



ULAB
UNIVERSITY OF LIBERAL ARTS
BANGLADESH

Electro Buy

A trusted platform to Buy Electronic Gadget

Submitted by

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Oct 7th 2021

A trusted platform to Buy Electronic Gadget

A report submitted
in partial fulfillment of the requirements
for the degree of
Bachelor of Science in Computer Science and Engineering

UNIVERSITY OF LIBERAL ARTS BANGLADESH

Dhaka, Bangladesh

Oct 7th 2021

Agreement Form

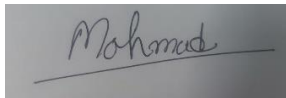
I am extremely pleased to be able to submit my project report to **Electro Buy** "A trusted platform to Buy Electronic Gadgets", with the exception mentioned in the reference. This report has been prepared as a prerequisite for a single project (CSE 499) which is a one semester course.

Declared By:

Md. Mahmudur Rahman

ID: 171014037

Date: Oct 7th, 2021

A rectangular box containing a handwritten signature in dark ink. The signature appears to be 'Mahmudur' written in a cursive style.

Signature

CERTIFICATE OF APPROVAL

The project report titled **Electro Buy "A Trusted Platform for Buying Electronic Gadgets"** is submitted to the Department of Computer Science and Engineering, University of Liberal Arts, Bangladesh (ULAB) in part to meet the requirements for a Bachelor of Science degree.

Dr. T.M. Abul Kalam Azad

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Dated: Oct 7th, 2021

Dedication

I declare that this complete project and the title report Electro Buy "*A trusted platform to Buy Electronic Gadget*" are entirely the result of my own work and the experimental work is almost entirely my own work, the collaborative contributions are clearly indicated and recognized. Appropriate references are given to all helpful literary works and resources. This report and product have not been submitted for my own research results and for any other degree or skill.

ABSTRACT

A web-based electronic stage is a purchaser of a business. A web-based web-based business application intended to make a shrewd web-based shopping opportunity for purchasers. This shopping stage has many elements for customers. The framework is constructed utilizing HTML, CSS, JavaScript and so forth It essentially helps Customers who need to purchase their important items in an easy-to-use way. The clients can basically visit the framework, picking items from any class, register for a request, sign into their records, lastly can make installment of their bought sum. The clients can alter their request list before request affirmation. The shopping site incorporates a scope of electronic things and other important items that customers need consistently. This web-based E-trade framework might be a finished answer for a client which gives an adaptable, safe, and easy to understand climate.

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CHAPTER 1

INTRODUCTION

1.1 About the Platform:

The project is an online electronic gadget that is a web-based digital shopping system. This system is designed to make shopping easy and convenient for buyers. Buyers and sellers will benefit from using the web application. The project is created by the most popular web programming languages Ejs, Sass, javascript. User-friendly interface and functionality help users and administrators to easily manage the application.

1.2 Motivation:

In this motivation section, I will discuss my motivations, motivations come to me in the online marketplace because a few days ago I saw some e-commerce businesses start their business locally at the time I decided to start my new business online, I think my about career If I start an online business I can reduce the timeliness for setting up a new live shop business. Online business is great for everyone. You can buy the product online and I can sell it online. First of all, thank you, my parents, and secondly, my esteemed caretaker Sir Professor Dr. T.M. Abul Kalam Azad, who is supporting me for my project. He is my favorite extraordinary teacher. I am really grateful to my teacher because he is very close to discussing any problem and creating a solution.

1.3 Objectives:

The purpose of this project is to simplify the shopping system which helps the customer to order products and also the sellers can easily manage the sales and pay the bills using online devices like computer, smartphone, tab etc. Some time ago, people thought that shopping bought the necessary goods or services in exchange for money at a certain time. But nowadays, buying products or services on the Internet is a chore. The popularity of online shopping has increased over the years,

mainly because people find it easier and more convenient to shop from the comfort of their home or office. One of the most attractive reasons for online shopping, especially during the holiday season, is that it reduces the need to wait in long lines or search for specific items from store to store. Also, sellers cannot go to certain places at a certain time to sell their products. In online shopping, sellers get the freedom to sell their products 24/7 per week from anywhere. The project has several objectives. They are as follows: Providing a user-friendly interface for viewing various products that consumers want to buy. To give an opportunity to open an account if a customer chooses a product online.

