

# 1. SDLC OVERVIEW





## 2. REQUIREMENT GATHERING AND ANALYSIS

### 2.1 ORGANIZATION DETAILS:

## 1. Name of the Organization: -

Asus

### 2. Brief detail of the organization: -

**ASUS** is an organization that deals with customers who are keen to buy gaming products with attractive RGB lights.

## 2.2 MEETINGS:

## I. Meeting with the CEO

#### 1. Name of CEO

- Mr. S.Y. HSU.

## 2. CEO's requirement in her words.

User's Login, List of Customers, List of Products,
 Admin Login, etc.



### II. Meeting with the user

#### 1. Name of the user.

-Mr. Samson Hu.

## 2. User requirement in her words.

 A System is required to buy products and then the admin has a separate view of all the current orders and a category window to add and delete products

## 2.3 Data which will be the input into the system....

- > Text
- > Images

## 2.4 <u>Data which will be the output from the system....</u>

- > Text
- > Images

## 2.5 Type of project....

➤ Online

## 2.6 Method for collecting data.

- ➤ Meeting with Client
- > Interview



## 3. SYSTEM REQUIREMENT SPECIFICATIONS

## 3.1 Introduction:

Asus Store is an online website that lets the end user rent properties such as houses, Apartments, and farmhouses for their vacation.

### **3.1.1 Purpose:**

The purpose of creating this project is the end user can buy any product of ASUS Inc. for any kind of variant he/she wants.

# 3.1.2 <u>Intended Audience and Reading Suggestions:</u>

The intended audience of this document is the potential end user. The document may also serve as a reference guide to the developers of the system.

## 3.1.3 Product Scope:

The Application produced will be an online website. Everyone can buy products from the vast variety of ASUS Inc.



# 3.2 Overall Description:

# 3.2.1 Product Function:

### (i.) Admin Module:

- Login
- Manage Categories
- Manage Products
- Manage Orders

### (ii.) User Module:

- Register
- Login
- View Products
- Buy Products
- View Cart
- View Order Summary

## 3.2.2 <u>User classes and characteristics:</u>

## (i.) User Classes:

- Administrator
- Customer



### (ii.) User Characteristics:

### (a) Administrator:

Admin must be capable of managing Database & Materials.

#### (b) Customer:

User should have a basic idea about electronic gadgets and their functionalities.

## 3.2.3 **Operating Environment:**

This website will operate through the internet including browsing platforms like Chrome, Firefox, and also the operating system **Windows** (7 or above).

## 3.2.4 <u>Design and Implementation constraints:</u>

- GUI is only in English.
- An Internet connection is required.
- Users should have basic knowledge of website operations.



## 3.2.5 Assumptions and dependencies:

- Administrator is created in the system already.
- The database will be managed by the admin only.
- Roles and tasks are predefined.

## 3.3 External Interface Requirement:

## 3.3.1 <u>User Interface:</u>

In case the user is not registered. He/She can enter the details and create an account. Once the account is created user can 'login'. If the username or password is incorrect then an error message appears.

## 3.3.2 Software Interface:

- Operating System Windows, MacOS, Linux
- Front End ASP.NET
- Back End MySQL Server
- Software for Front End Visual Studio
- Communication Interface MySQL Activities



## 3.4 **System Features:**

- To provide user login.
- To show Product list.
- To provide Product-wise Listings.

### 3.5 Other Nonfunctional Requirements:

### 3.5.1 Performance requirement:

- Overall System should be fast and error-free.
- It should have built-in error-checking and correction facilities.
- The system should be able to handle large amounts of data.

# 3.5.2 <u>Security Requirement:</u>

• Administrator has more rights than user

## 3.5.3 Safety Requirement:

• To prevent data loss in case of system failure, the request will be sent to the Admin.



### 3.6 Feasibility Study

A feasibility study is a preliminary investigation of a proposed system to decide whether the system can run smoothly within the organization.

## 3.6.1 Operational Feasibility: -

Operational feasibility is the measure of how well a proposed system solves problems and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development

## 3.6.2 <u>Technical Feasibility: -</u>

Technical feasibility determines whether the work for the project can be done with the existing equipment, software technology, and available personnel.

Technical feasibility is concerned with specifying equipment and software that will satisfy the user's requirements.



### 3.6.3 Economic Feasibility: -

Economic feasibility determines whether there are sufficient benefits in creating to make the cost acceptable, or if the cost of the system is too high.

