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ELECTRONICS SHOP PROJECT REPORT

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Abstract: The main objective of the “**Online Electronics Shop**” is to provide the services to those who don’t want to come to the market always and tend to use the online services ,the project will provide **Buy** and **Sell** services as well as Delivery.

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Abbreviations:

- RURA: Rwanda Utility Regulatory Agency

- UI: User Interface
- ER Diagram: Entity Relationship Diagram

Chapter 1. Introduction

1.1. historical background of case study

Now a days the life style of people is different due to Covid-19. It was proved by Covid-19 that the internet can do better when people are limited to access some areas , like crowded markets, it is also clear to the factor that Online is where we can find , share and compare information about the prices of something . Knowing the real price and specifications of Electronics products like iPhone or Laptops is very hard, imagine having somewhere you can get updated information about prices of Electronics products as well as compare them from different Suppliers! This led us to the development of Online Electronics Shop Web Application.

1.2. Problem statement

Due to the desire of some traders, it is not advisable to go to any Electronics shop without having any updates about prices and specifications of laptop or smartphone or any other accessory you want to buy.

1.2.1. Inconveniences in price negotiations

It seems messy and time wasting to negotiate prices on specific products with different shopkeepers.

Solution: The best practice to defeat unfair and time wasting in price negotiations is to use e-commerce as supplier cannot do mistakes of uploading products with high prices because his competitors can have the same product of his, at affordable price.

1.2.2. Limited hours of working

According to the scenario of Covid-19, where there were limited hours which hinders people from accessing physical shop.

Solution: With Online Electronics Shop website, the market is 24 hours open, and accessed by anyone online. as client makes order, and receives the product at minimum time.

1.3. Objectives of the Project

1.3.1. To attain maximum hours of working

With Online Electronics Shop the hours of working will be 24 hours per week as clients can access the system any time

1.3.2. To reduce time taken by customers to look for products

With This website, customers will know about prices, specifications of the products and purchased products will delivered to them at their respective places. This will reduce the time taken to get your desired laptop or phone.

1.3.3. To allow Clients to access the shop wherever they are

Customers will have access to store at any time anywhere by simply using the internet without going to physical stock.

1.3.4. To allow customers to know about prices of electronics products easily

It will be easy to know about the price of any laptop, smartphone or any other electronic accessory from different suppliers by only visiting our website

1.3.5. To allow easy advertisement

With our Online Electronics Shop, suppliers will be able to advertise their products easily at no cost, by just only uploading phone , laptop or any other accessory to our system.

1.3.6. To allow easily management of inventory

It will be easier for the administrator as well as suppliers to know the flow of business because the system itself records the system transactions and business situation.

1.3.7. To track how the business is going

As this website itself records the flow of sales, it is very easy to know if the business is working very good or it is at tangent.