To give an opportunity to open an account if a customer chooses a product online. Giving the opportunity to pay for the product online without being physically present at the specified place. To make the shopping system hassle free and time saving. To help sellers sell their products online even on their holidays

1.4 Expected Outcome:

This project was originally designed to change the normal definition of shopping. It is hoped that the results of this project will save us valuable time and energy and bring us comfort in our busy lives. Learn about product descriptions and exact prices from the office, home and anywhere. Buy and sell any product from anywhere in the world. Buy and sell products at any time even on holidays. Enjoy the product discount and low sell cost. Easily find the necessary products using search. Online payment system helps the buyer and sellers as well as pay and receive the bill. No need for physical gathering to sell or buy products.

1.5 Report:

Layout in this chapter, I discussed the summarization of our topic which I have discussed in our other chapters.

In chapter 1, Discuss the motivation, objectives and expected outcomes of the Online Shopping project.

In chapter 2, there will be a discussion about the background of the project. The scope and challenges. Also, the discussion about the similar project and related work.

In chapter 3, Requirements of this project will be discussed.

In chapter 4, here I write about the e implementation of the proposed system and after completing the system how can I test the system.

In chapter 5, finally, in this part, the conclusion will come. And the scope of farther development in the future

Chapter 2

Background

1.1 Introduction:

Daily Online electronic shopping is a web based application that enables you to buy any product anywhere. This is the online marketplace where you can buy the product for your needs. This is a summary of Daily Online Shopping. There are so many features which are not included right now. The Daily Online Shopping will come all featured very shortly like Amazon, eBay. The modern online life facilitates the online shopping system and makes it more reliable for the consumer.

2.2 Related Works:

Remotely order like an e-commerce Electronic commerce is like e-commerce. This is not important to denote how a website product is selling. Facebook is like e-commerce as I see most of the people are buying their product using Facebook, Vk and so many social media. E-commerce concept is electronic commerce there are so many classifications I will consider it below description

2.3 Comparative Studies:

Electronic Commerce, Mobile Combined with commerce, Probably

Not far. One in the world around the future in serious business development Is about to become. Asian and different nations Currently online business and m-trade in the upset. The web Has dispatched a major influx of revisions. Sorts of correspondence Have changed and of organizations with Interaction Internet Occurs through the website.

As a result, web recent channels directed towards making doing which is the scope of Trade-scope and e-commerce Then arrive at M-Commerce. Web Builder, Retailers, wholesalers and suppliers to them higher, faster and with business cheap market talk to say and able to communicate, Of the scepter Buyers, any time of them with access and products than before and a wide range of services provides options.

2.4 Scope of the Problem:

Internet business sites have an assortment of issues. To start with, you need to guarantee your web association when your client needs to see the item. Need to arrange the important electronic gadgets, for example, cell phones, workstations, and so forth Site upkeep is troublesome.

2.5 Challenges:

In this day and age of globalization, economy on the Internet. New freedoms got it. Execution of monetary exercises, much obliged for the most recent data innovation, It is more proficient and beneficial Creates. The pertinence of this point is because of the way that another area has arisen on the planet economy - web based business, which is one of the parts of the "new economy", acquiring and more down to earth importance. The electronic market is not strong enough in comparison with the traditional market; its potential is not realized for the end for several reasons:

1. There is no improvement of the administrative and authoritative system, which prompts the issue of security of protected innovation rights for labor and products that are acknowledged in the structure of electronic trade, just as monetary and legally binding issues. Subsequently, there is an absence of certainty with respect to financial backers, likely purchasers, and the speed of improvement is declining; There is no advancement of the administrative and authoritative structure, which prompts the issue of assurance of licensed innovation rights for labor and products that are acknowledged in the system of electronic business, just as monetary and legally binding issues. Therefore, there is an absence of certainty with respect to financial backers, possible purchasers, and the speed of improvement is declining;