So this signifies cost-benefit analysis and savings on behalf of the cost-benefit analysis.

## 3.6.4 Schedule Feasibility: -

How long will it take to get the technical expertise?

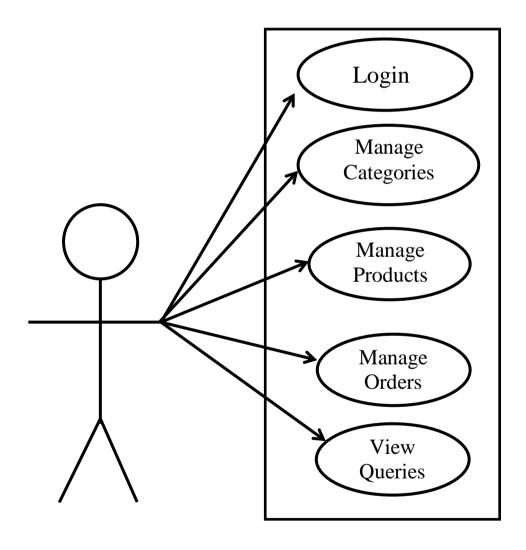
We may have the technology, but that doesn't mean we have the skills required to properly apply that technology.



# 4. SYSTEM ANALYSIS AND MODELING

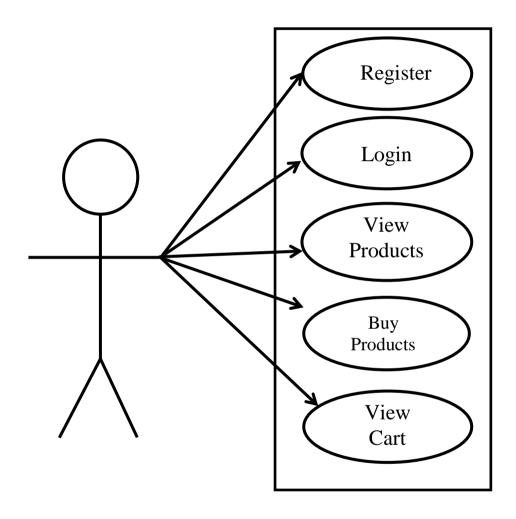
# 4.1 <u>Use case Diagram:</u>

# 1) Admin Side





# 2) User Side





## 4.2 Normalization & E-R Diagram:

Normalization is the process of organizing the columns (attributes) and tables (relations) of a relational database to reduce data redundancy and improve data integrity.

### **>** <u>Un − Normalized Data:</u>

User_id	Username	Cat_id	MRP	password	image
8	Rahul	2	42500	Rahul@123	rog-azoth.jpg
9	Preet	1	21000	Preet@123	rog-ally2.png

## Normalized Form:

#### A. 1st Normal Form:

1) Table Name: admin\_users

Primary Key: id (Auto Increment)

Id	username	password	
*(AI)			
1	admin	admin@123	



2) Table Name: users

Primary Key: id (Auto Increment)

id	name	email	phno	username	password
*(AI)					
8	Rahul	rahul@gmail.com	9409479818	Rahul	Rahul@123
9	Preet	preet@gmail.com	6351400634	Preet	Preet@123

# B. 2<sup>nd</sup> Normal Form:

3) Table Name: category

Primary Key: id (Auto Increment)

id	Cat_name
*(AI)	
1	laptop
2	Keyboard
3	Router



**4) Table Name:** products

Primary Key: id (Auto Increment)

Foreign Key: cat\_id

Id	image	Name	Mrp	Slp	Description	Cat_id
*(AI)						(FK)
2	rog-azoth.jpg	ROG Azoth	42999	35999	keyboard	2
5	rog-ally2.png	ROG Ally	83990	69990	console	8

5) Table Name: cart

Primary Key: id (Auto Increment)

Foreign Key: u\_id, p\_id

Id	u_id	p_id	image	name	qty	price	total_p
*(AI)	(FK)	(FK)					rice
3	9	17	asus-z790.jpg	ASUS ROG	1	52795	52795
				Strix			
4	8	11	asus-graphics-	ASUS	3	8700	26100
			card-1.jpg	Phoenix			



6) Table Name: contact

Primary Key: id (Auto Increment)

Id	name	email	Message
*(AI)			
8	Rahul	rahul@gmail.com	Hello
9	Preet	preet@gmail.com	Sample message

