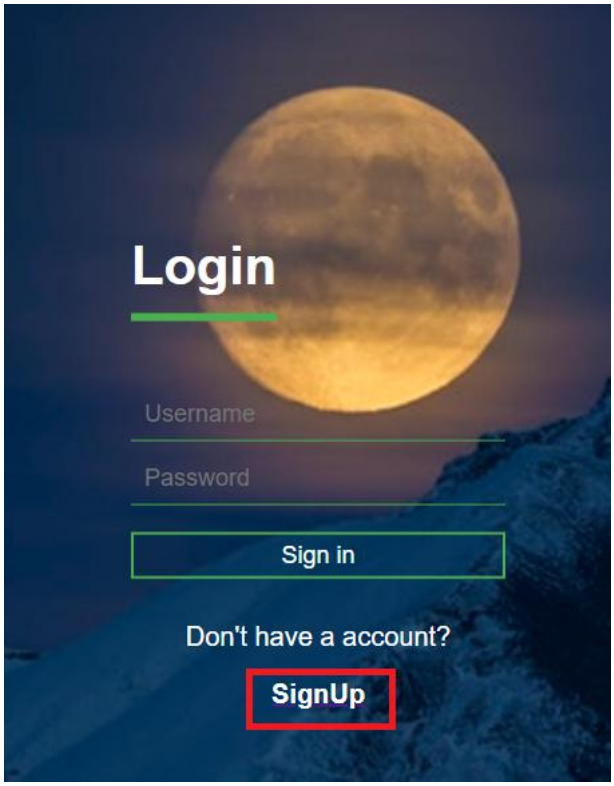
After each iteration , unit testing as done to check if the implementation works properly . Moreover , integration testing is also done to make sure that the new sub-system is not affecting the previously existing sub-systems .

User Guide

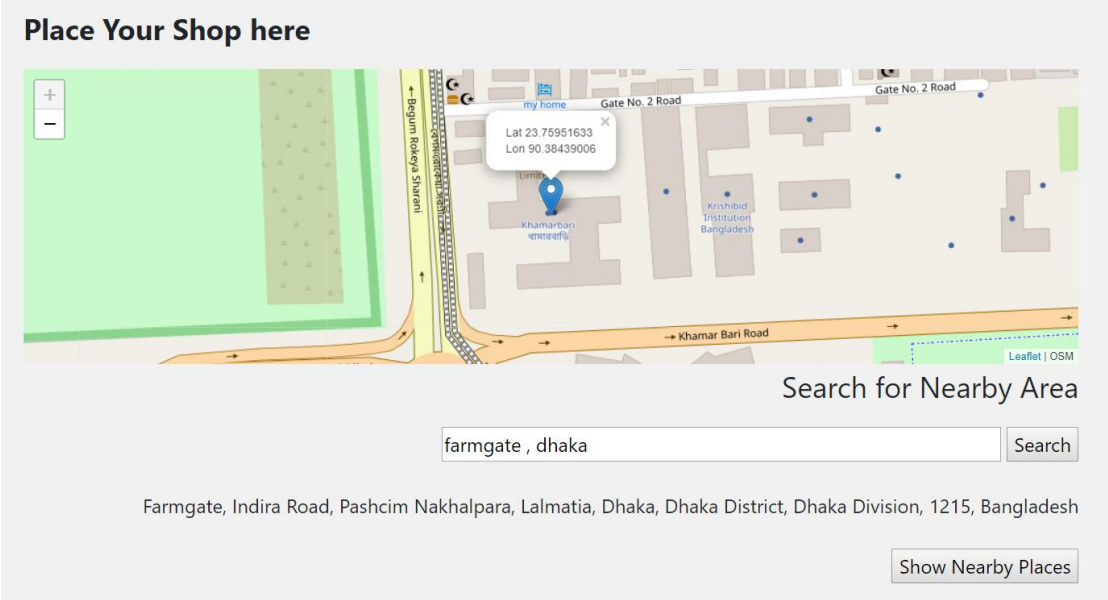
Shop Owner's perspective :

Get Started :

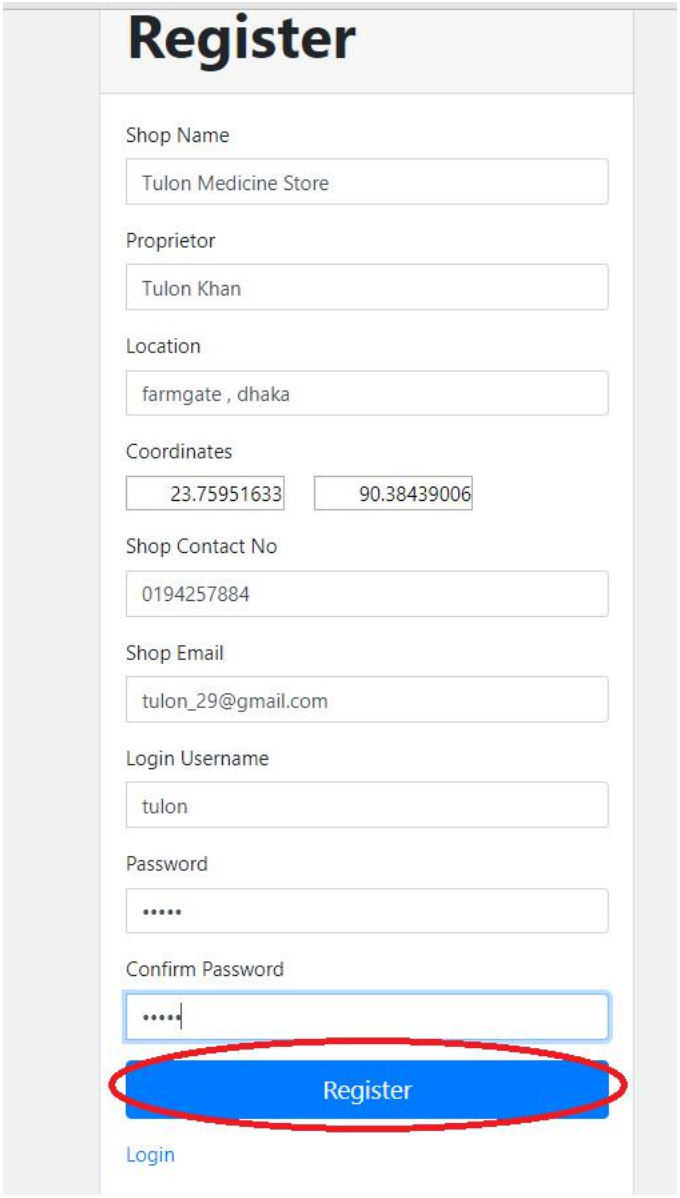
At first , you need to sign up as a new user . To do this , you have to click the "SignUp" button .