CHAPTER 2. System Analysis and Design

2.1 System Analysis

2.1.1 Functional requirements of the project

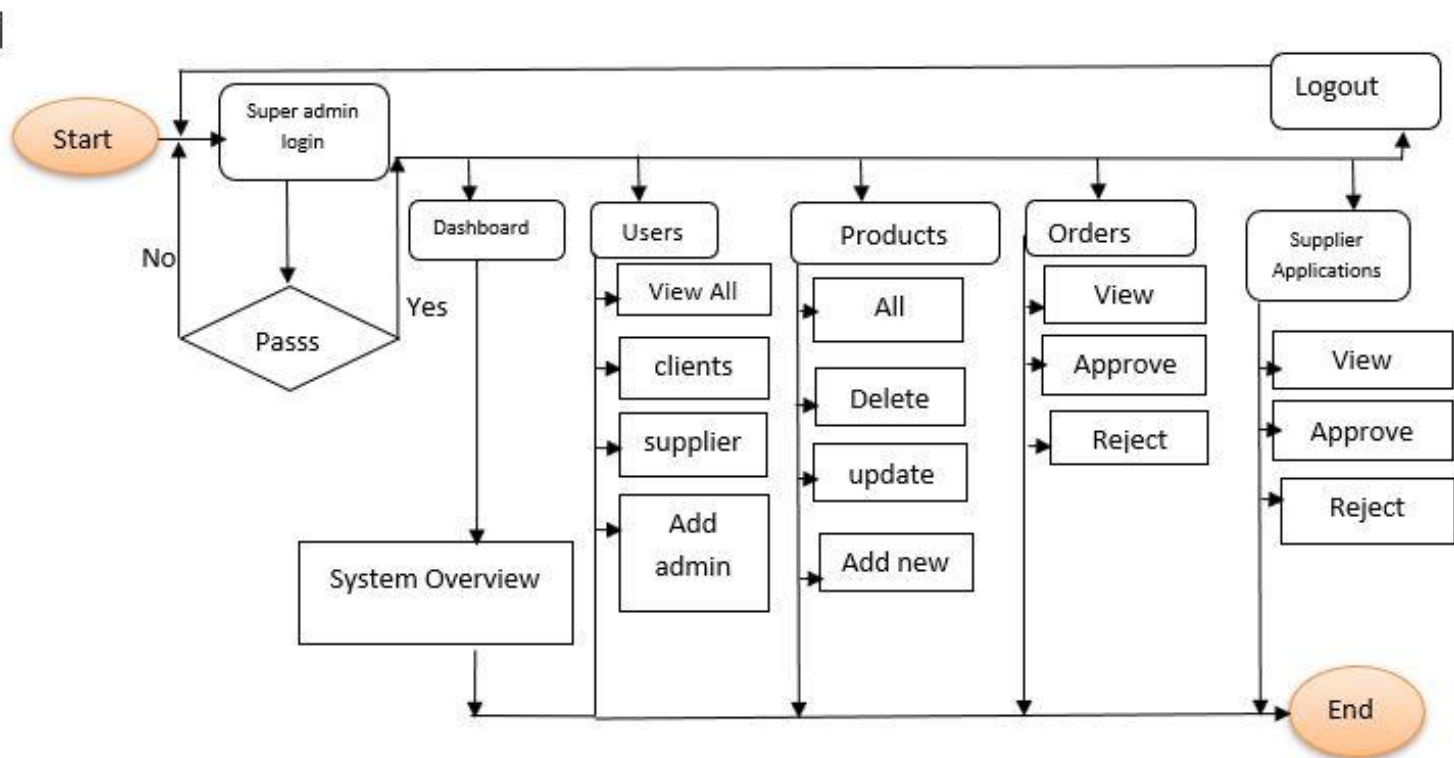


Figure 1 Login as Super Admin

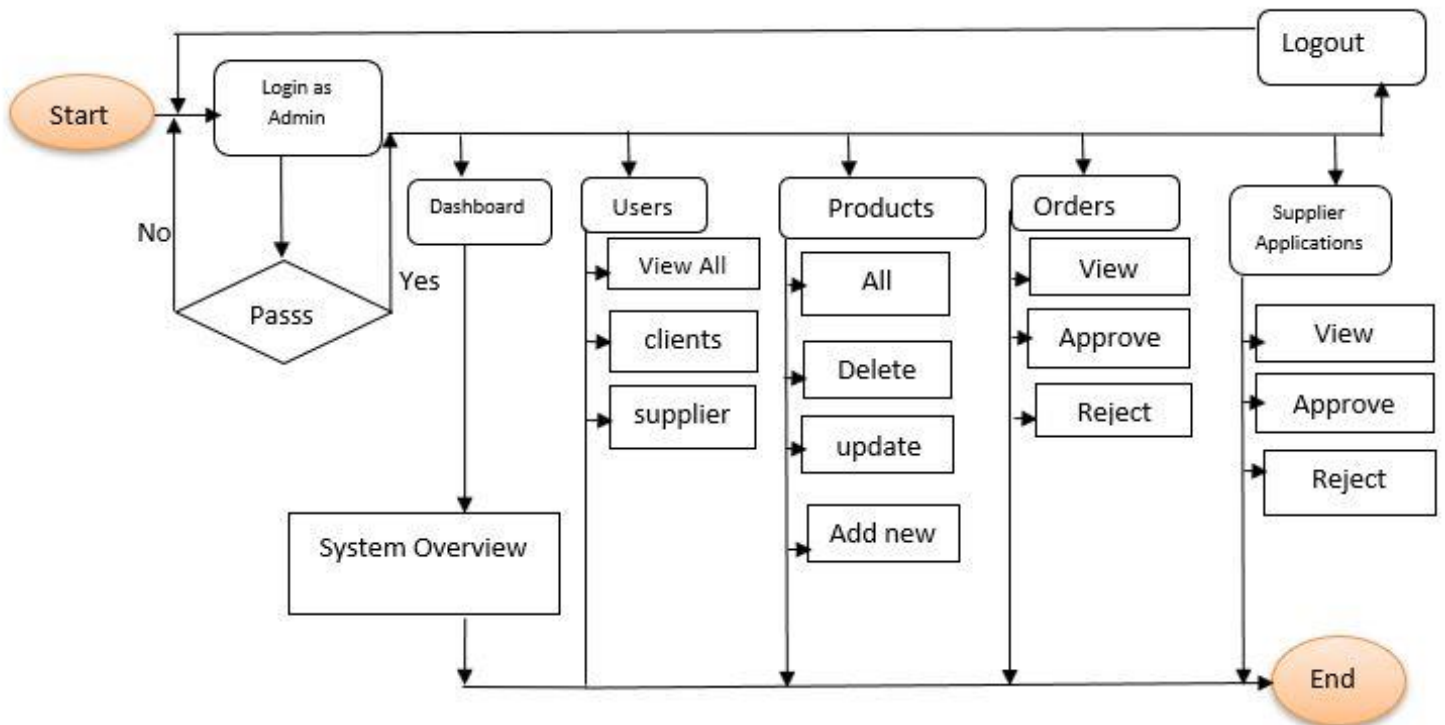


Figure 2 Login as Admin

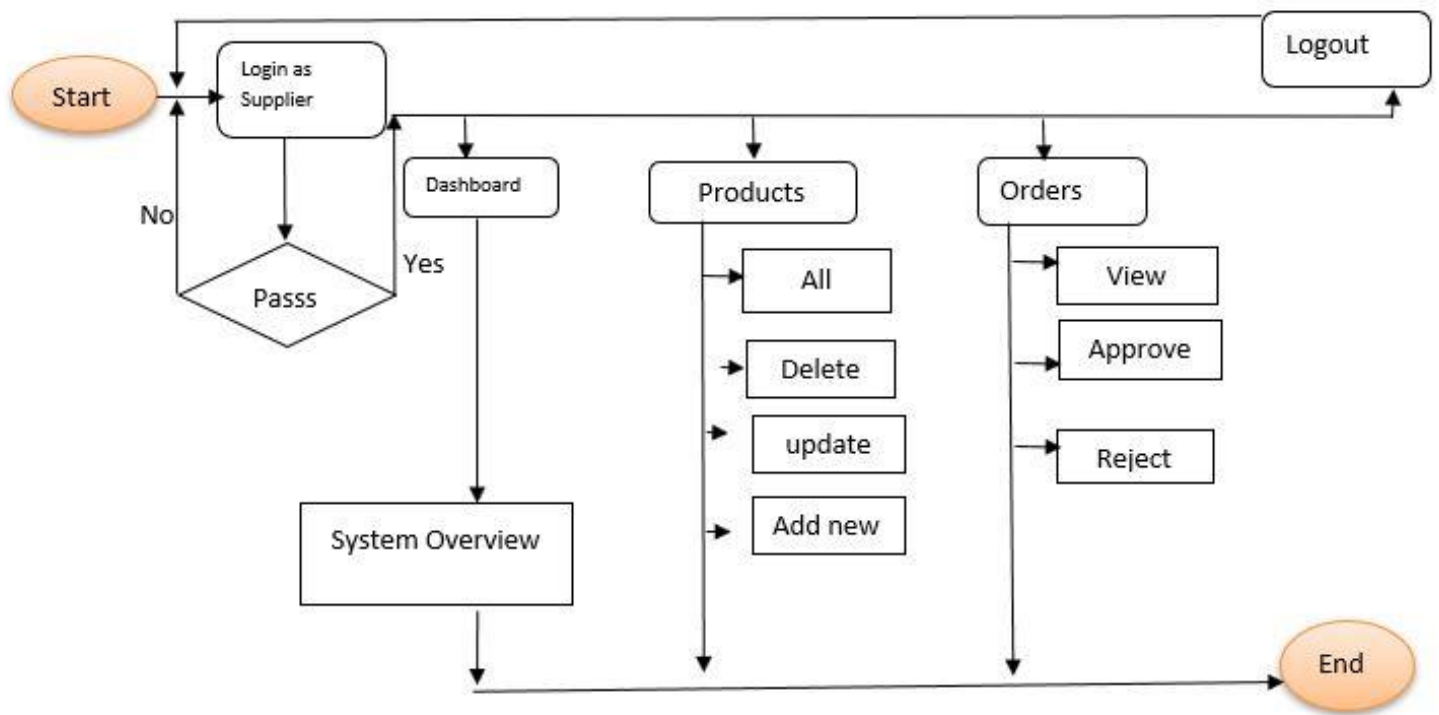


Figure 3 :Login As Supplier

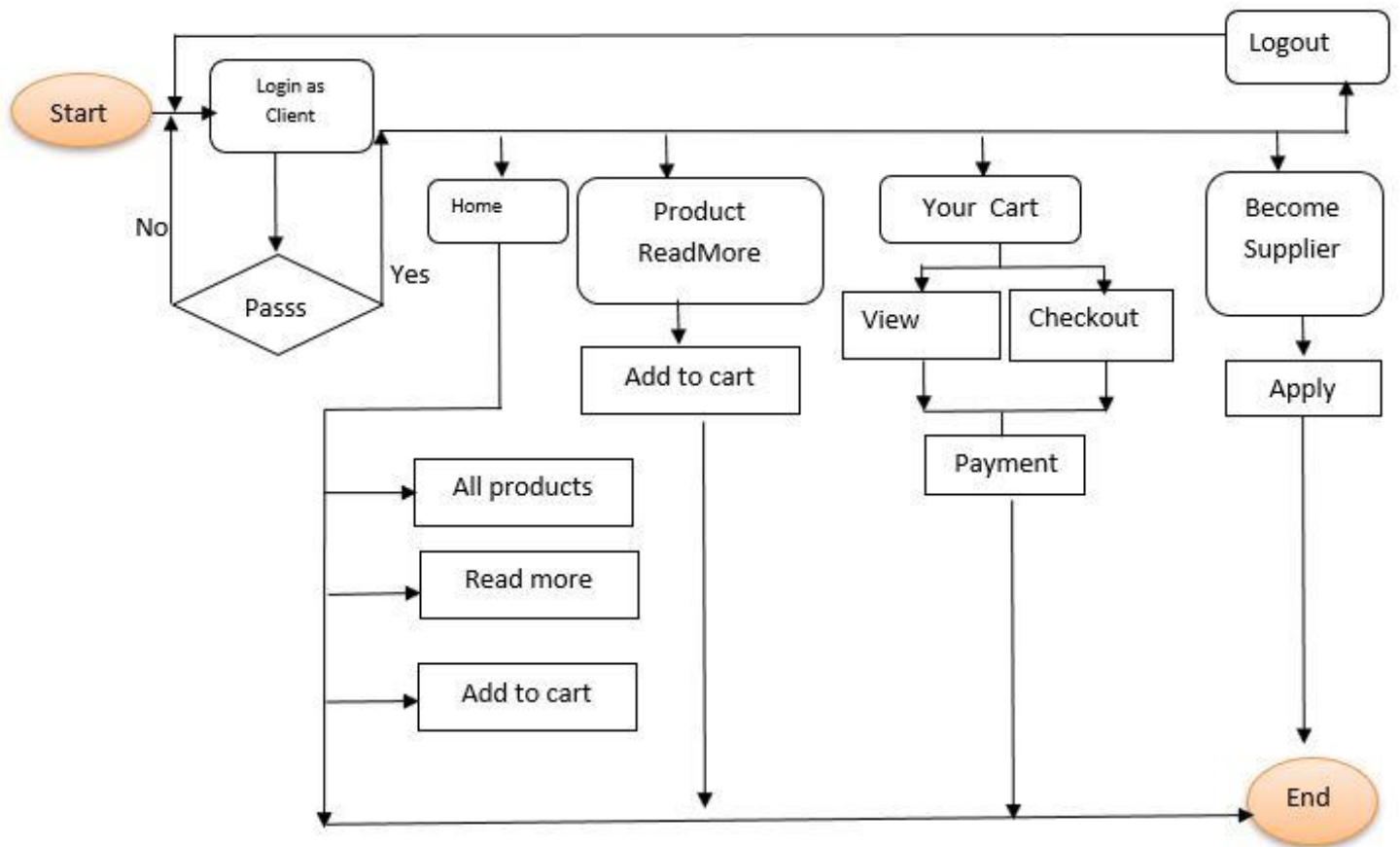


Figure 4:Login As Client

2.1.1.1 Client when you visit Online electronics Shop as client, below are the functionalities:

- ❖ **Signup functionality:** it helps clients to enter and submit information to database, so that he/she may get access to full functionalities, as only logged in users are allowed to make order.
- ❖ **Login functionality:** it authenticates users and makes him/her to make order.
- ❖ **Home functionality:** when you click on home, you are moved to webpage of available products ,hence you can scroll through them as you wish.
- ❖ **Add to cart:** you can collect all products you want on single cart so that you may not lose track on your favorites.
- ❖ **View cart functionality :** This allows you to see and update what you have in cart.
- ❖ **Become Supplier functionality :** This allows users who wishes to act as suppliers to fill application form and then apply.
- ❖ **Logout:** this helps user, admin or supplier to be logged out of the system and when you click to logout button you automatically moved to login page.

2.1.1.2 Supper Admin

Functionalities:

- ❖ **Users:** it helps supper admin to retrieve or delete all users , clients, suppliers as well as administrators , Supper Admin can also add new admin
- ❖ **Products:** it helps supper admin to retrieve, add new, update ,delete or view product details.
- ❖ **Orders:** This is for showing all orders and allows supper admin to approve or reject order
- ❖ **Supplier Applications:** This allows Supper admin to see all suppliers applications and he/she
- ❖ **Logout:** This is for security, if you click on logout, your session is expired, and no one can access supper Admin account.

2.1.1.3 Admin

Functionalities:

- ❖ **Users:** it helps admin to retrieve or delete all users , clients and suppliers.
- ❖ **Products:** it helps admin to retrieve, add new, update ,delete or view product details.
- ❖ **Orders:** This is for showing all orders and allows admin to approve or reject order
- ❖ **Supplier Applications:** This allows admin to see all suppliers applications and he/she
- ❖ **Logout:** This is for security, if you click on logout, your session is expired, , credentials are required to access Admin account.