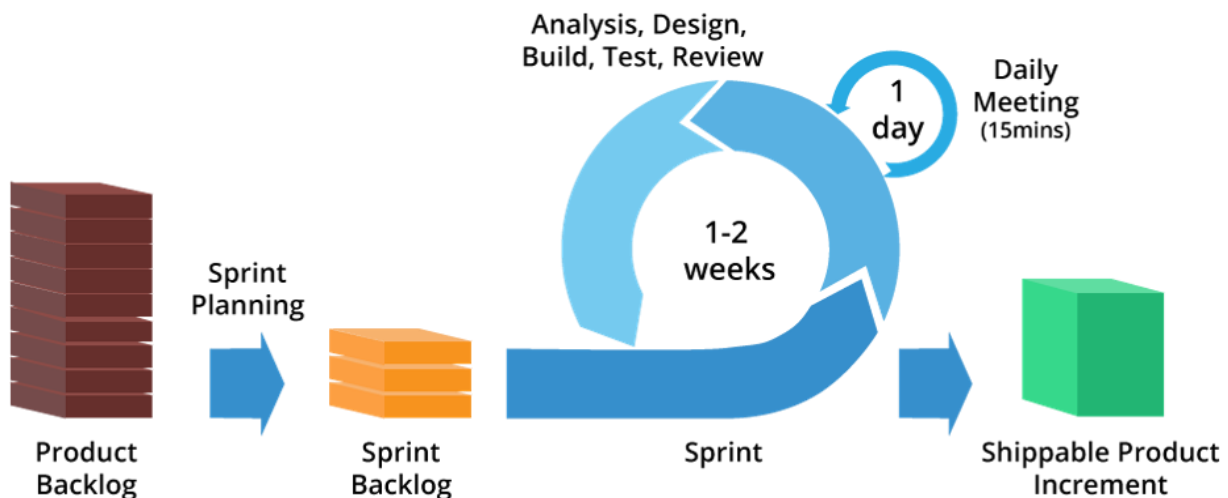
2. There are problems that are associated with the global concept of e-commerce. These include: the lack of confidence that in other parts of the world the partner company and the product or service that it offers are actually existing; differences in traditions and rules for doing business in these companies;

Chapter 3

METHODOLOGY

3.1 Software Process Model

A software process is a group of associated activities that lead to the making of the software. These exercises may include the development of the software from scratch or rebuilding an existing framework. For this process model I am choosing “Agile Model”. This model breaks tasks of the project into small increment builds and these parts are provided in iterations which gives flexibility, easy to manage and use. I choose this model because of its all advantages and mainly because it allows us to regularly adapt to changing requirements even late changes in requirements are welcomed, which is suitable for our project. I utilize it since of its celerity, where usage or advancement work is allocated into some packets.



In this scrum development process how, I worked in each event are given below:

- i. Sprint Planning: This is the primary stage. Before starting an iteration, I conduct an online meeting where I decide about the plan for the upcoming sprint.

ii. Daily Scrum: In this event I talked with someone where we discussed what I have done individually and what I will do next and what is blocking my project.

iii. Sprint review and retrospective: In this event, I conduct meetings with our supervisor about my progress and the problems I faced each week. After discussion with my supervisor, he suggested to me what to do.

3.2 Software Tools

To develop any project lots of tools are required. There were lots of tools required for implementing this project. This section shows the list of software tools I used to develop my project:

3.3.1 Web Application Tools

Frontend:

i. EJS □ It is a straightforward template engine and language that lets any coder to generate HTML markup with plain JavaScript.

ii. SASS □ A preprocessor scripting dialect that's deciphered into Cascading Style Sheets (CSS).

iii. JavaScript □ A programming language that permits programmers or users to make web pages dynamic and implementing complex features.

Backend:

i. Node JS □ A stage built on Chrome's JavaScript runtime for effectively building quick and flexible network applications and it is a backend language.

ii. Express JS □ Express is an adaptable Node JS web application framework that gives a solid set of features for web applications and android applications.

iii. Mongo DB □ It is a cross platform and source oriented and report oriented database program. It is a report database with the versatility and adaptability that clients need with the questioning and ordering that we require.

iv. Laravel Mix □ A software tool for compiling and optimizing resources in a Laravel app.