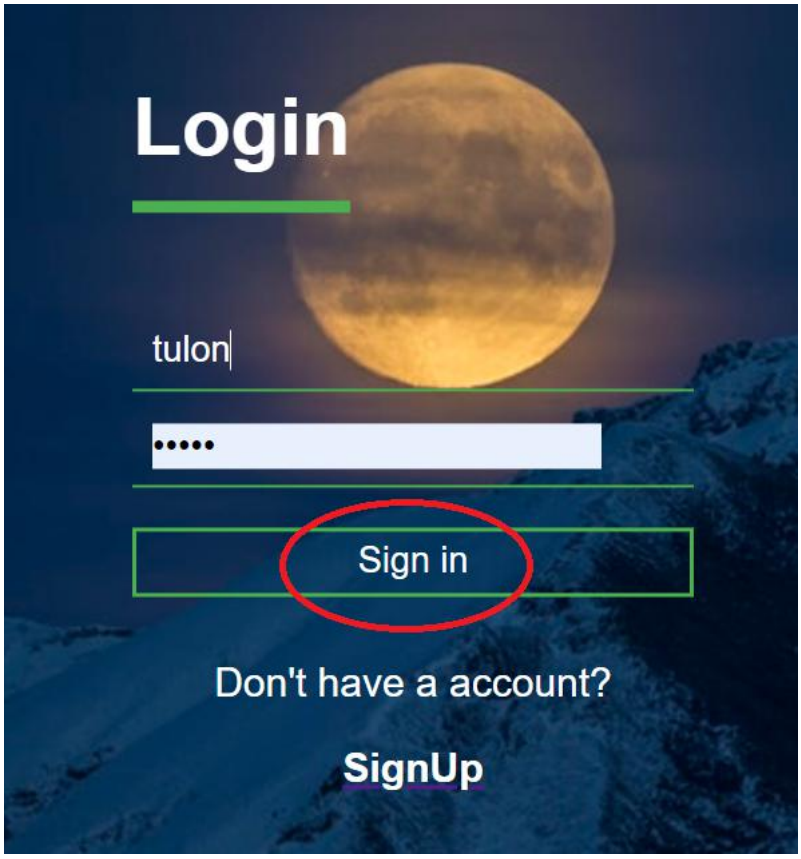
You will get redirected to this page where you have to fill up the form to register your shop in our system . First , place the marker on your shop's location .



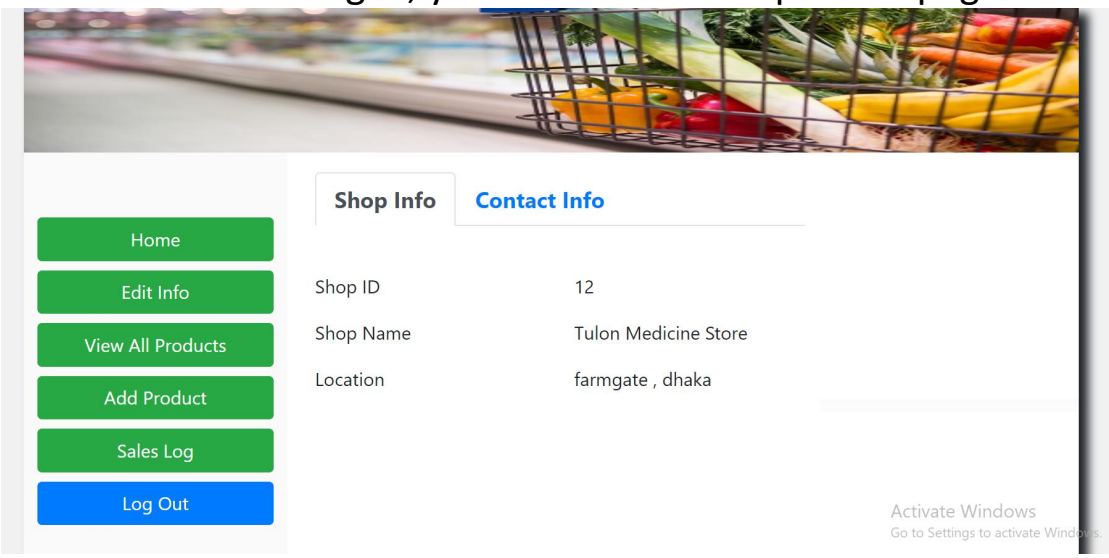
Then you have to provide necessary information in the form below . Hit “Register” when you are done .



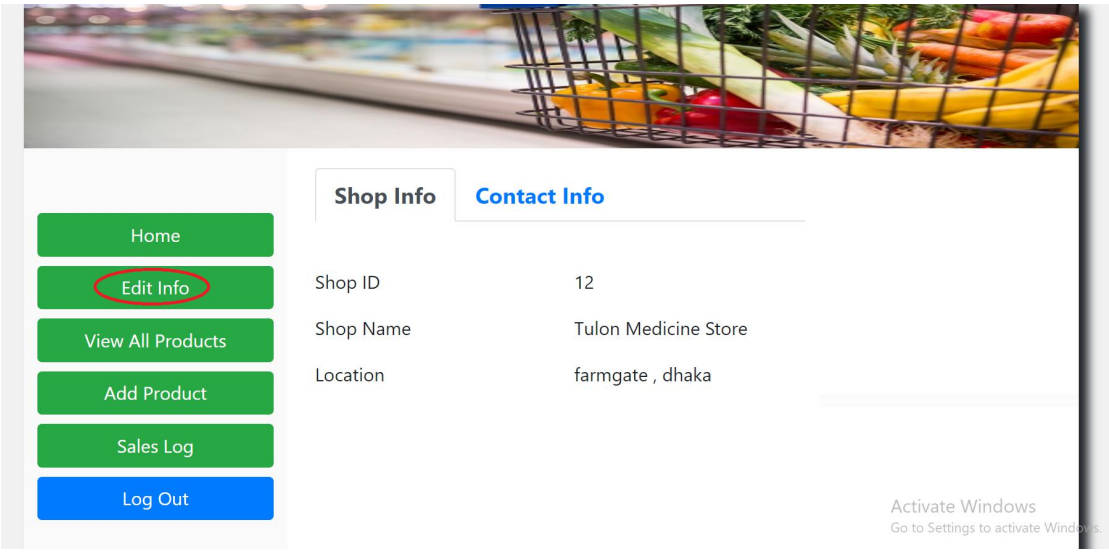
Now you can log into the system using your id and correct password . click “Sign in” button for a successful login . Invalid login will result in error . Clicking “Exit” button at any time will terminate the whole process .