2.1.1.4 Supplier

Functionalities:

- ❖ **Orders:** This is for showing all orders so that supplier can approve or reject it.
- ❖ **Products:** This functionality allows supplier to products he/she has upload as well as he can update, delete or view details of product.
- ❖ **Logout:** This is for security, if you click on logout, your session is expired, credentials are required to access the supplier account.
- ❖

2.1.2 Intended Users

- **Admin**
- **Clients**
- **Suppliers**
- **Accountants**
- **Shopkeepers**

2.1.2 Intended Partners

- **Banks/ATM cards**
- **Stripe**
- **RURA**
- **Suppliers**

2.2. System Design

2.2.1 User Interface /UI Design

2.2.1.1 Client UI

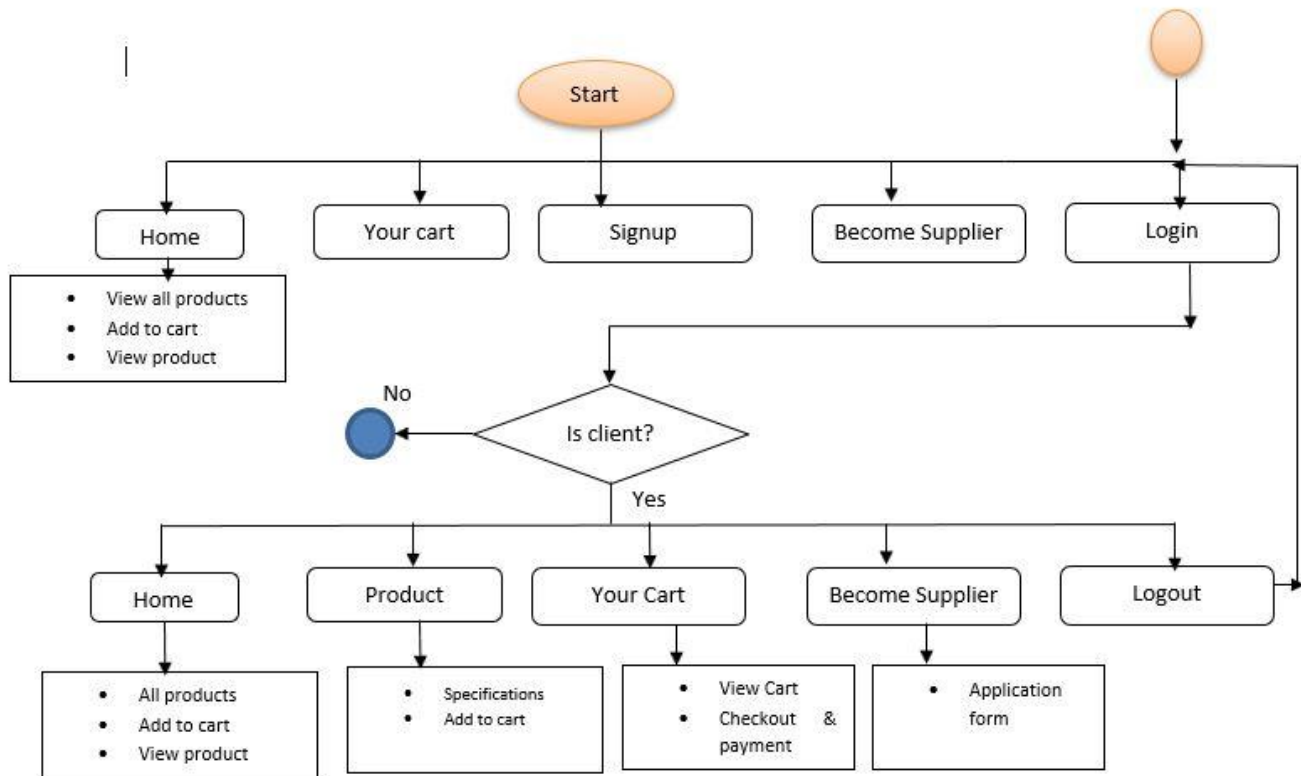