3.3.2 API Tools

i. Node JS

ii. Yarn

3.4.3 Development Tools

i. IDE: Visual Studio Code (web app)

ii. Postman and Insomnia (API development tool)

Chapter 4

Requirement Specification

4.1 Business Process Modeling:

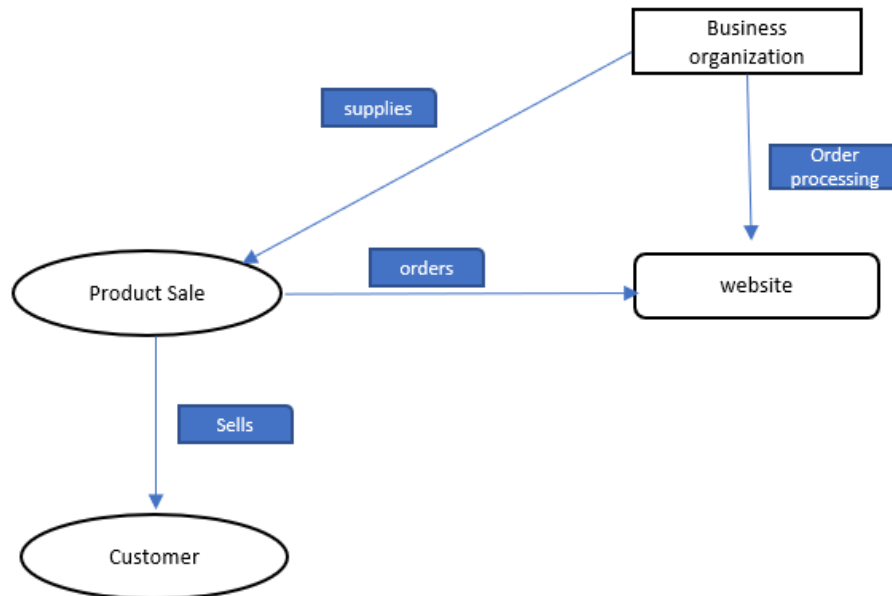


Figure 1.1 Business Process Modeling

I have clarified the kind of web based business, I ought to choose the game plan anyway rely upon it .The target of the thing and to whom it is worked, the game plan changes. For In the first place, I should characterize an item as a producer, wholesaler or retailer, Administration or content.

4.2 Requirement Collection and Analysis:

states and prospects for the advancement of internet business in various nations of the world are thought of. Proposition have been made to further develop the web-based business parts of assembling and business undertakings. eb based business is a new and promising viewpoint for the advancement of homegrown endeavors and it should be considered in promoting techniques. The quick improvement of online business in various nations of the world is described by an expansion in the infiltration pace of the Internet in movements of every kind; Increase in market size; Development of internet business as one of the parts of internet business.

4.3 Product analysis:

First, me you have to choose what kind of product you want to publish or sell on the websites and then I have this product category. I need to add that product by their own category and I need to minimize their price.

4.4 Customer analysis:

. The article considers its impact on client experience and customer loyalty regarding online stores. Working strategies, including data on the purchase history of customers in the Internet store, are important factors in analyzing customer behavior.

Content of the article. Introduction Purchasing history and CRM

In the system Its presentation is the structural matrix of the interrelationships of the discriminative function classification obtained using the classification discriminatory function literature using the decision distribution tree to successfully distribute the completed order in the customer behavior sample analysis

4.5 Websites optimization analysis:

The arrangement incorporates the planning of a point-by-point specialized task for the accompanying thing:

1. Site structure

2. The page links diagram of the site (Mind Map)
3. Optimizing URL
4. Formation of human-understandable URL (CNC)
5. Forming static URLs from dynamic URLs
6. Optimizing internal links
7. Breadcrumbs
8. Optimizing pagination pages
9. Optimizing filters
10. Multilanguage site
11. Generating sitemaps
12. Generating an HTML
13. sitemap
14. Creation of XML sitemap
15. Forming an XML image map
16. Forming an XML map of video materials
17. Internal analysis of the site: technical component
18. Configuring 301 redirects
19. Robots.txt file
20. Restriction of indexing of individual pages of a site by search robots
21. Limiting the ability to go to indexed pages by search engines
22. Optimizing Outbound Inbound Links
23. Generating correct HTTP headers
24. Definition of canonical URLs
25. Error pages
26. Error page 404

Chapter 5

Diagram

5.1 Use Case Modeling and Description:

Use case charts are at times called Unified Modeling Language (UML), a framework activity and a graphical portrayal of the client's job. The client communication with the framework.