7) Table Name: order\_details

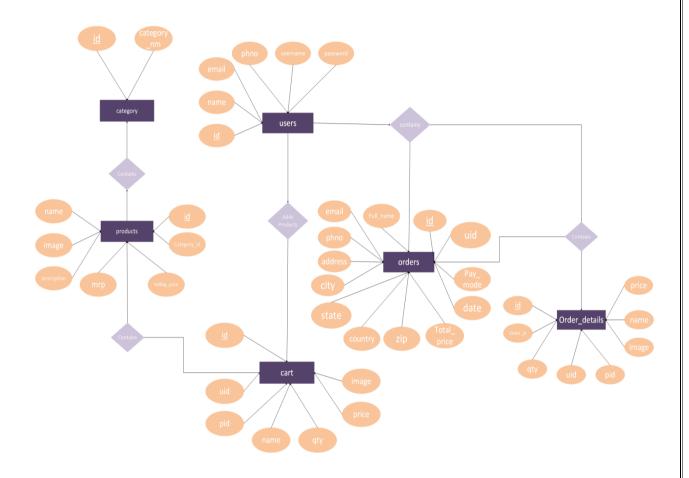
Primary Key: id (Auto Increment)

Foreign Key: order\_id, u\_id, p\_id

Id	Order	u_id	p_id	image	name	price	qty
*(AI)	_id	(FK)	(FK)				
	(FK)						
1	1	8	6	rog-	ASUS ROG	99999	1
				7ultimate-	Phone 7		
				phone.jpg	Ultimate		



# **E-R Diagram:**





# 4.3 <u>Data Dictionary</u>

# 1) users:

SR	COLUMN	DATATYPE	NULL	LINKS	COMMENTS
NO.	NAME			ТО	
1	Id	Int(11)	NO		Primary Key,
					Auto Increment
2	Name	Varchar(50)	NO		
3	Phno	BigInt(50)	NO		
4	Email	Varchar(50)	NO		
5	Username	Varchar(50)	NO		
6	Password	Varchar(50)	NO		

# 2) admin\_users:

SRNO.	COLUMN	DATATYPE	NULL	LINKS TO	COMMENTS
	NAME				
1	Id	Int(11)	NO		Primary Key,
					Auto Increment
2	Username	Varchar(50)	No		
3	Password	Varchar(50)	No		



# 3) category:

SRNO.	COLUMN	DATATYPE	NULL	LINKS TO	COMMENTS
	NAME				
1	Id	Int(11)	NO		Primary Key,
					Auto Increment
2	Cat_name	Varchar(50)	NO		

# 4) product:

SRNO.	COLUM	DATATYPE	NULL	LINKS	COMMENTS
	N			ТО	
	NAME				
1	Id	Int(11)	NO		Primary Key,
					Auto Increment
2	cat_id	Int(11)	NO		
3	Image	Varchar(50)	NO	category→	Foreign Key
				catid	
4	Name	Varchar(50)	NO		Foreign Key
5	Mrp	Float	NO		Foreign Key
6	Slp	Float	NO		
7	Descript	Varchar(Max)	NO		
	ion				



# 5) contact:

SRNO.	COLUMN	DATATYPE	NULL	LINKS TO	COMMENTS
	NAME				
1	Id	Int(11)	NO		Primary Key,
					Auto Increment
2	Name	Varchar(50)	NO		
3	Email	Varchar(50)	NO		
4	Message	Varchar(Max)	NO		

# **6)** cart:

SRNO.	COLUMN	DATATYPE	NULL	LINKS TO	COMMENTS
	NAME				
1	Id	Int(11)	NO		Primary Key,
					Auto
					Increment
2	Uid	Int(11)	NO	Users → userid	
3	Pid	Int(11)	NO	product→	
				productid	
4	Iamge	Varchar(50)	NO		
5	Name	Varchar(50)	NO		
6	Quantity	Int(11)	NO		
7	Price	Float	NO		
8	Total_price	Float	NO		

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# 7) orders:

SR	COLUMN	DATATYPE	NULL	LINKS	COMMENTS
NO.	NAME			ТО	
1	Id	Int(11)	NO		Primary Key,
					Auto
					Increment
2	Uid	Int(11)	NO	Users→	Foreign Key
				userid	
3	Name	Varchar(50)	NO		
4	Email	Varchar(50)	NO		
5	Phno	BigInt	NO		
6	Address	Varchar(Max)	NO		
7	City	Varchar(50)	NO		
8	Country	Varchar(50)	NO		
9	State	Varchar(50)	NO		
10	Zip	BigInt	NO		
11	Total_price	Float	NO		
12	Date	Varchar(50)	NO		
13	Pay_mode	Varchar(50)	NO		