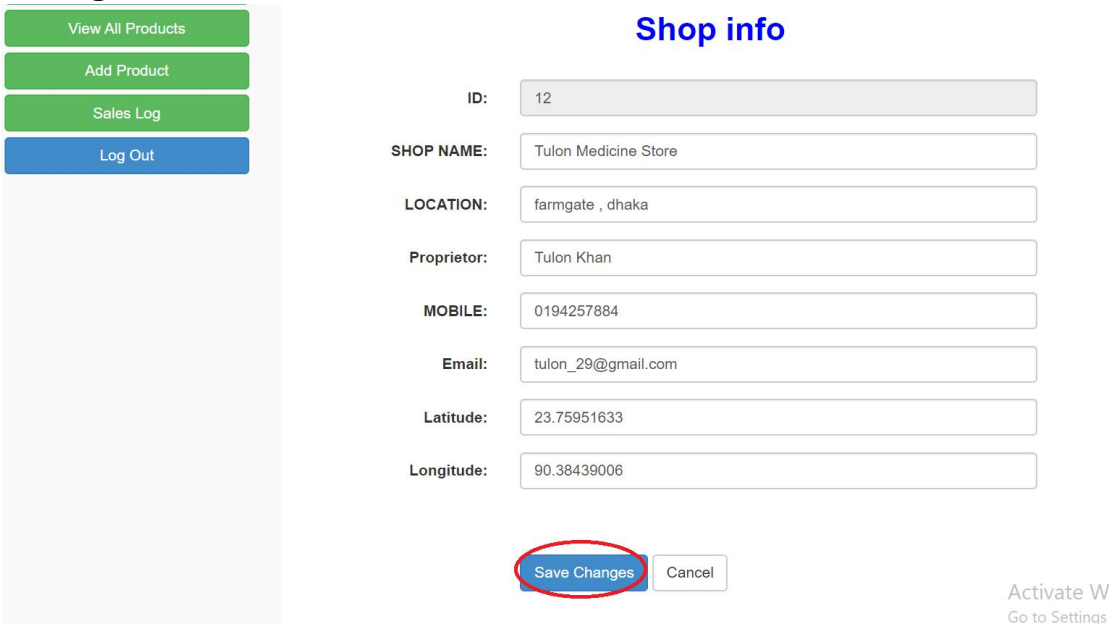
After a successful login , you will see this shop home page.



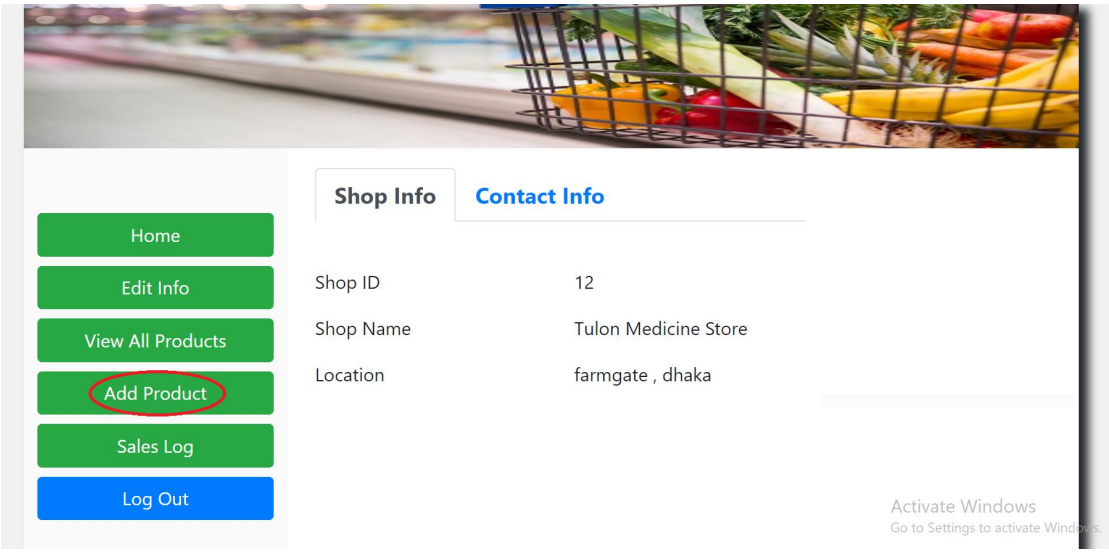
You can change your info from “Edit Info” option on the left of this page.



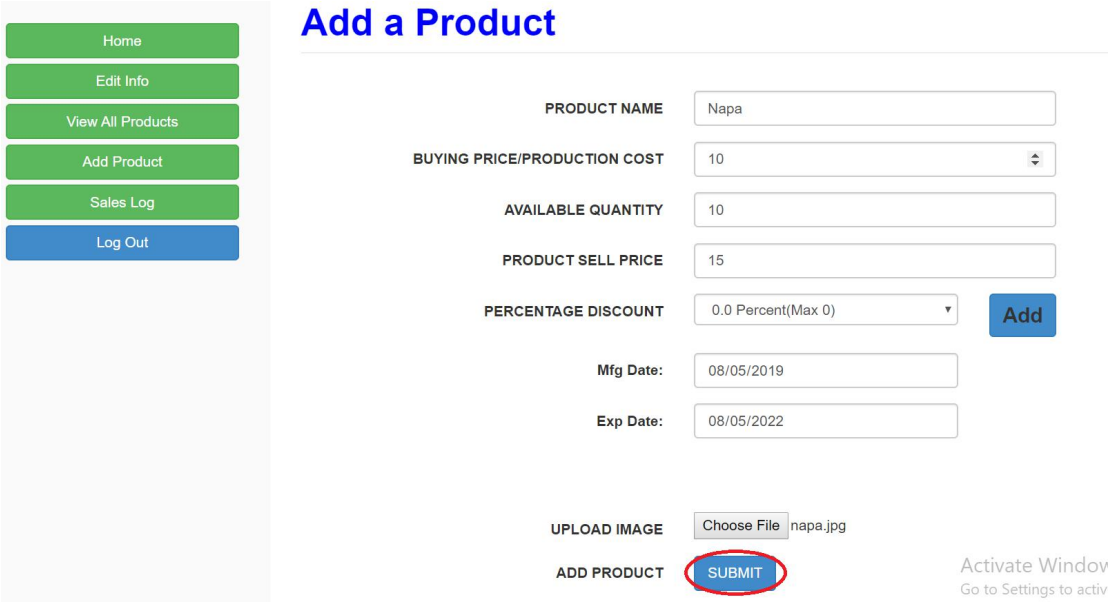
After making necessary changes , you have to click the “Save Changes” button .