The job of us and the client with these assignments. Use case demonstrating and portrayal Case graphs are now and then Called brought together displaying.

language (UML) is a graphical portrayal of a framework activity and client's jobs. It is a straightforward portrayal of a framework's client connection with the framework. A utilization case shows the rundown of activities or occasions with these activities.

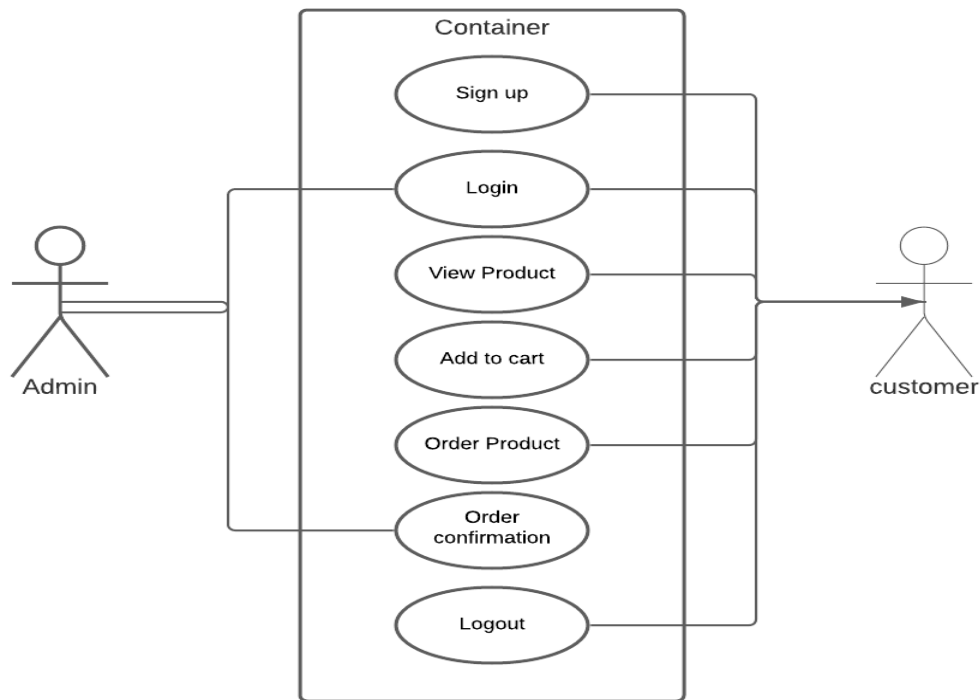


Figure 2.1 Use case diagram

5.2 Class Activity Diagram:

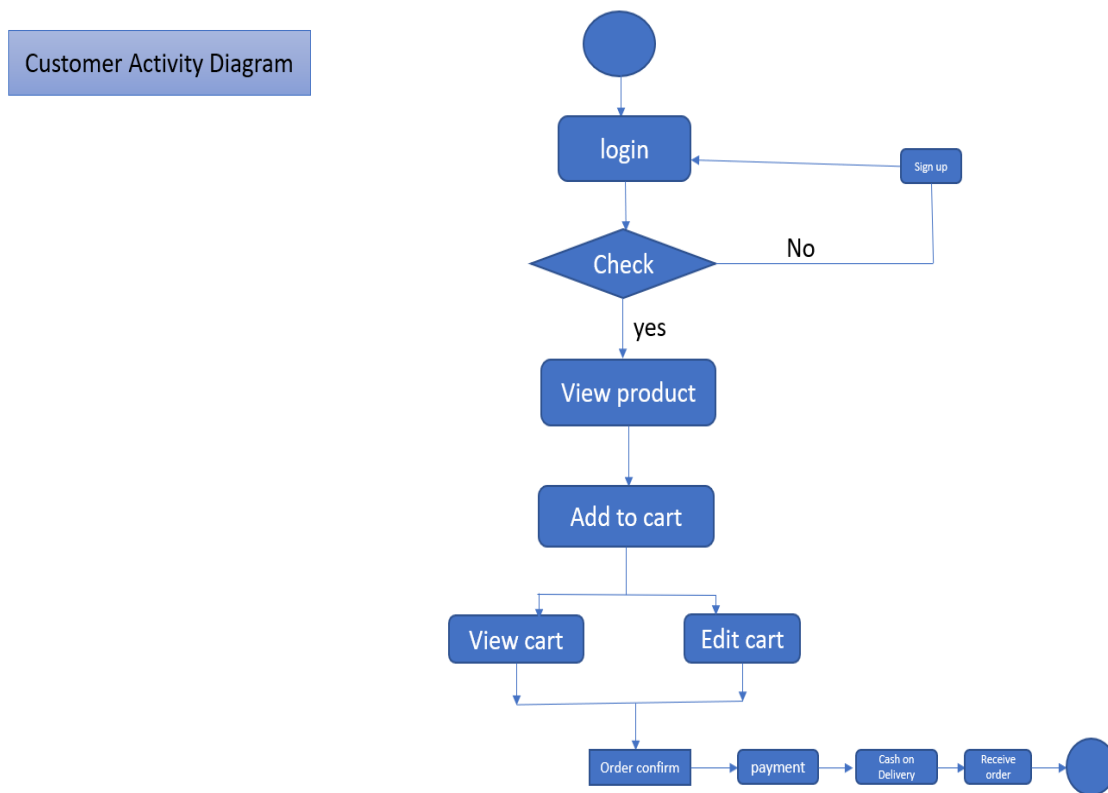


Figure 3.1 Class Activity Diagram

5.3 Data Flow Diagram:

Data flow Diagram show us the path how my system data flow to one process to another process. Also help us to understand how to work systems every aspect.