Figure 5 UI Design /Client

2.2.1.2 Supper Admin UI

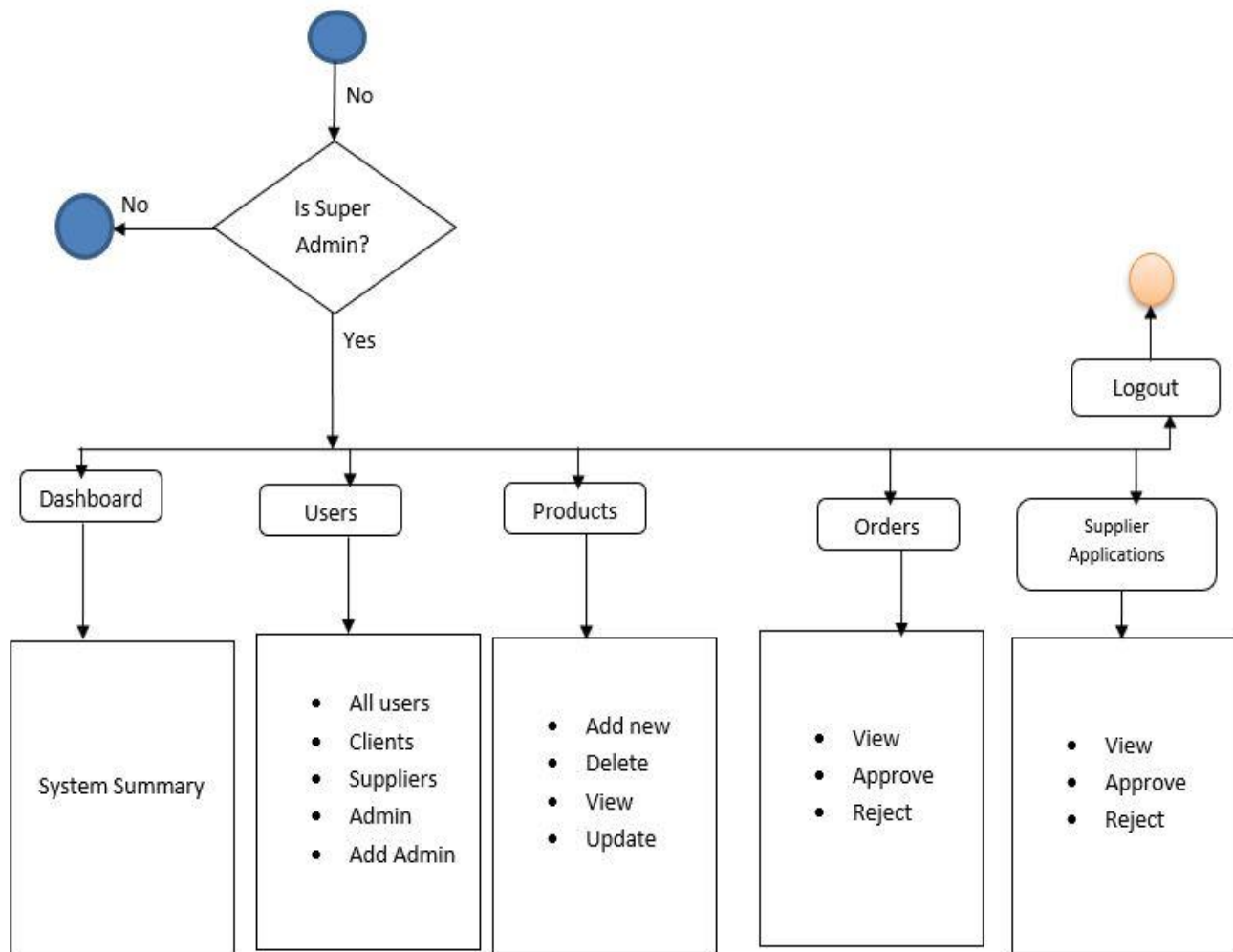


Figure 6: UI Design /Supper Admin

2.2.1.2 Admin UI

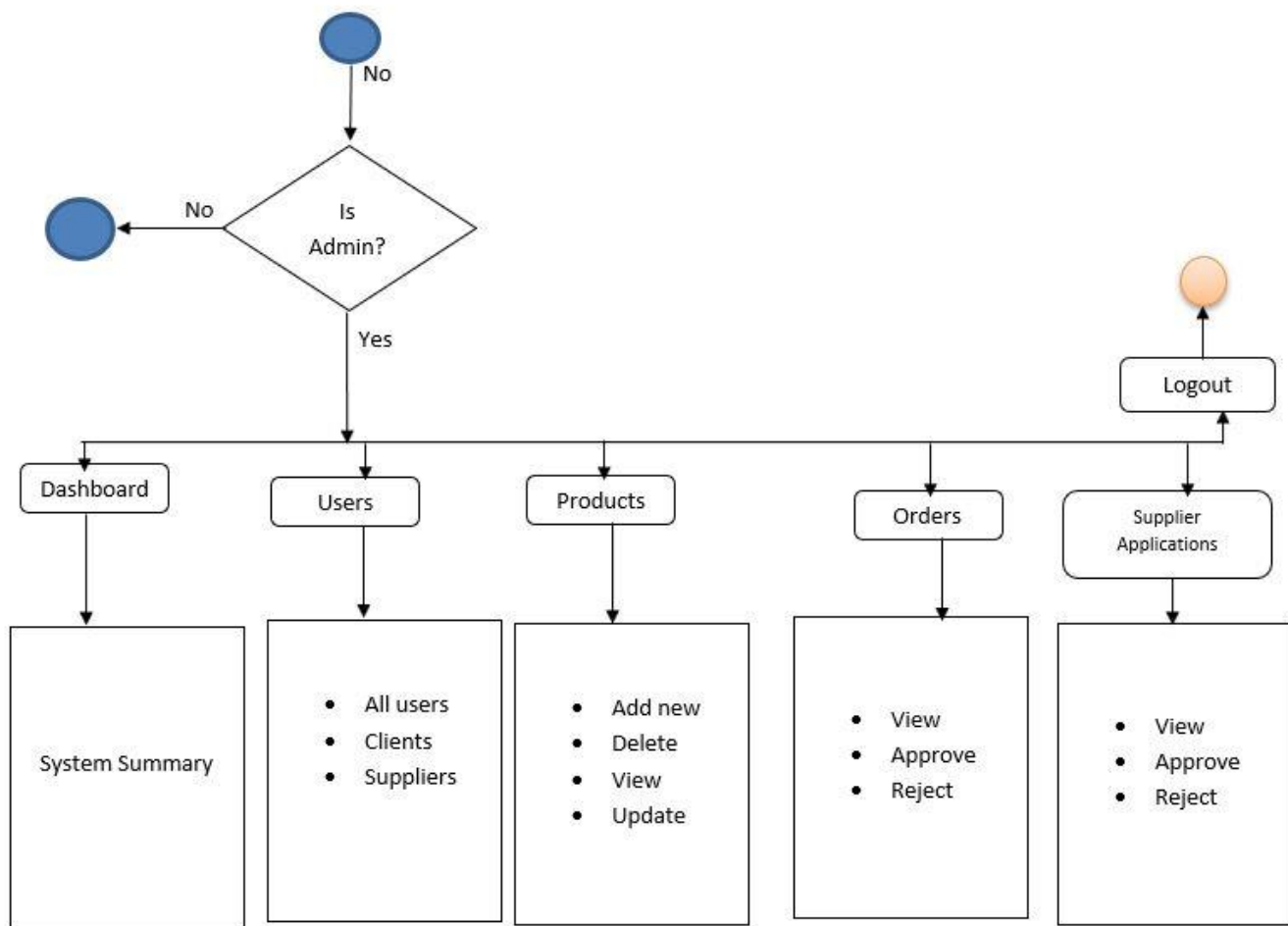


Figure 7: UI Design /Admin

2.2.1.2 Supplier UI

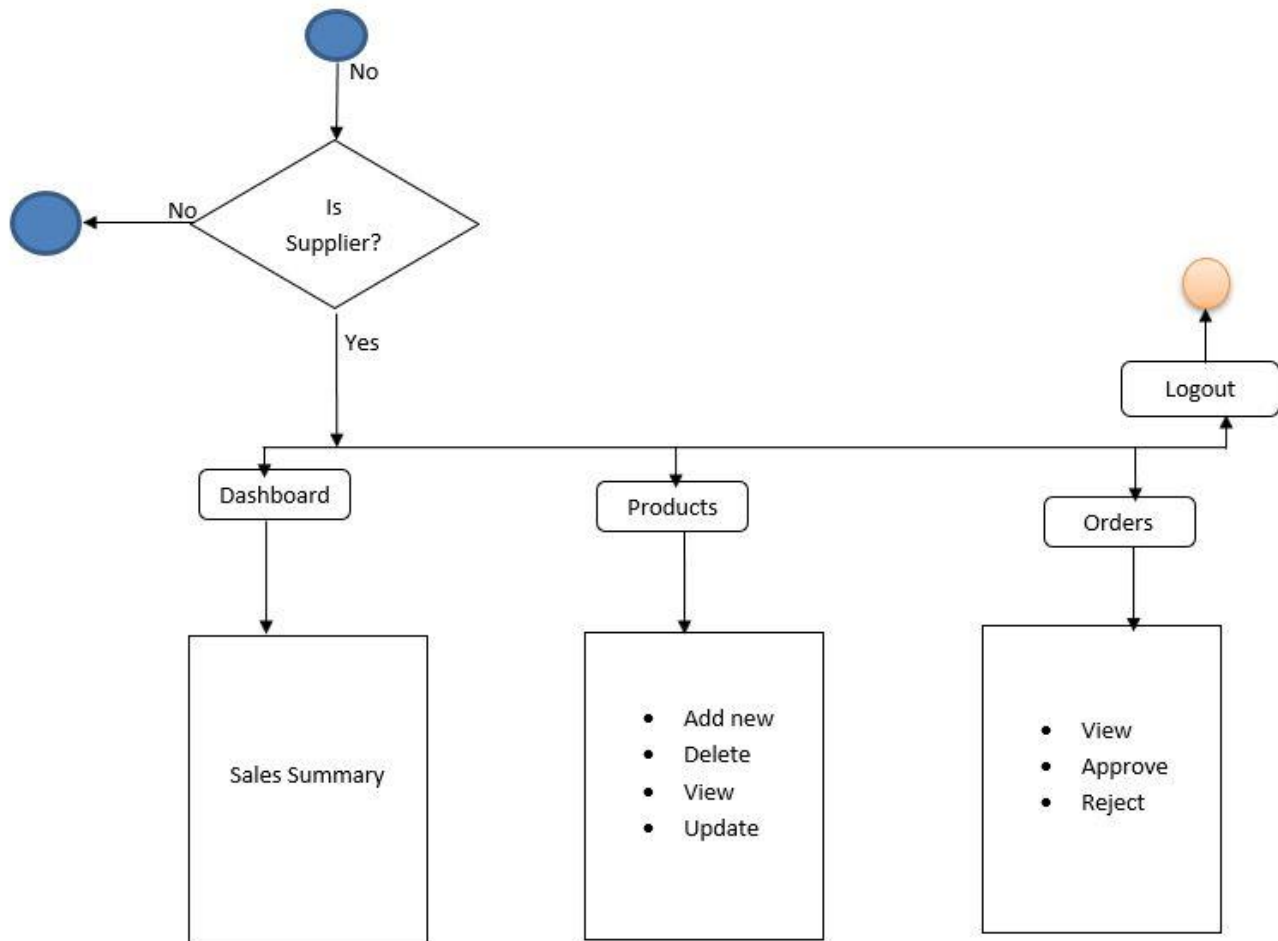


Figure 8: UI Design /Admin

2.2.2 Database Design

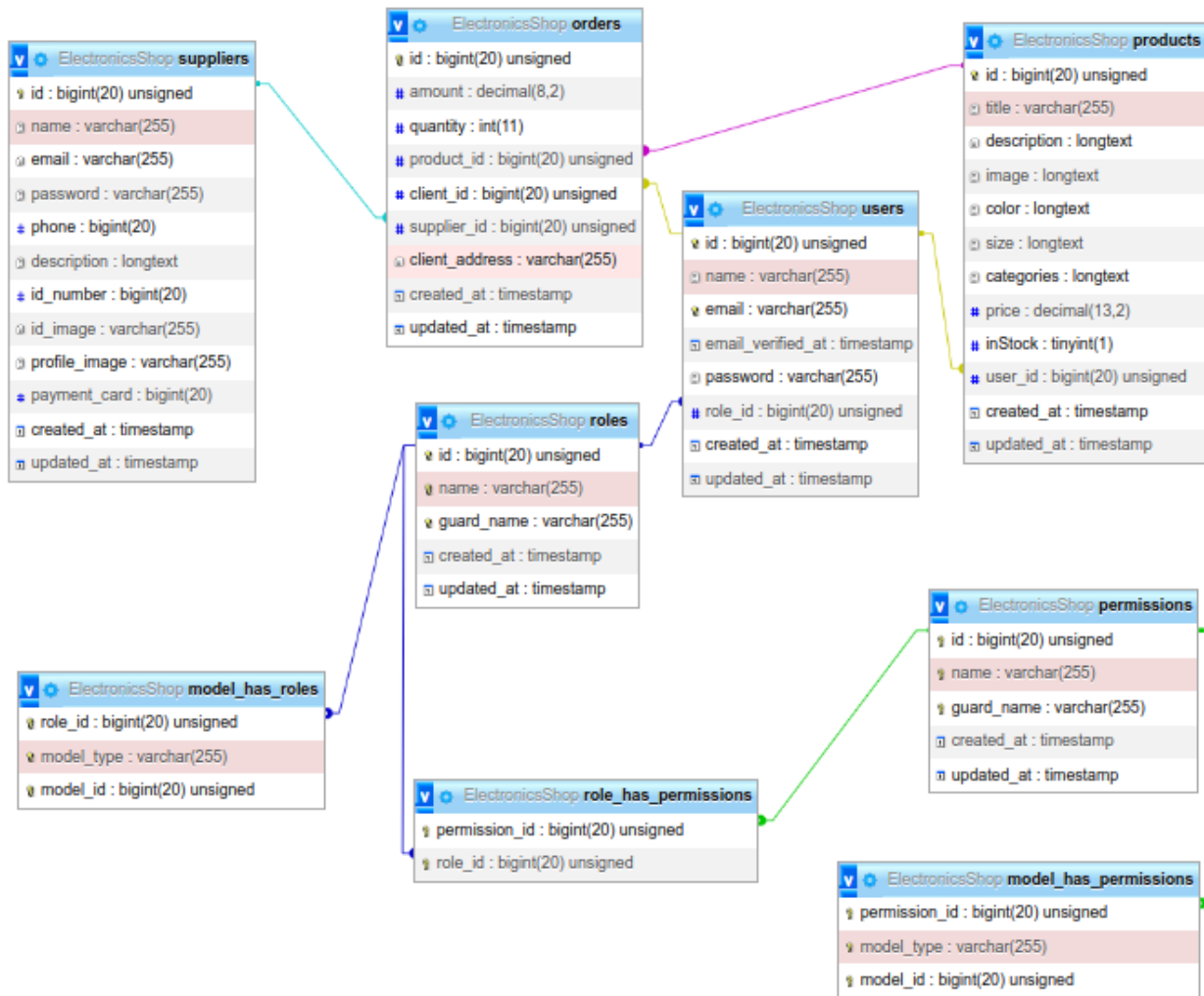


Figure 9:ER Diagram

CHAPTER 3. Implementation

3.1 Introduction of the section

In this section, we are going to talk about the functionality of Electronics Shop web application, using the screenshots of webpages and captions explaining how it works. It contains customer pages and admin pages as follows.