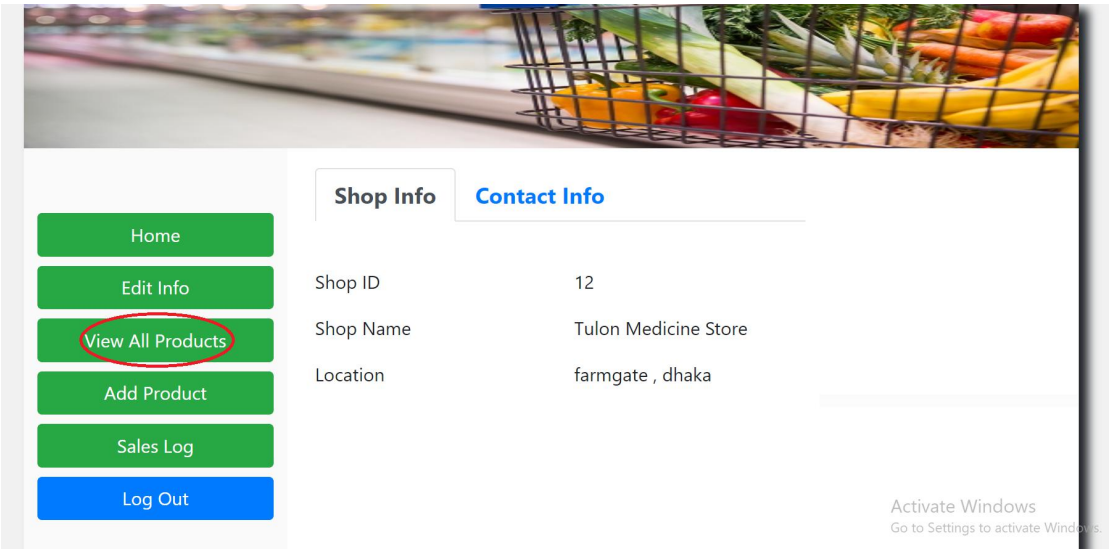
You can add a product to your shop from “Add Product” option on the left of this page .



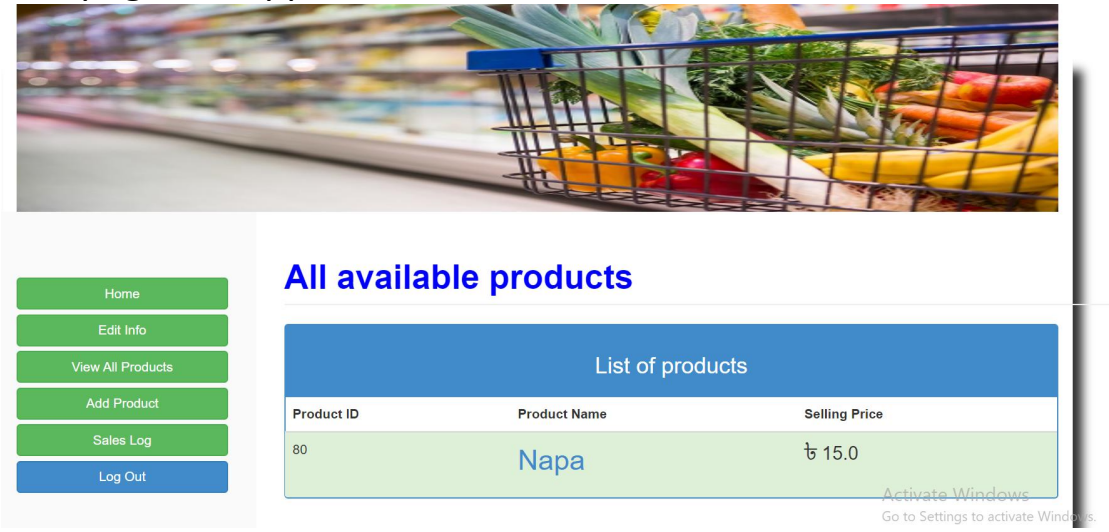
Filling the form , you will click “SUBMIT” to add your product



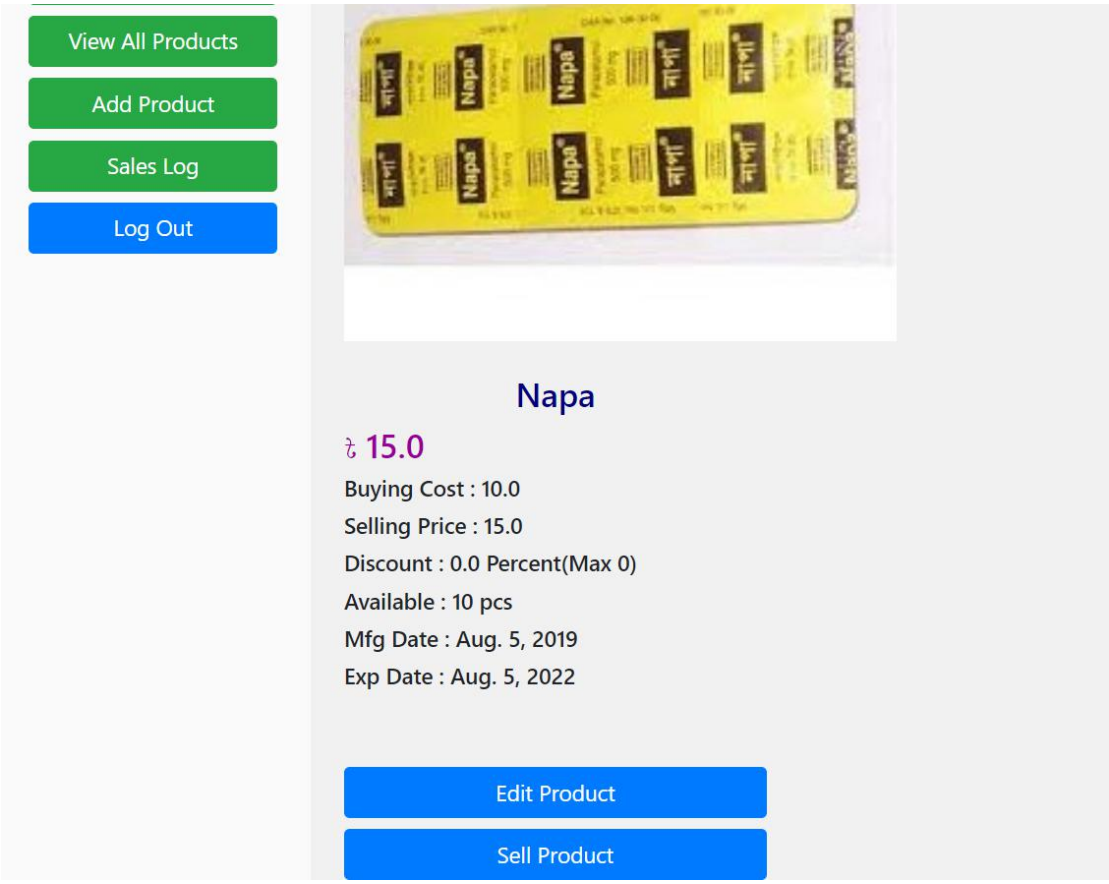
You can see all your product from “View All Products” option on the left of this page .