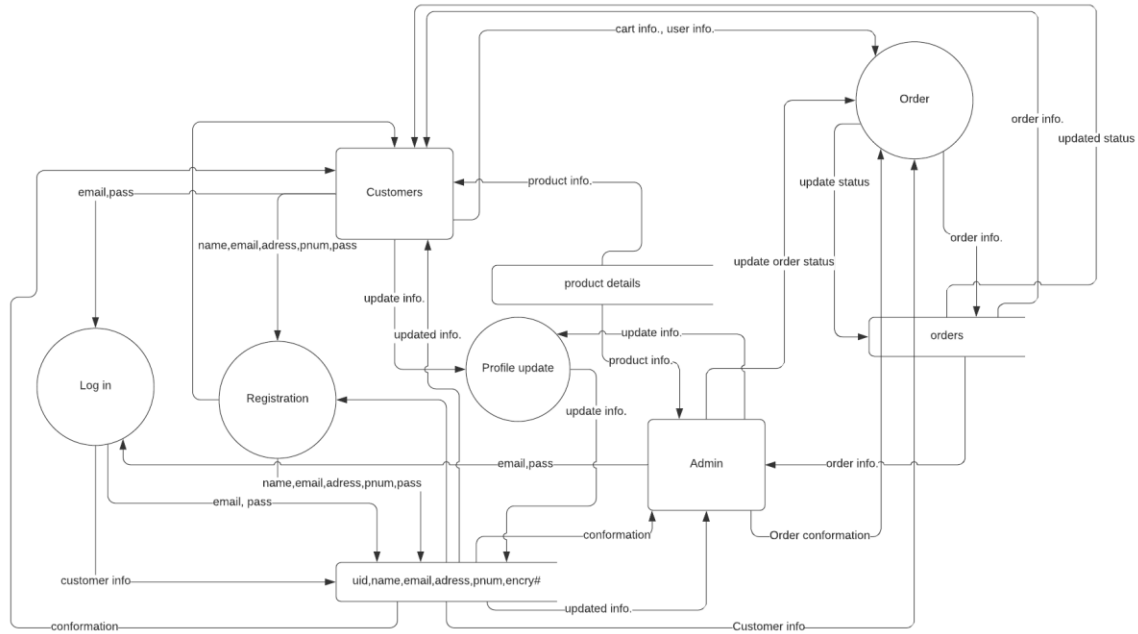