3.2 Client Side

3.2.1 home page

This is the landing page when you first visit our website, here you can scroll through available products, add to cart as well as read more to find more details about the product.

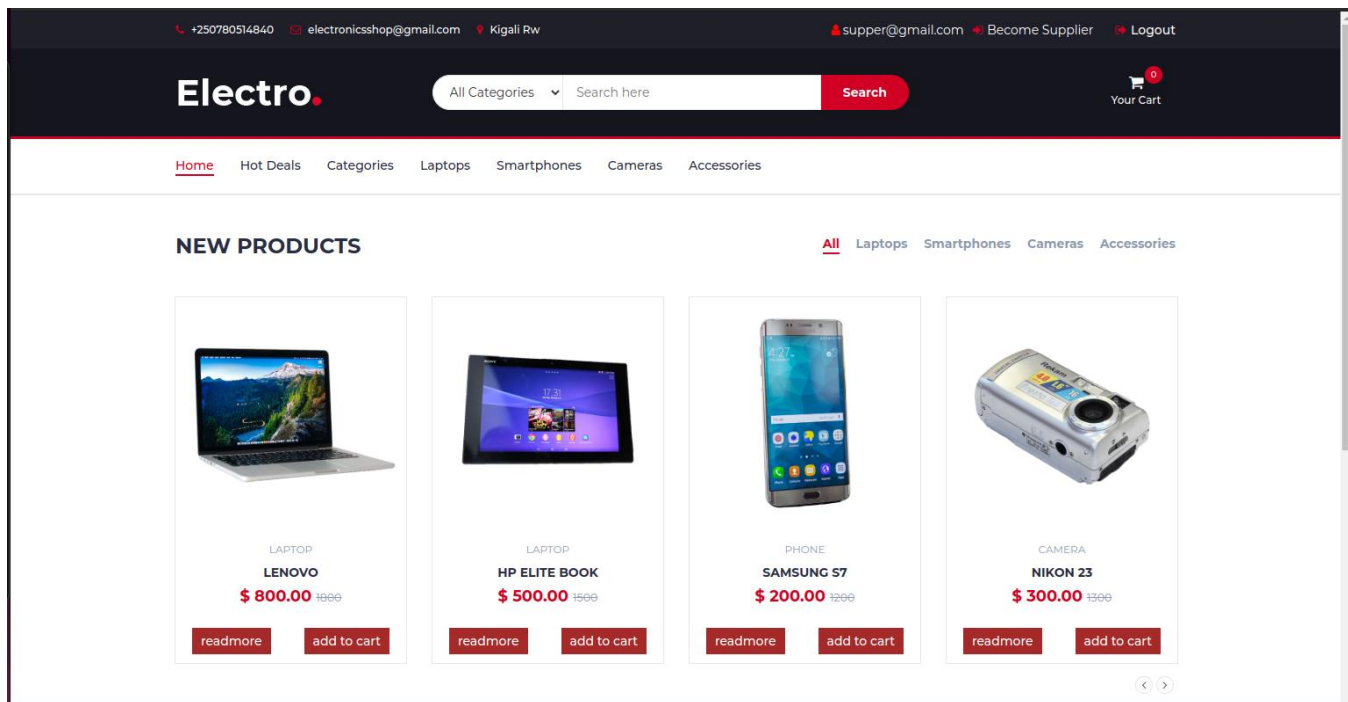


Figure 10: Home page

3.2.2 read more

this is the page you will be redirected to when you click on read more, it has all details about a single product of your choice.

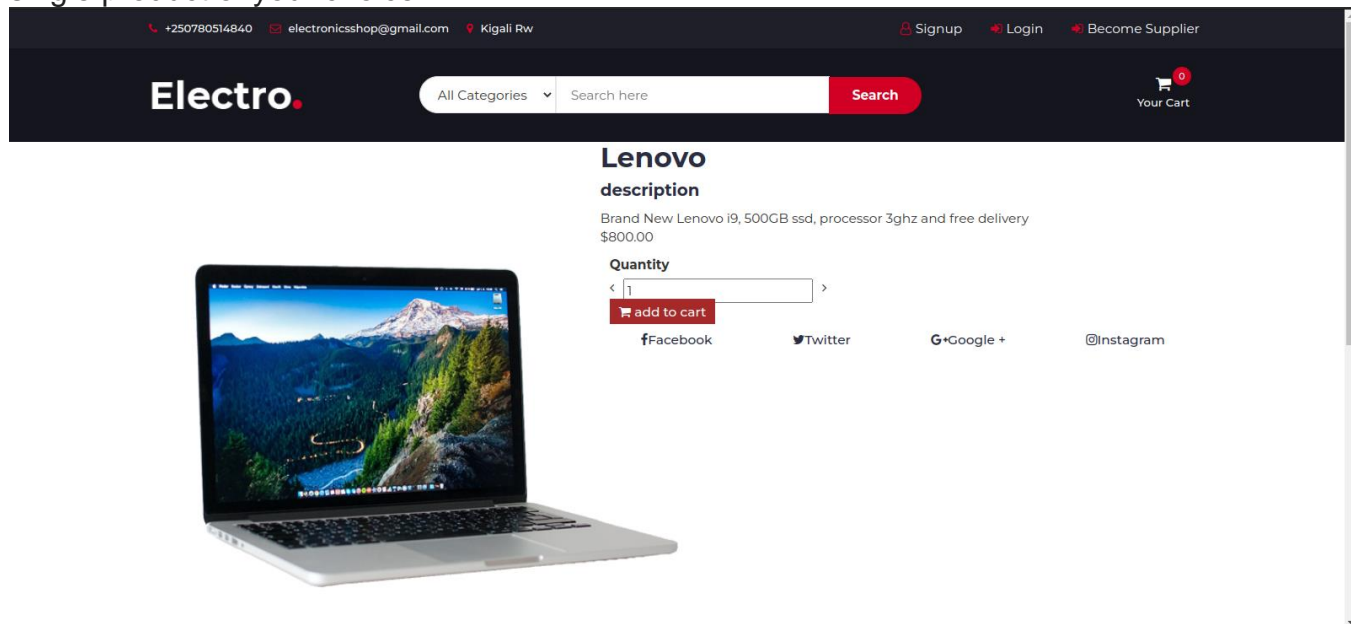


Figure 11: Read More

3.2.3 Your cart

when you click on your cart, the model shows you what you have in your cart and total price. From here you can view cart or checkout.

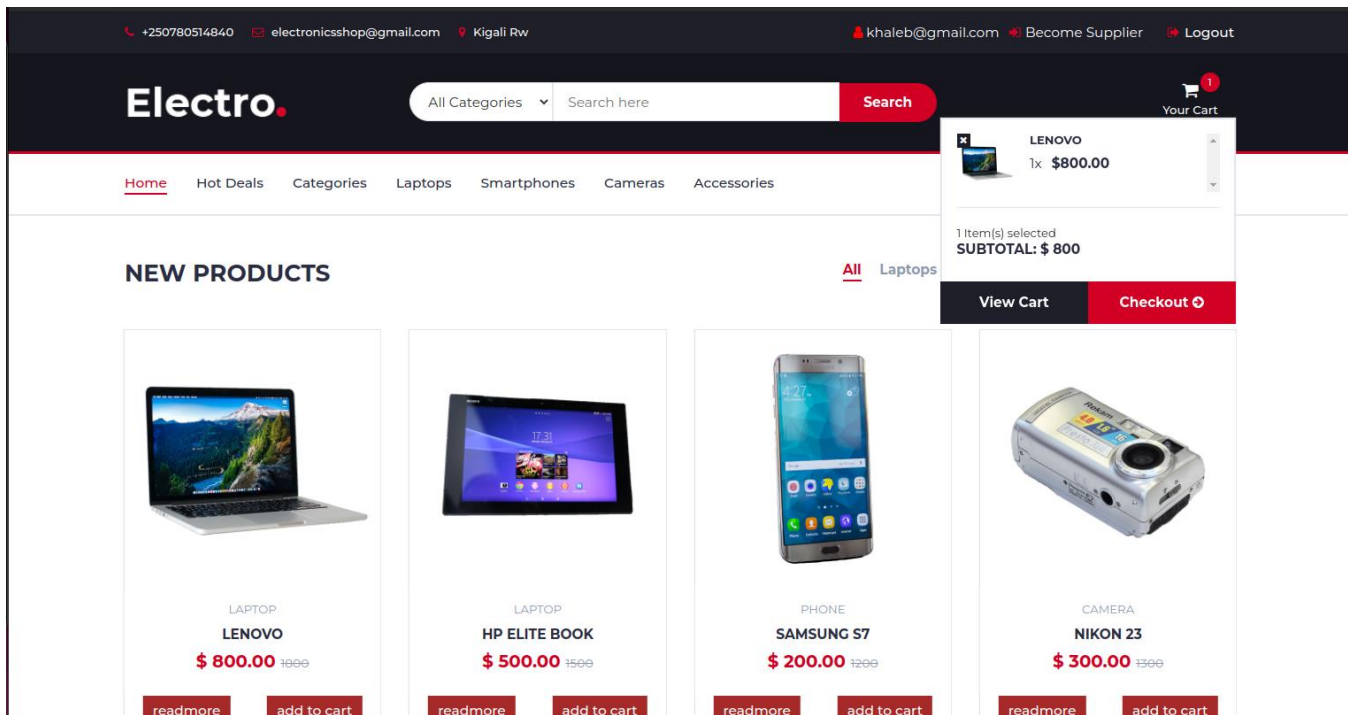


Figure 12:Your Cart

3.2.4 checkout

when you click on checkout, you are directed to payment form unless you are logged in. otherwise you may login or signup.