# 8) order\_details:

SR	COLUMN	DATATYP	NULL	LINKS	COMMENTS
NO	NAME	Е		ТО	
1	Id	Int(11)	NO		Primary Key,
					Auto
					Increment
2	Order_id	Int(11)	NO	Orders→	Foreign Key
				orderid	
3	Uid	Int(11)	NO	Users→	Foreign Key
				Userid	
4	Pid	Int(11)	NO	Product→	Foreign Key
				productid	
5	Image	Varchar(10	NO		
		0)			
6	Name	Varchar(10	NO		
		0)			
7	Price	Float	NO		
8	Quantity	Int(2)	NO		



# 4.3Functional and behavior modeling

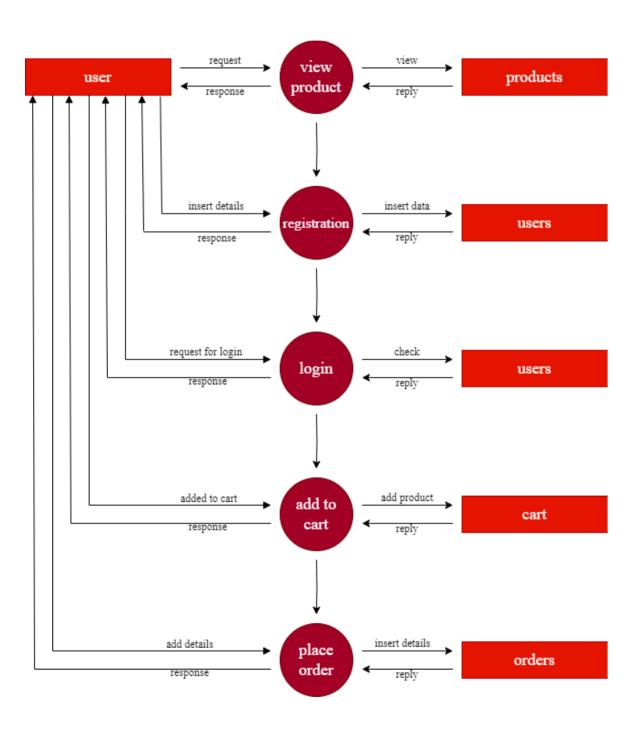
# 4.3.1 Context Diagram (0-level Diagram)





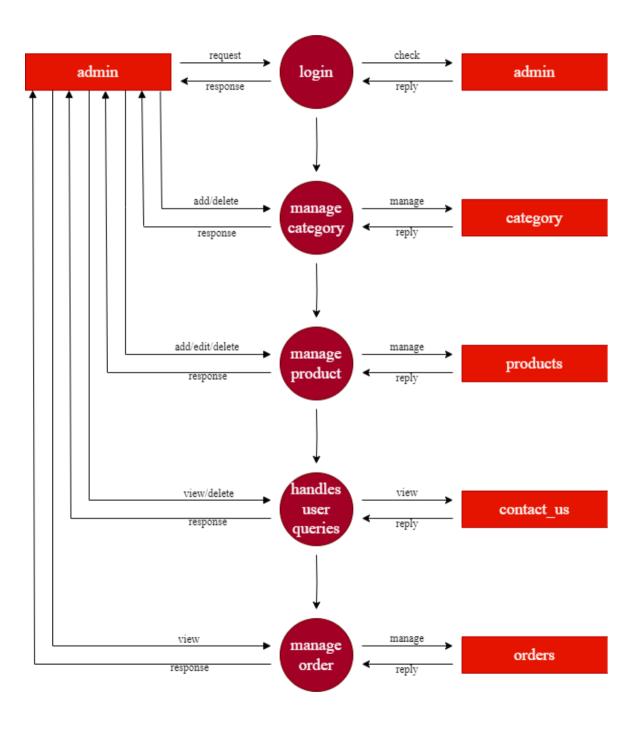
# 4.3.2 First Level Diagram (1-level Diagram)

## • USER



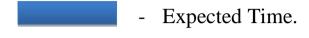


### • ADMIN





# 4.4 Gantt Chart



- Actual Time.