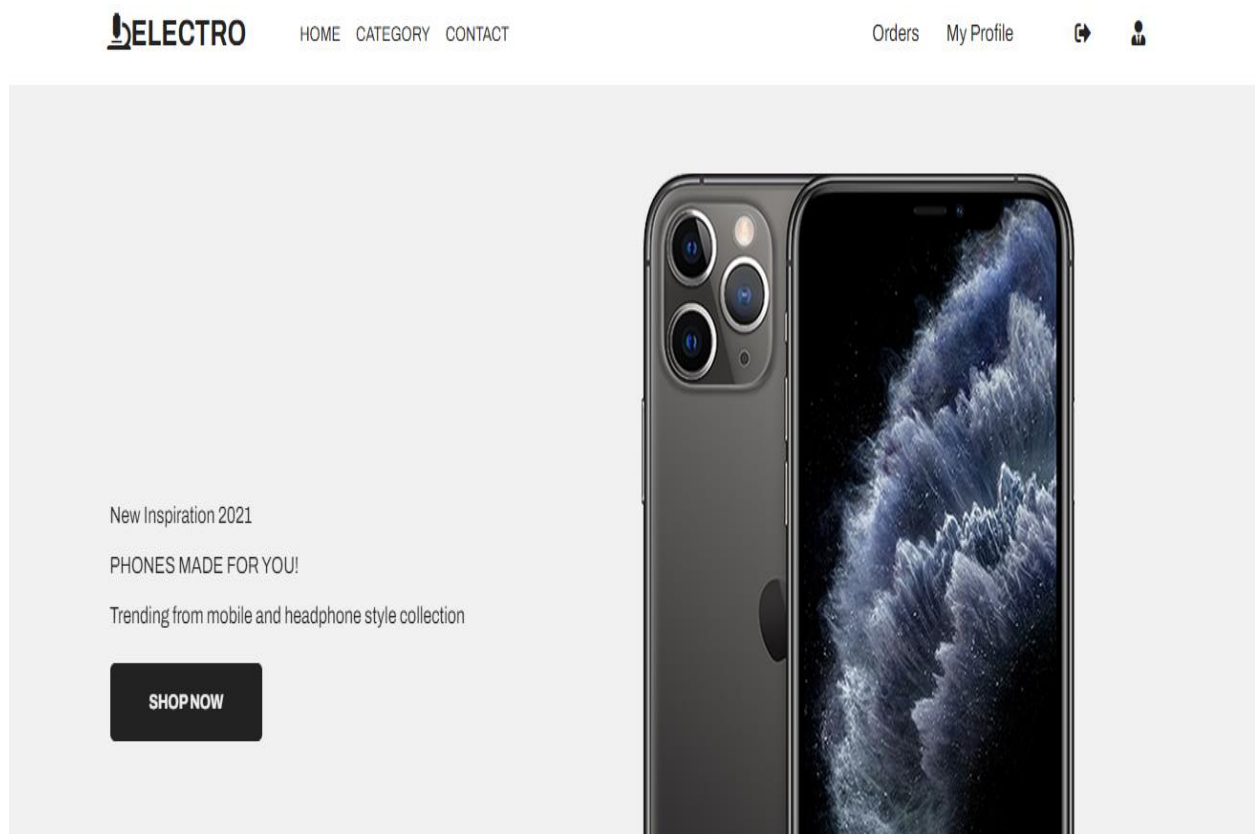