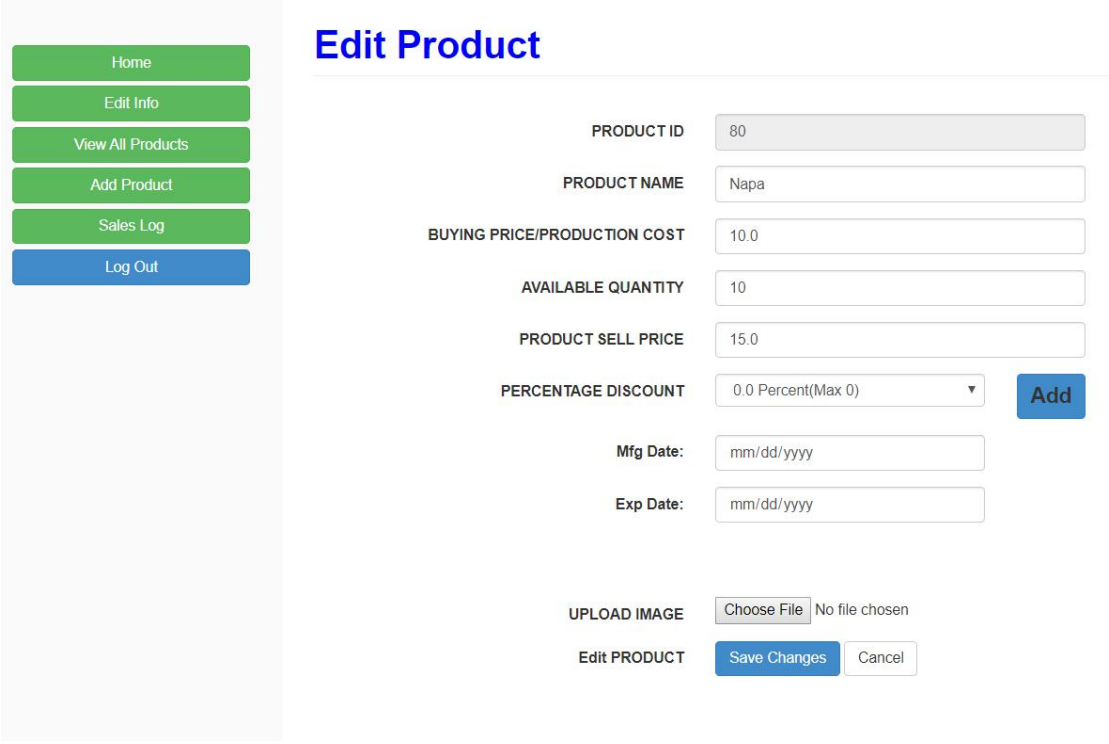
This page will appear .



Clicking on the product's name , you will get to see its details .

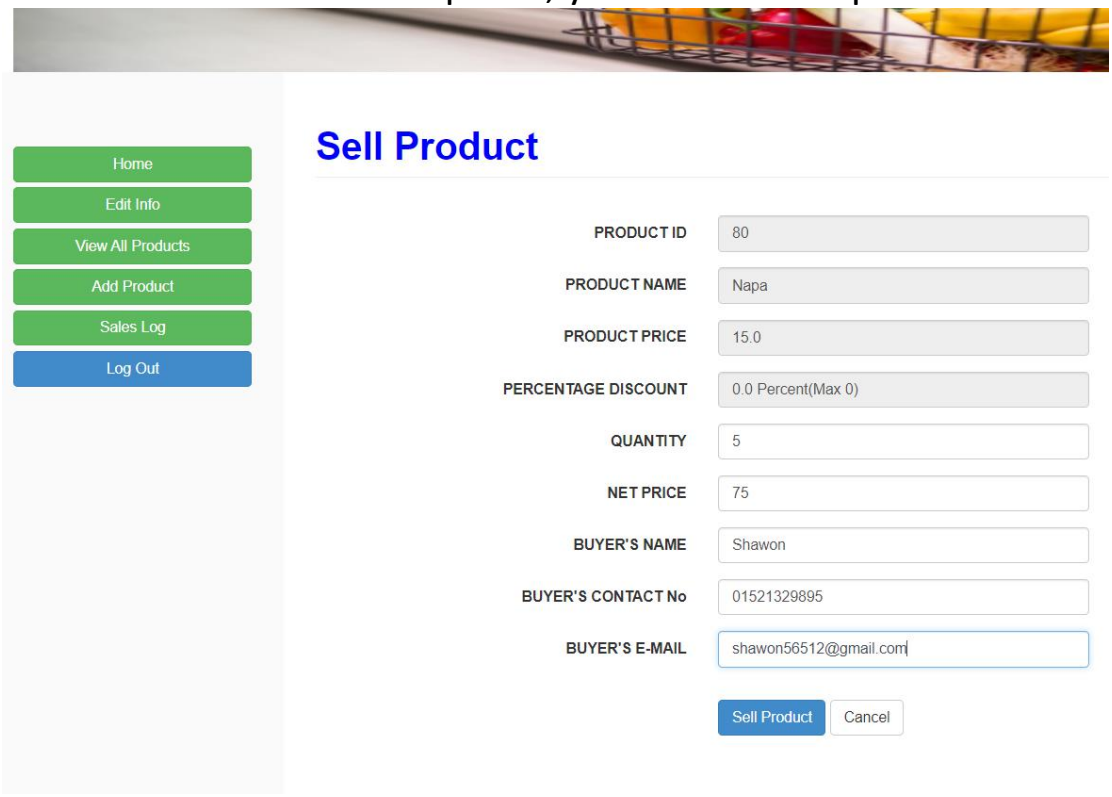


From the “Edit Product” option , you can edit this product.