The screenshot displays the checkout process on the Electro website. The header includes contact information, email, location, and user options. The main content area is split: the left side features a Lenovo laptop with a price of \$800.00, and the right side contains a 'Payment Form' titled 'Payment Details'. The form has input fields for 'Name on Card' (filled with 'Sostene'), 'Card Number' (filled with '4242424242424242'), 'CVC' (filled with '123'), 'Expiration Month' (filled with '12'), and 'Expiration Year' (filled with '2028'). A red 'Pay Now (\$800)' button is at the bottom of the form. The footer contains links for 'ABOUT US', 'CATEGORIES', and 'SERVICE'.

Electro. All Categories Search here Search Your Cart

Payment Form

Payment Details

Name on Card

Sostene

Card Number

4242424242424242

CVC

123

Expiration Month

12

Expiration Year

2028

Pay Now (\$800)

Lenovo

1x\$800.00

ABOUT US

Your satisfaction is our Motive.

KN 15 ave

+250 787938344

CATEGORIES

Hot deals

Laptops

Smartphones

SERVICE

Product Delivery

Figure 13:Checkout

3.2.5 signup

when you click on signup, the modal form to fill your details is displayed, then you can fill them and click on signup to be registered, hence you are allowed to login.

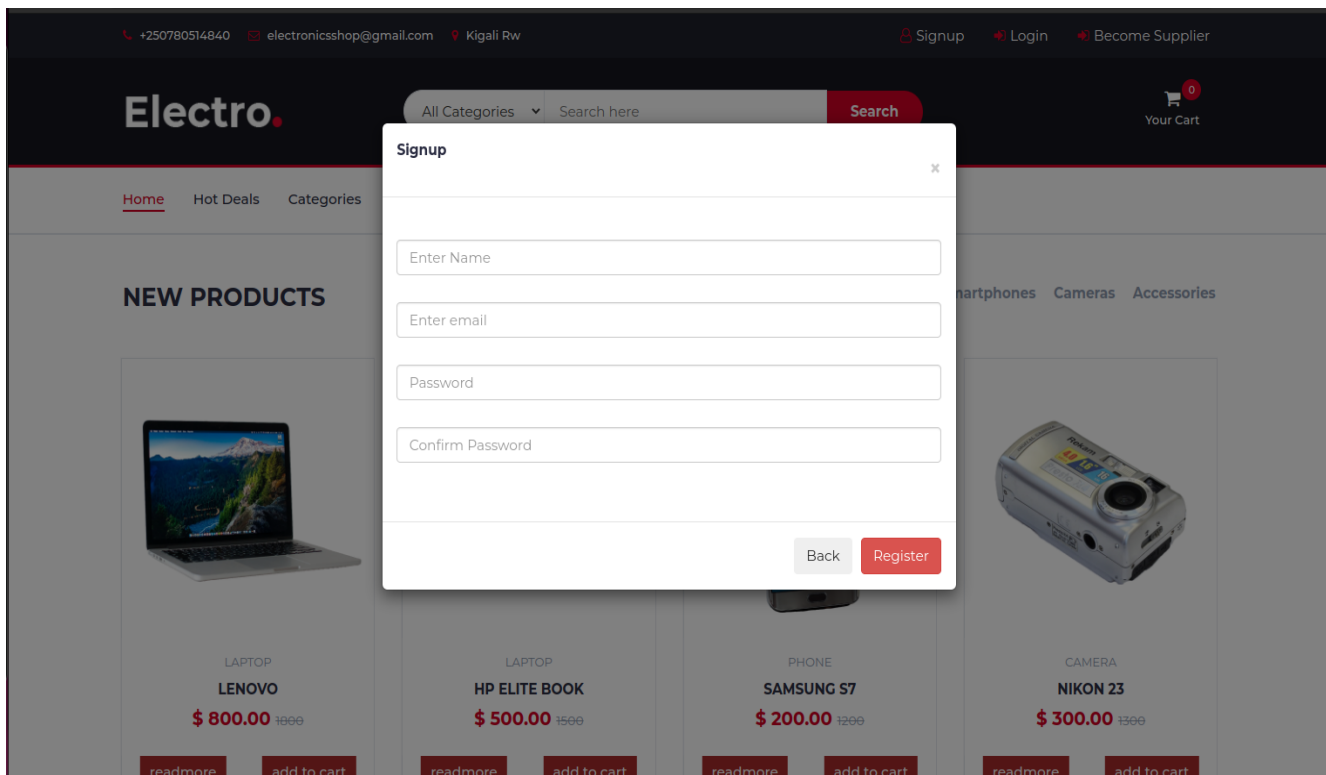


Figure 14:Signup

3.2.6 login

when you click on login, the modal to fill your email and password is displayed, when you click on login and you have valid credentials, you are automatically logged in and you make checkout and payment to your desired products

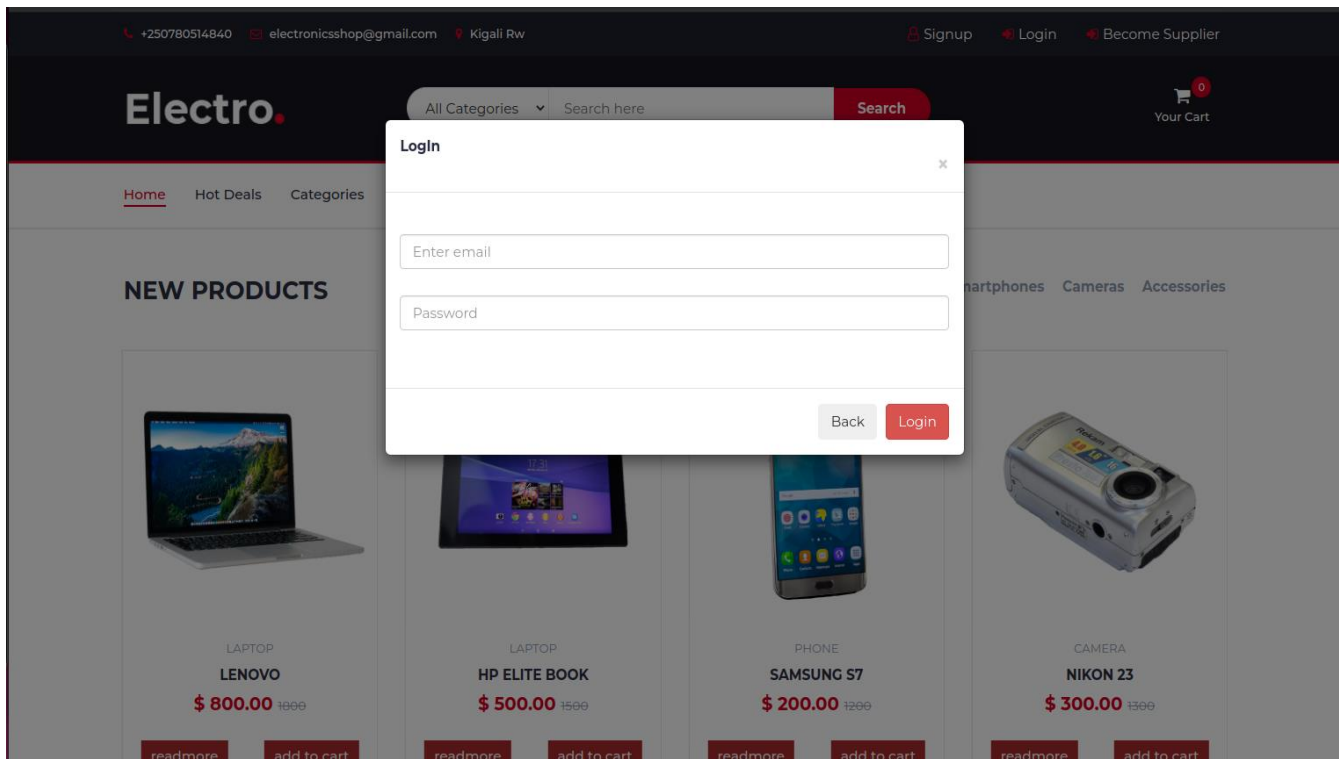


Figure 15:Login

3.2.7 checkout

when you click on checkout and you are logged in, the form to fill your card information is displayed along with the products details from your cart

The screenshot displays the checkout interface of the 'Electro' website. At the top, a dark navigation bar contains contact information (+250780514840, electronicsashop@gmail.com, Kigali RW) and user links (khaleb@gmail.com, Become Supplier, Logout). Below this, the 'Electro' logo is positioned next to a search bar and a 'Search' button. A shopping cart icon with a red notification badge is also present.

The main content area is split into two columns. The left column features a product image of a silver laptop with a mountain landscape on its screen. Below the image, the text 'Lenovo' and '1x\$800.00' are visible, along with a small close button. The right column is titled 'Payment Form' in red and contains a 'Payment Details' section. This section includes input fields for 'Name on Card' (containing 'Sostene'), 'Card Number' (containing '4242424242424242'), 'CVC' (containing '123'), 'Expiration Month' (containing '12'), and 'Expiration Year' (containing '2028'). A red 'Pay Now (\$800)' button is located at the bottom of the form.

The footer is a dark bar with three columns: 'ABOUT US' (with the tagline 'Your satisfaction is our Motive', address 'KN 15 ave', and phone '+250 787938344'), 'CATEGORIES' (listing 'Hot deals', 'Laptops', and 'Smartphones'), and 'SERVICE' (listing 'Product Delivery').