No.	Task	October	November	December	January	February
1	Requirement					
	Gathering And SRS					
2	System Analysis					
3	System Design					
4	System					
	Development					
5	System Testing					
6	Deployment					



# 5. TEST CASE

Login Module							
TEST CASE No. 1			TEST CASE DESIGN DATE :				
			5/Jan /2024				
TEST T	TTLE: Login Modu	le Test	TEST CASE EXECUTION DATE:				
			5/Jan/2024				
DESCR	IPTION: In this tes	t case Login mo	dule would be te	sted			
PRECO	NDITION: Login A	Activity must be	working				
STEP	TEST STEP	TEST DATA	EXPECTED ACTUAL STATUS				
No.			RESULT	RESULT			
1	Navigate to the	Login	Login	Same As	PASS		
	Login Page	Activity	Activity is	Expected			
			visible				
2	Enter Email	admin@gmail	Email is	Invalid	FAIL		
			accepted	Email			
3	Enter Password	admin123	Password is	Same As	PASS		
			accepted	Expected			
4	Click Login	Button Click	Check	Same As	PASS		
	Button		Credentials	Expected			

<sup>\*</sup> Note: Email is not accepted in the above test case due to invalid format.



	Signup Module							
TEST C	CASE No. 2		TEST CASE DESIGN DATE : 5/Jan/2024					
TEST T	TTLE: Signup Modu	le Test	TEST CASE EXECUTION DATE: 5/Jan/2024					
DESCR	IPTION: In this test	case Signup A	ctivity would be	tested				
PRECO	NDITION: Signup A	Activity must b	e working					
STEP	TEST STEP	TEST	EXPECTED ACTUAL STATUS					
No.		DATA	RESULT	RESULT				
1	Navigate to Signup Activity	Signup Activity	Signup Activity is visible	Same As Expected	PASS			
2	Enter All Fields	Data	Check Data Integrity	Same As Expected	PASS			
3	Click Signup Button	Button Click	Signup done With all Validation	Same As Expected	PASS			



# 6. SCREENSHOTS

## **➤ User Side**

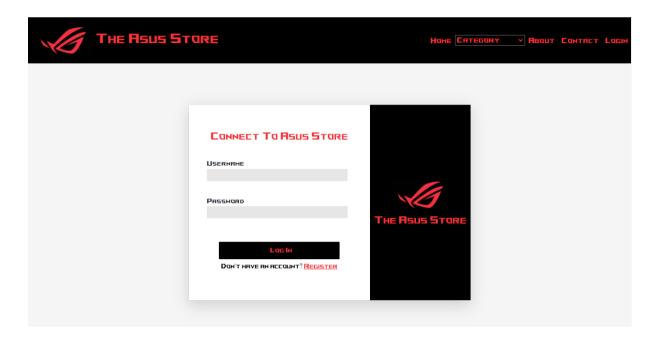




6.1 This Page Displays Home Screen

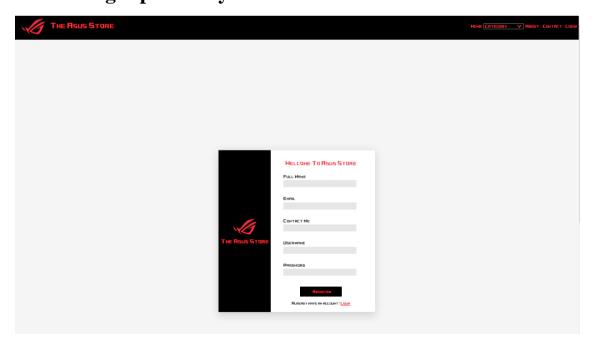


# • Login Page



## 6.2 This Page Displays the Login Screen

# • Signup Activity



6.3 This Page Displays Signup Screen

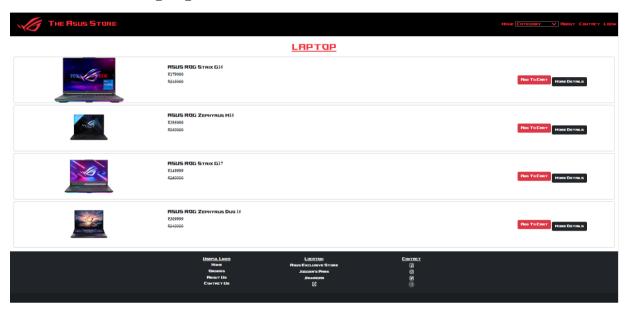
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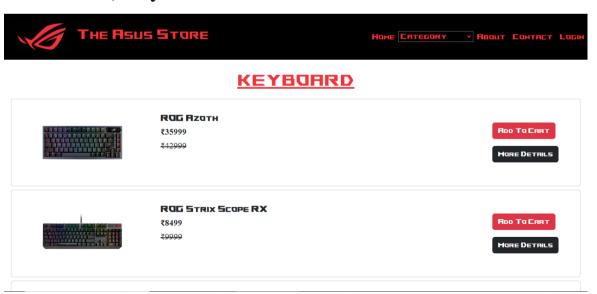
## • Category Pages:-