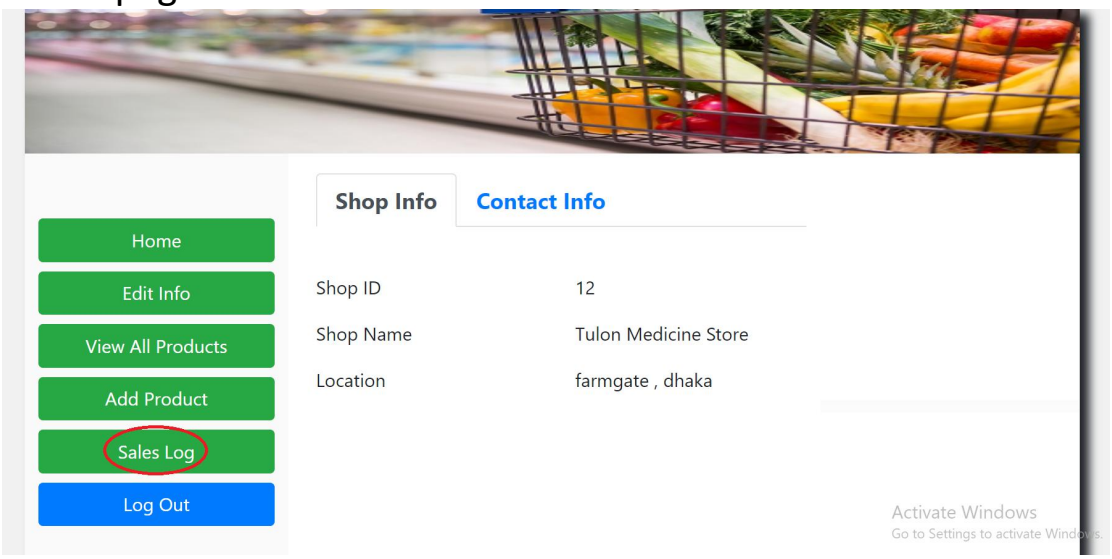
After making necessary changes , you have to click the “Save Changes” button .

From the “Sell Product” option , you can sell this product.

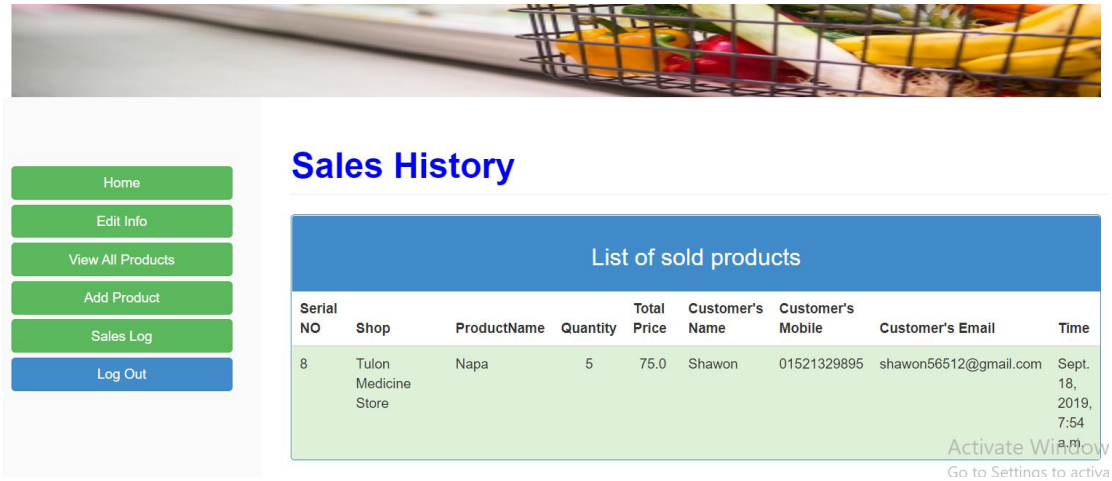


Just Product’s net Price and Buyer’s information is needed.

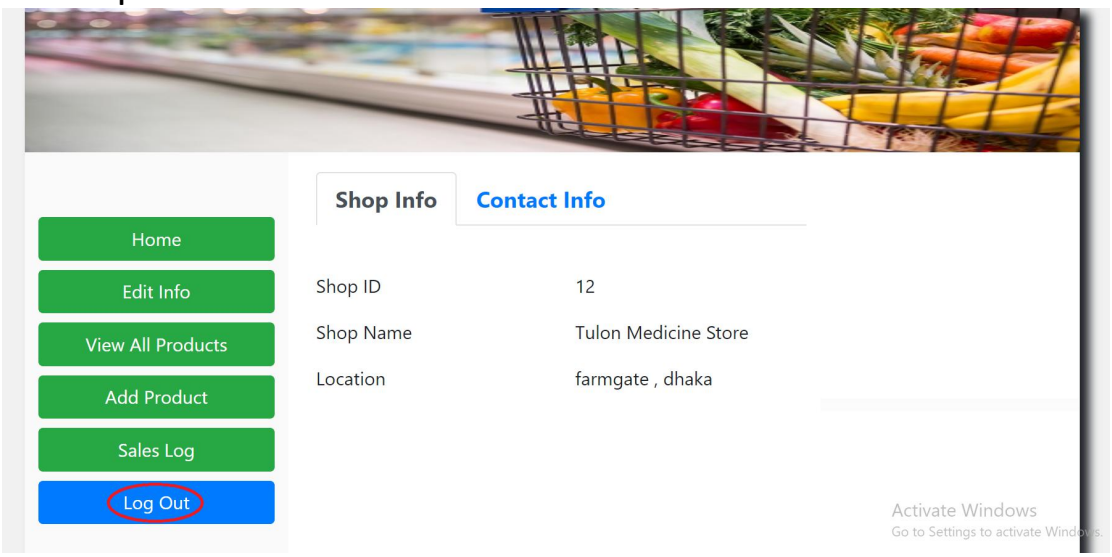
You can check your sales log from “Sales log” Option on the left of the page.



This will provide you summary of your sales done by the application.