Figure 16:Checkout

3.2.8 Payment

after filling valid information of your card and you may click on the red button that tells you to pay amount equivalent to the total cost of your cart products .
after you click on pay, the flash message is displayed telling you that your payment is success and the order directly placed and is in process.

The screenshot displays the 'Payment Form' on the Electro website. The form is titled 'Payment Details' and features a green success message 'Payment successfull' at the top. Below this, there are input fields for 'Name on Card' (containing 'Sostene'), 'Card Number', 'CVC' (with an example 'ex: 311'), 'Expiration Month' (containing '12'), and 'Expiration Year' (containing '2028'). A red 'Pay Now (\$800)' button is at the bottom of the form. To the left of the form, there is a product image of a Lenovo laptop with the text 'Lenovo 1x\$800.00'. The website header shows the 'Electro' logo, a search bar, and a shopping cart icon with a red notification bubble. The footer contains links for 'ABOUT US', 'CATEGORIES', and 'SERVICE'.

Figure 17:Payment

3.3 Admin Side

3.3.1 login as super admin

when you login as supper admin, the dashboard homepage is displayed that shows the system summary and side bar where you can see all users, products, orders, supplier applications, settings and logout.

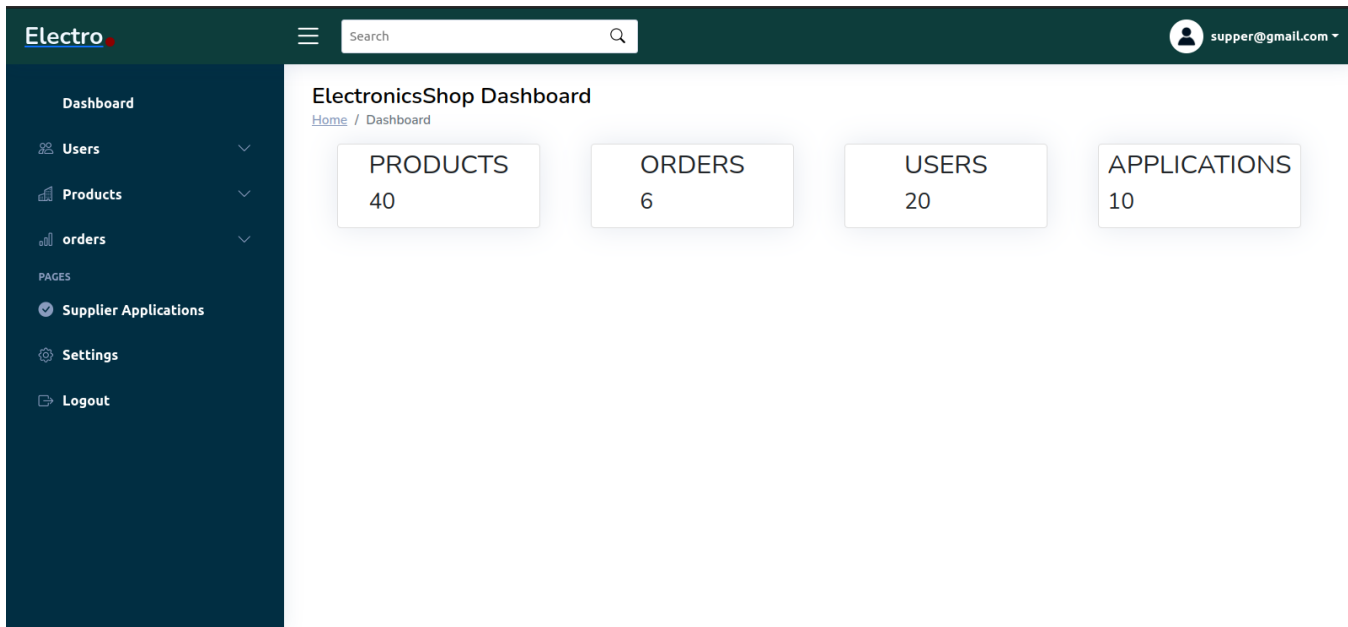


Figure 18: Supper Admin Dashboard

When you click on Users,
You can see

3.3.2 All users

Electro Search supper@gmail.com

Users Table

Show entries Search:

ID	Name	Email	Role	Created At	Updated At	Action
7	Abdoulkalim Bazambanza	bzkarim250@gmail.com	Super Admin	2022-12-05 16:48:31	2022-12-05 16:48:31	View Delete
8	superadmin	supper@gmail.com	Super Admin	2022-12-05 16:51:04	2022-12-05 16:51:04	View Delete
9	admin	admin@gmail.com	Admin	2022-12-05 16:53:02	2022-12-05 16:53:02	View Delete
10	sostene	sostene@gmail.com	Admin	2022-12-05 16:54:55	2022-12-05 16:54:55	View Delete
11	Supplier	supplier@gmail.com	Supplier	2022-12-05 17:09:06	2022-12-05 17:09:06	View Delete
12	supplier 2	supper2@gmail.com	Supplier	2022-12-05 17:09:15	2022-12-05 17:09:15	View Delete
13	Khaleb	khaleb@gmail.com	Super Admin	2022-12-05 17:58:05	2022-12-05 17:58:05	View Delete

Showing 1 to 7 of 7 entries Previous 1 Next

Figure 19:All users

3.3.3 All Admins

All Admins
[Home](#) / [Tables](#) / [Admin](#)

Users Table

Show entries Search:

#	Name	Email	Role	Created At	Updated At	Action
1	admin	admin@gmail.com		2022-12-05 16:53:02	2022-12-05 16:53:02	View Delete
2	sostene	sostene@gmail.com		2022-12-05 16:54:55	2022-12-05 16:54:55	View Delete

Showing 1 to 2 of 2 entries Previous Next

Figure 20:All Admins

3.3.4 All suppliers

All Supplies
[Home](#) / [Tables](#) / [Supplies](#)

Users Table

Show entries Search:

#	Name	Email	Role	Created At	Updated At	Action
1	Supplier	supplier@gmail.com		2022-12-05 17:09:06	2022-12-05 17:09:06	View Delete
2	supplier 2	supplier2@gmail.com		2022-12-05 17:09:15	2022-12-05 17:09:15	View Delete

Showing 1 to 2 of 2 entries Previous Next

Figure 21:All Admins

3.3.5 Products

when you click products, you will see all products uploaded on the system, you can delete update and add new product here

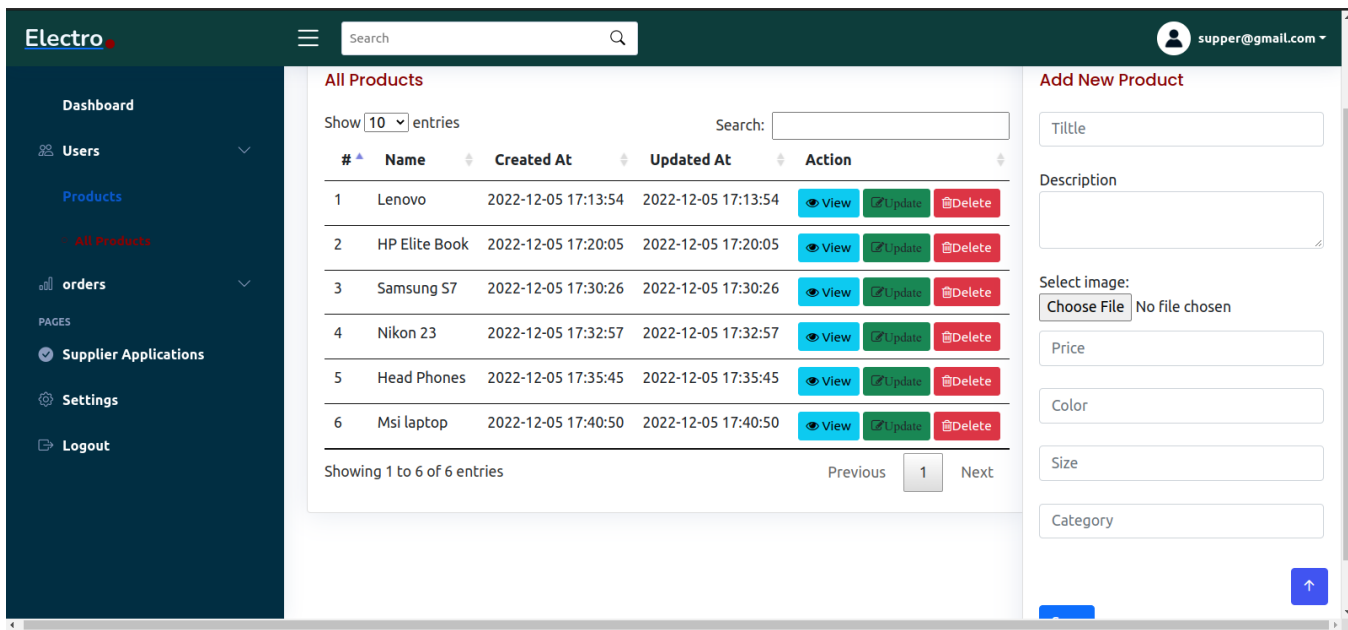


Figure 22: All products

3.3.6 Supplier Applications

If you click on supplier applications, you will see the list of all applicants to become supplier, you can view details ,approve or reject the request.