## a) Laptops



# 6.4 This Page Displays Various Categories of Laptops

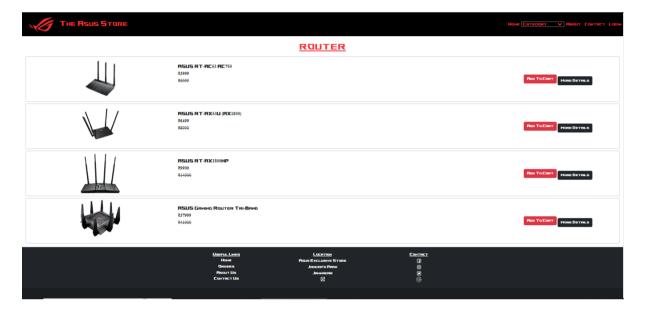
# b) Keyboards



6.5 This Page Displays Various Categories of Keyboards

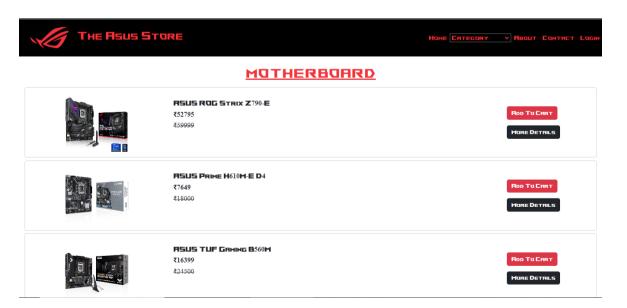


## c) Routers



6.6 This Page Displays Various Categories of Routers

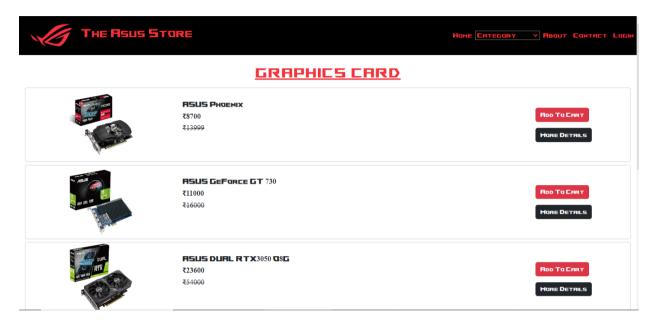
## d) Mother-Boards



6.7 This Page Displays Various Categories of Mother-Boards

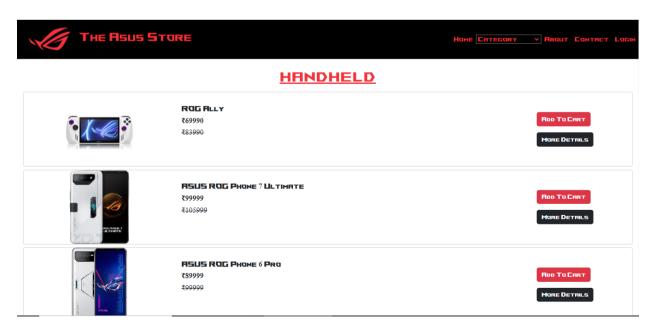


## e) Graphics Card



6.8 This Page Displays Various Categories of Graphics Cards

## f) Hand-Held



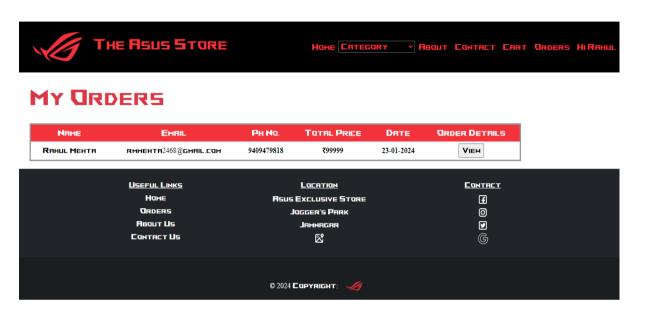
6.9 This Page Displays Various Categories of Hand-Holds