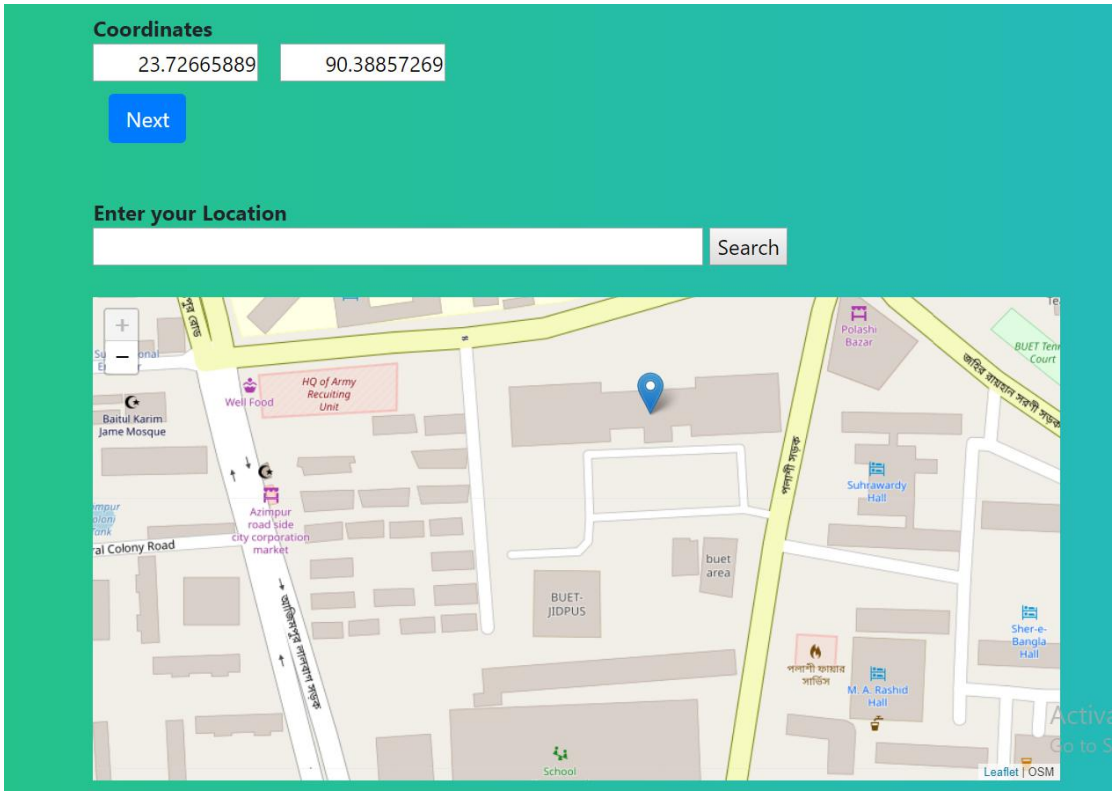


You can log yourself out from the system just by clicking “Log Out” option on the left .

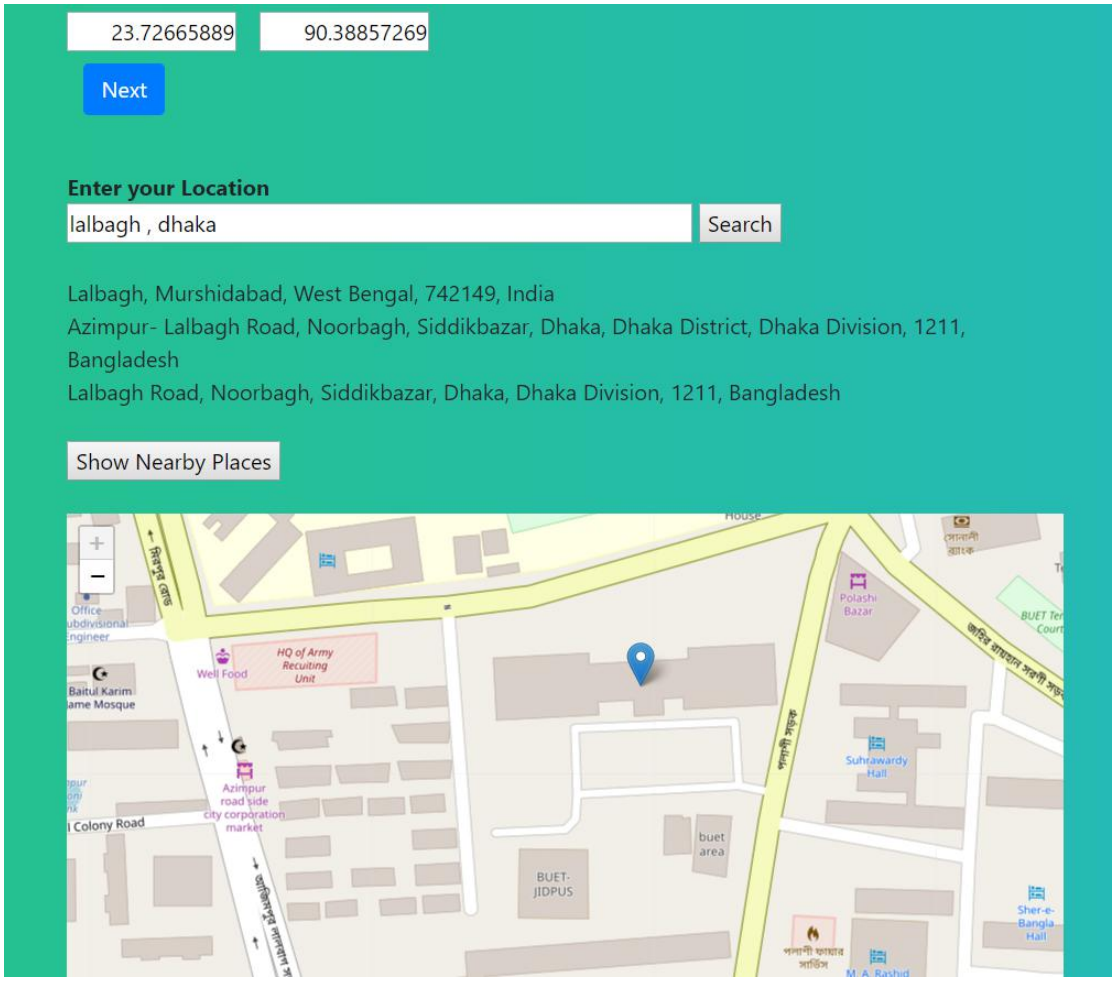


User’s perspective :

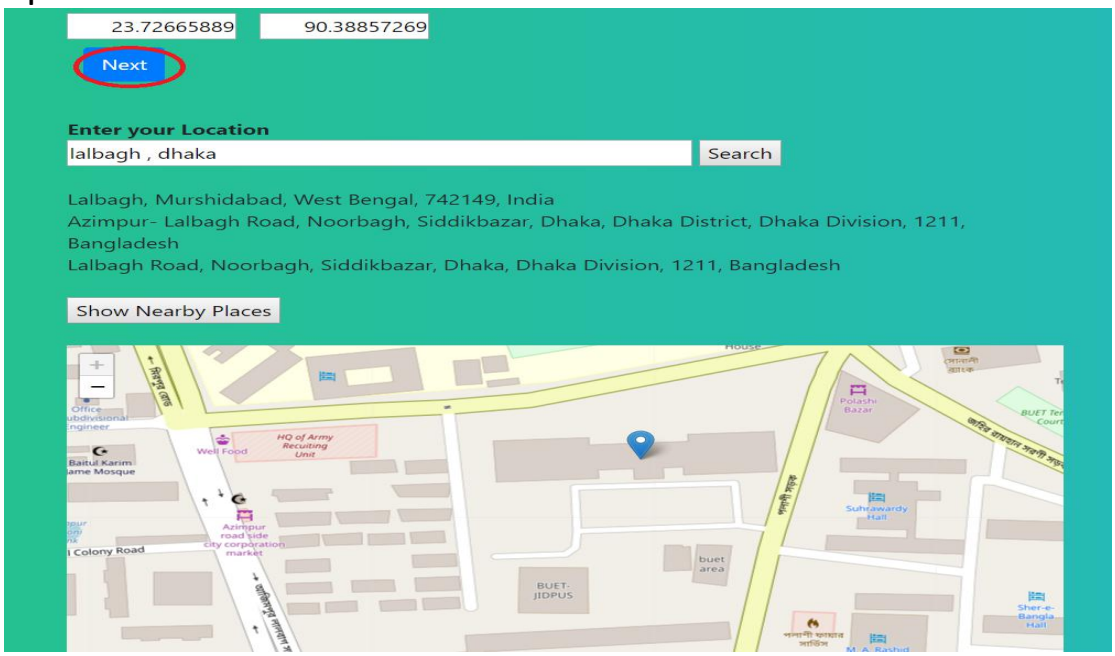
When you visit our website , we will locate you .