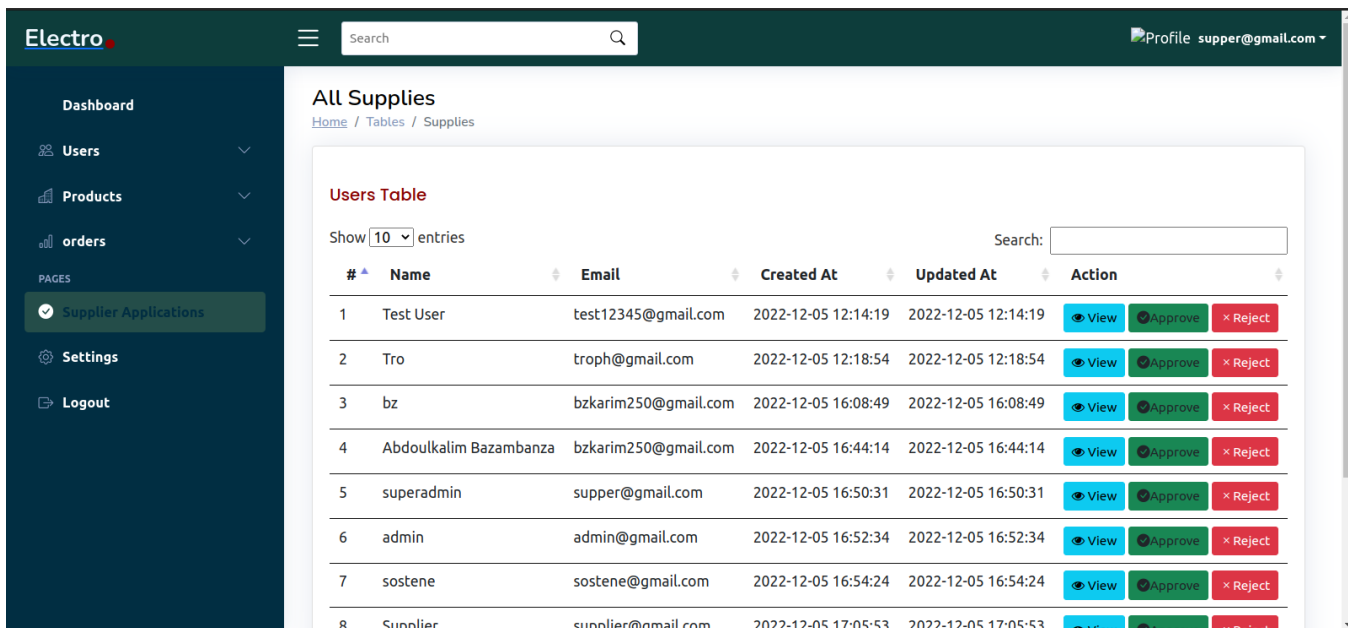


Figure 23: Supplier Applications

3.4 Login as Admin

Admin will the same thing as the supper admin but he cannot see the list of admins or add/assign new admin.

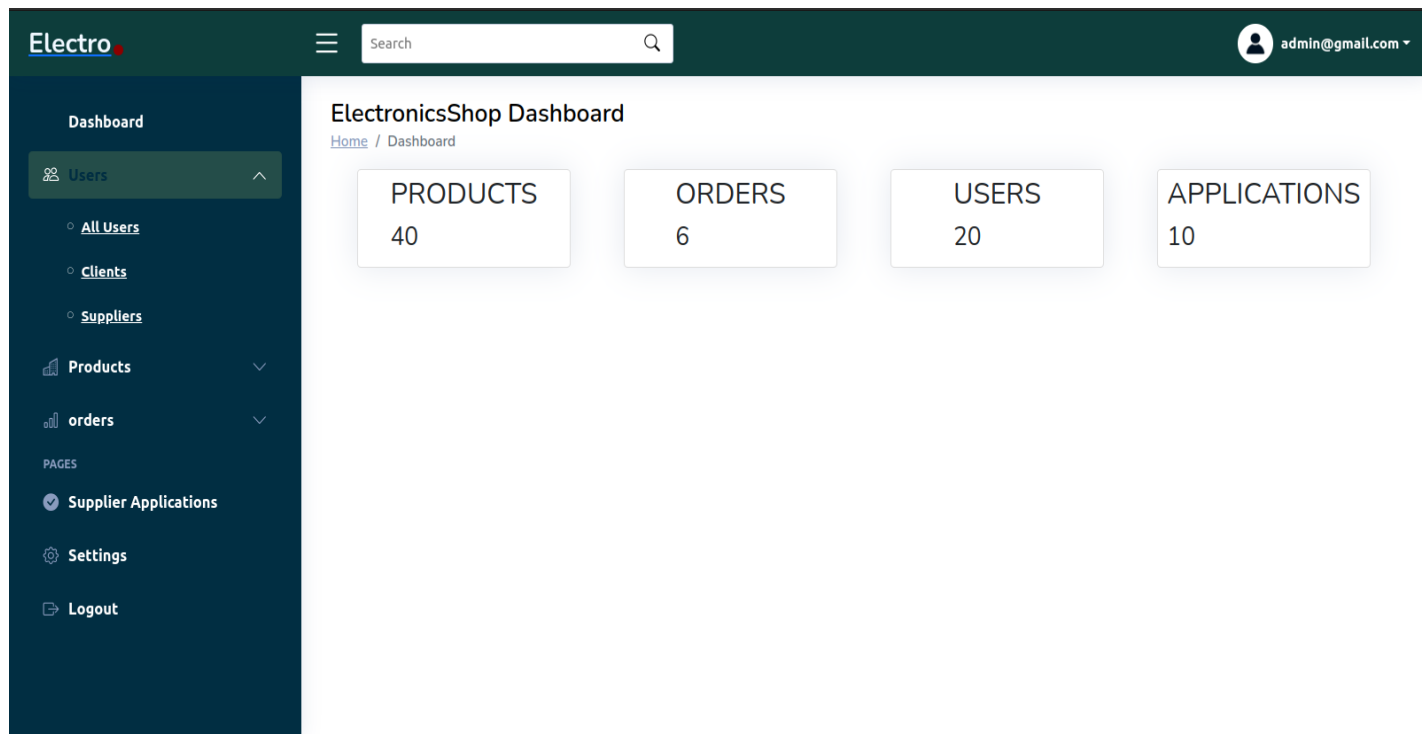


Figure 24:Admin Dashboard

3.5 Login as Supplier

Supplier can also see the same things as admin but he can not see the list of users ,and supplier applications.

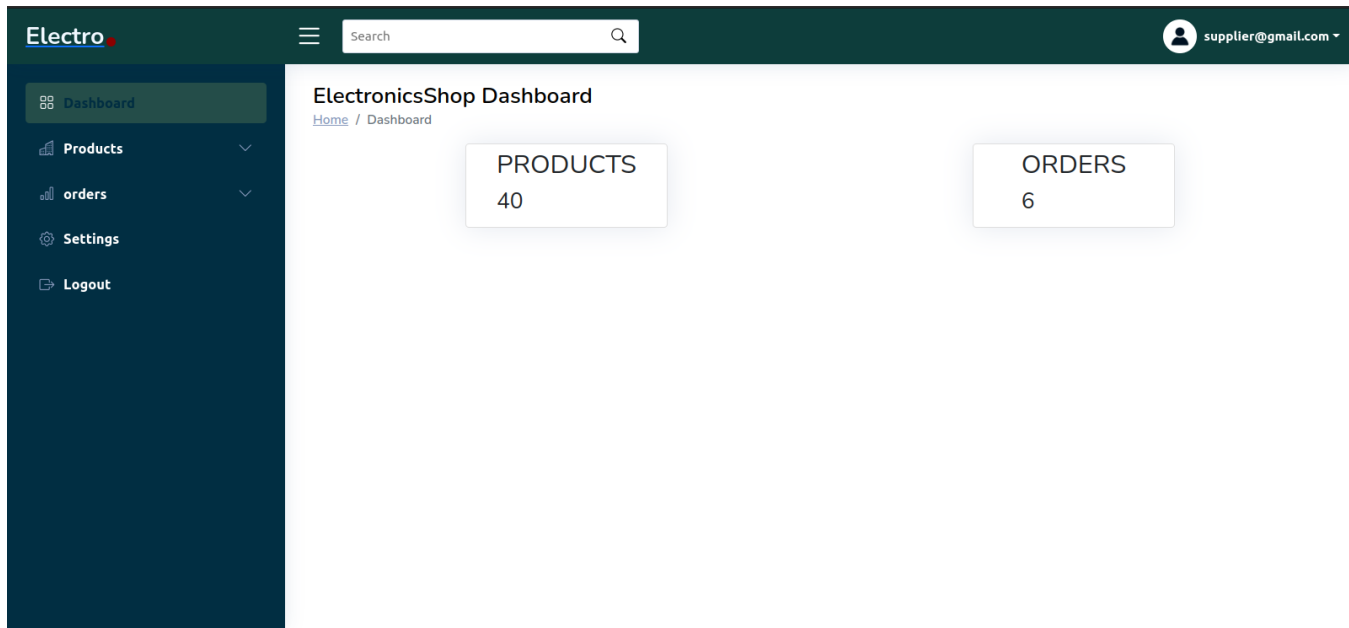


Figure 25:Supplier Dashboard

CHAPTER 4. Conclusion and Recommendation

As conclusion, our project is 90% complete as there will be some other few functionalities and features that we are still implementing. We can say that with this project we mastered system design knowledge with Laravel as well, so we can say that we fit the best system designers and developers on the market level. We hope that our Electronics Shop will be the best preference to the users who want to shop easily without taking much time and user can access the store any time anywhere.

Our gratitude goes to University of Rwanda, our Beloved Lecturer **Hitimana Eric**, KTU developers and Dolphix Electronics.

Appendix

GitHub link repository of the project: <https://github.com/bzkarim250/ElectronicsShop>