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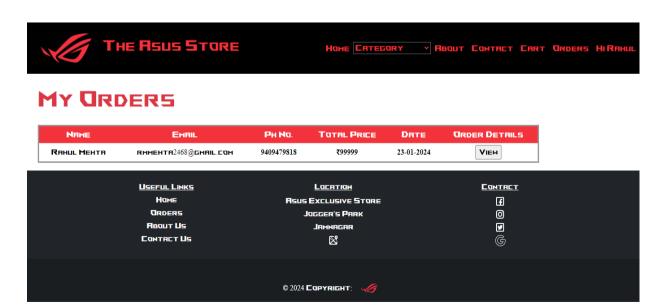


## • Cart Page:



6.10 This Page shows the Products Added to the Cart

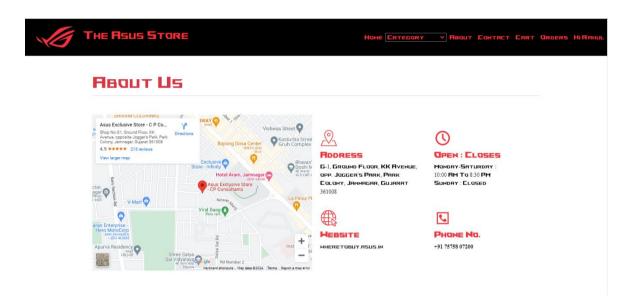
• View Orders:



6.11 This Page shows the Orders Placed by the User

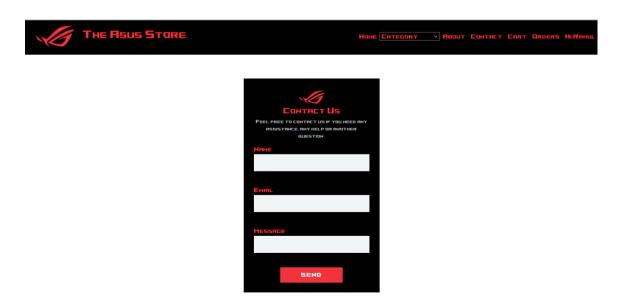


## About Us Page:



6.12 This Page Shows the Details of the Company

## • Contact Us Page:

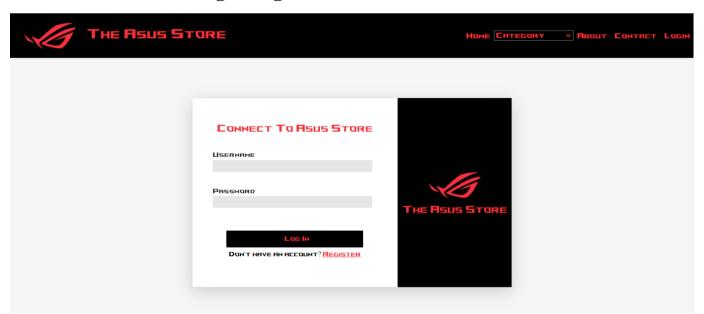


6.13 This Page Shows the Contact Form



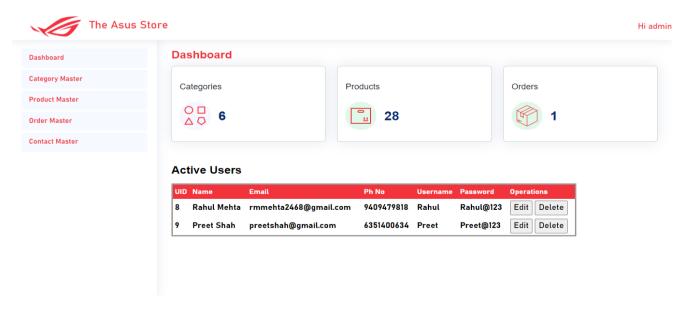
## > Admin Side

• Login Page



6.1.1 This Page Allows Admin to log in

• Dashboard View

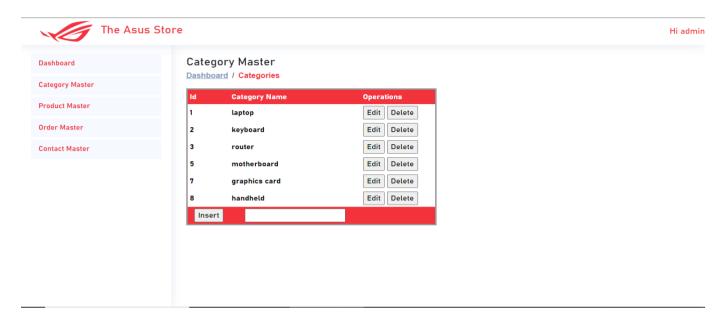


6.1.2 This Page Shows the Dashboard View

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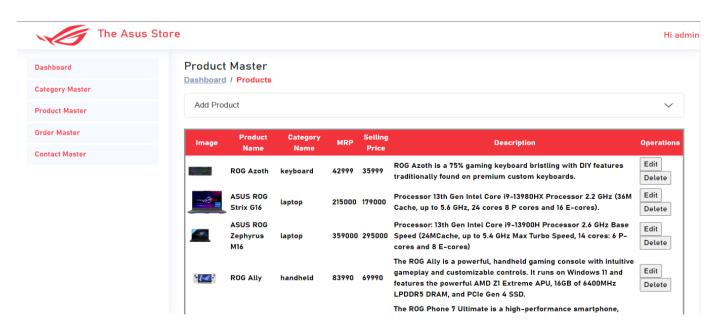


## Category Master Page



## 6.1.3 This Page Allows Admin to Manage Categories

## • Product Master Page

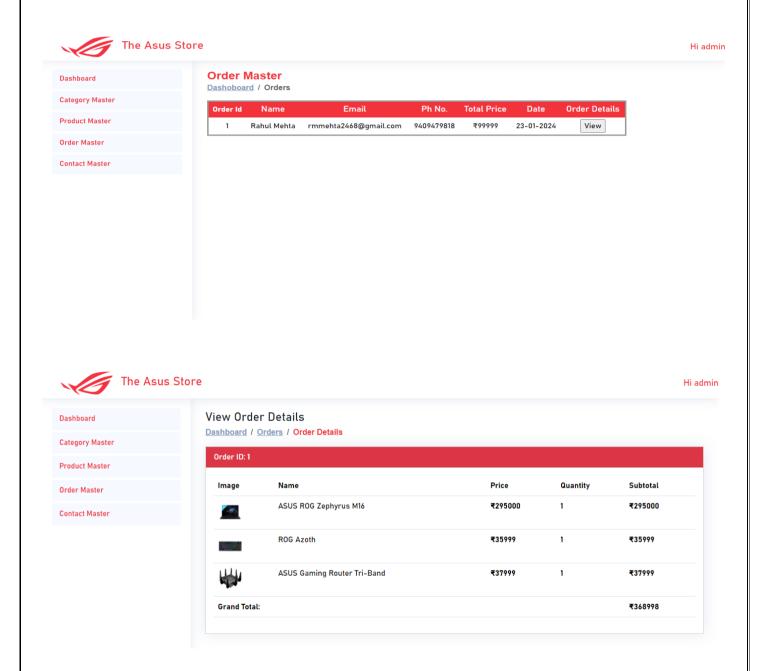


6.1.4 This Page Allows Admin to Manage Products

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# • Order Master Page



6.1.5 This Page Allows Admin to View All Orders



# 7. <u>LIMITATIONS AND FUTURE ENHANCEMENT</u>

### **Limitations:-**

- The limitation in the Asus Store is that the client can't cancel the order once placed.
- The customer can doesn't have the real-time status of his/her order placed.
- After placing an order the customer isn't provided with a real-time tracking link of that order.

### • Future Enhancement:-

- In the future, overall website design will be improved.
- A solution for updating the profile of the customer would be found.
- User management rights would be provided to the admin.
- Real-time delivery status will be shown to the customer once the order is placed.
- All other limitations would be removed.



# 8. CONCLUSION

The project report entitled Asus Store has been completed successfully. This website has been developed with much care that is free of errors and at the same time it is efficient and less time-consuming. I have tried my level best to make this website as dynamic as possible. Also, provision is provided for future development of the website. This website will be approved and implemented soon.



# 9. REFERENCES AND BIBLIOGRAPHY

All the references listed below were used to develop and design this website and were also used for documentation. I am thankful to each and every person who helped me and supported for this project's completion.

#### ➤ Books:-

- ASP.NET Programming by Prof. Nilesh Advani
- ASP.NET by Bharat Prakashan

#### ➤ Websites:-

- www.stackoverflow.com
- www.javatpoint.com
- www.w3schools.com
- www.bootstrap.com
- www.chat.openai.com