You can also change your location using “Enter your Location” Option.

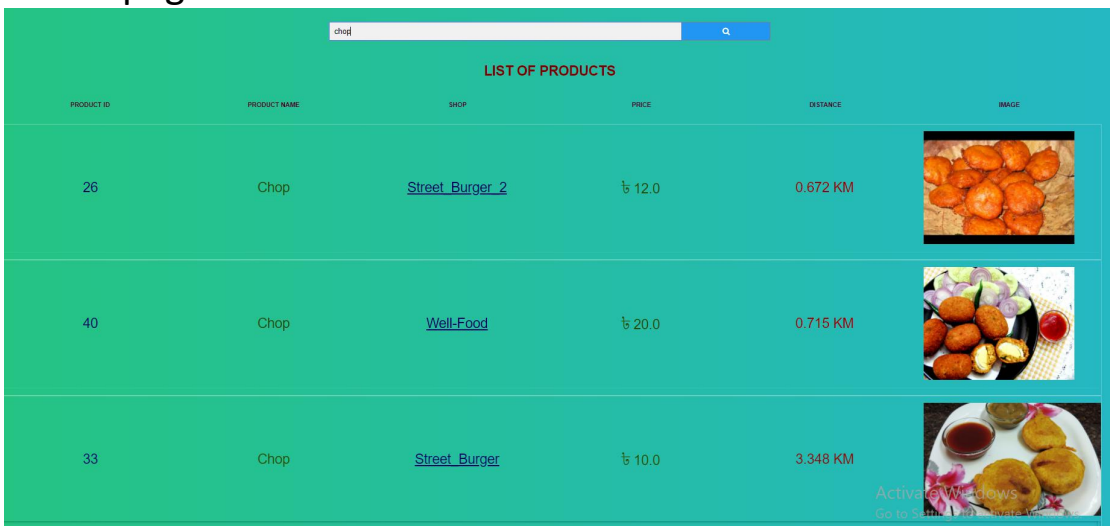


Click “Next” on the top of the page when your location is set up .



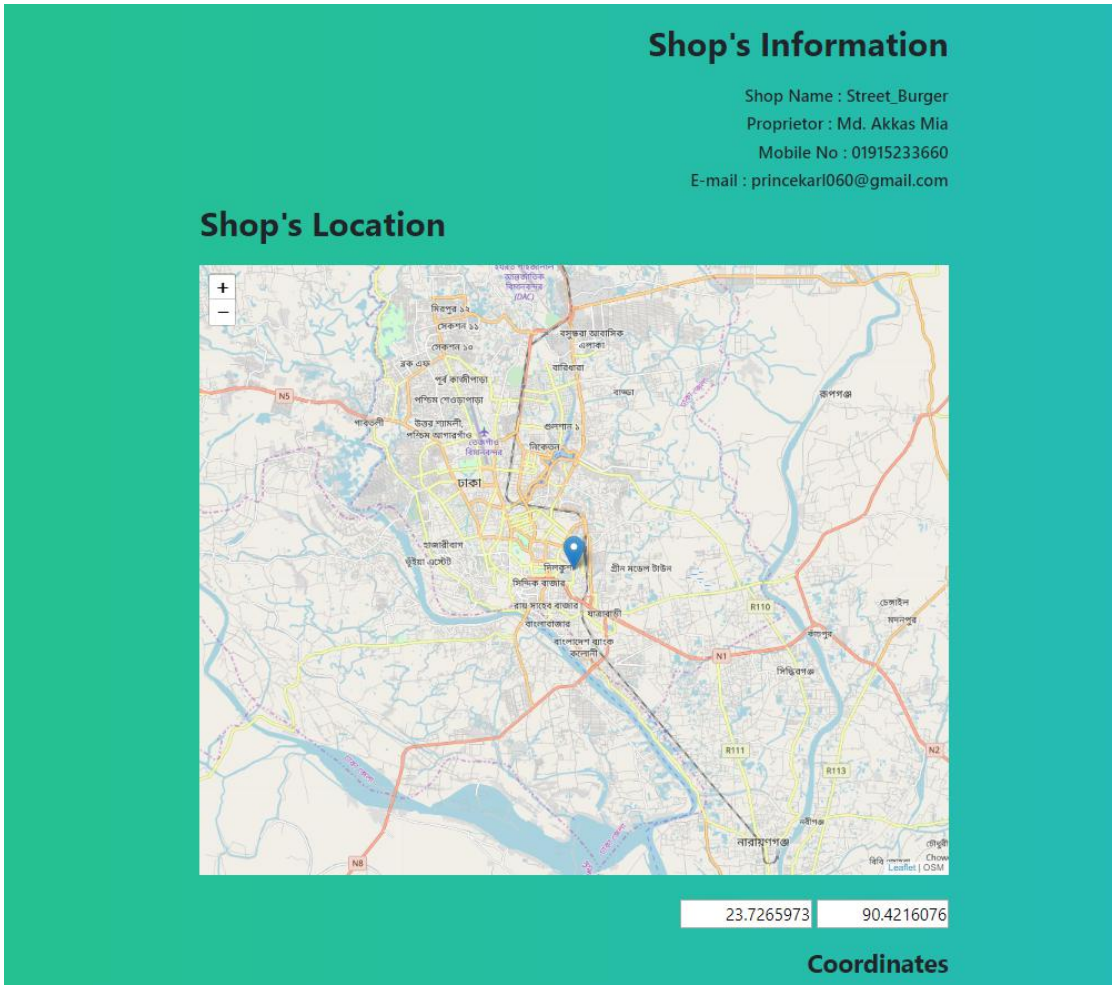
You will get to see all the products available in our system , sorted by distance .

You can search for any product using the Search bar on the top of this page .



Clicking on the product of any shop , you will get to see its details.

If you click on the shop's name , you will see its location and details so that you directly contact the shop.



System Documentation

No installation or configuration of the application is needed. Anyone with internet connection can browse our website and enjoy the service . The user has to enable his/her GPS so that their location can be retrieved .

Last of all , the concept of the application is inspired by the Google Maps and online shopping. We hope that the application will help users to find the best quality product around his/her preferable area.