Figure 4.1 Data flow diagram

Chapter 6

Implementation and Testing

6.1. Implementation of Front-end Design:



6.2 Product design:



Apple iPhone 11 Pro

★★★★☆
385 TK

ADD TO CART



Sony WH-CH510

★★★★☆
475 TK

ADD TO CART



Apple iPhone 11

★★★★☆
800 TK

ADD TO CART



Sony WH-CH510

★★★★☆
850 TK

ADD TO CART



EXTRA
BASS



6.3 Registration Design:

Sign in with

 GOOGLE

 FACEBOOK

or Sign up with following information



Choose File

 No file chosen

 enter username

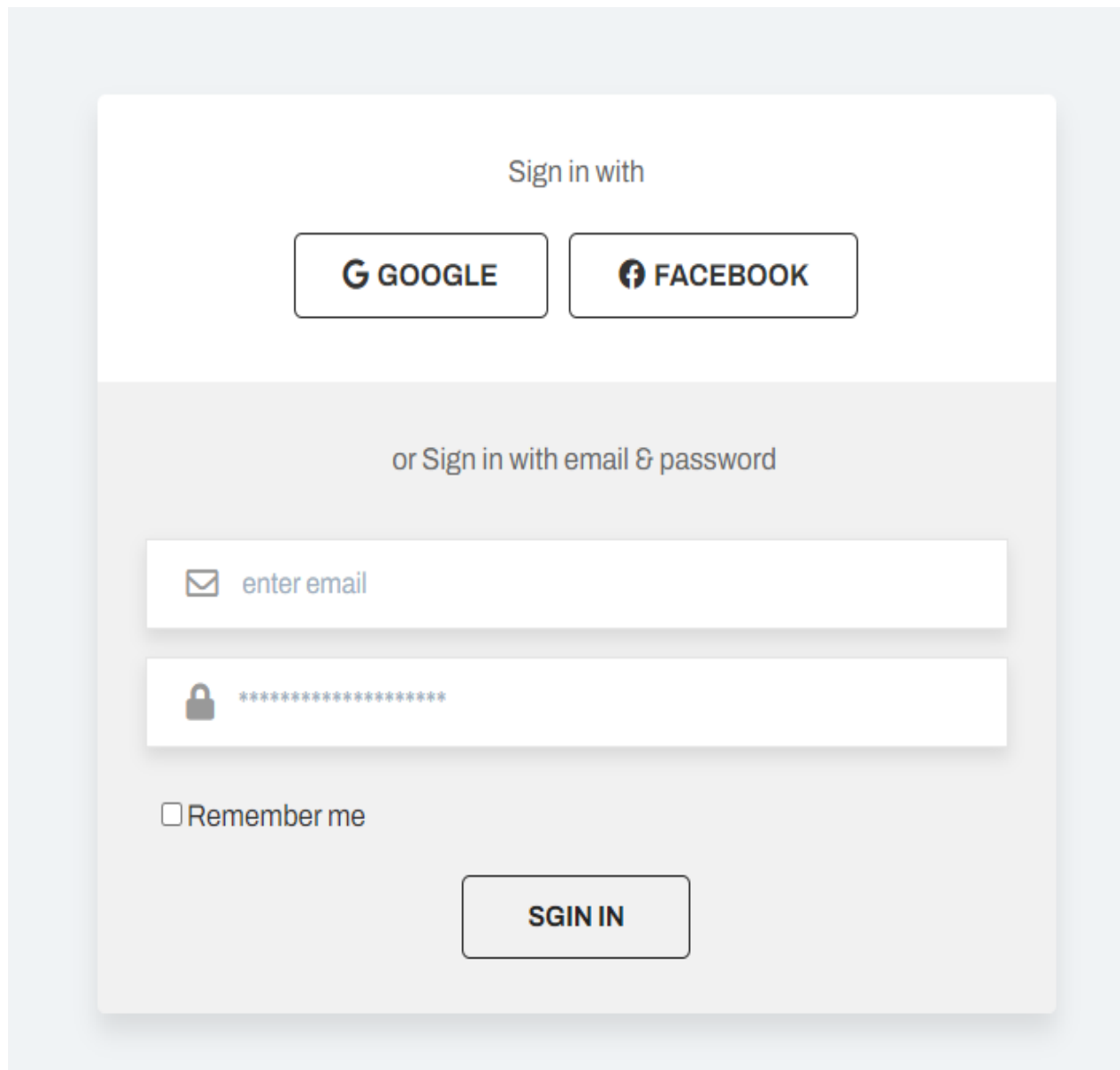
 enter email

 enter contact

 enter address

 *****

6.4 Login design:



The image shows a login form design on a light gray background. The form is a white rounded rectangle with a subtle drop shadow. It is divided into two main sections. The top section is white and contains the text "Sign in with" centered above two buttons: "G GOOGLE" and "f FACEBOOK". The bottom section is light gray and contains the text "or Sign in with email & password" centered above two input fields. The first input field has an envelope icon and the placeholder text "enter email". The second input field has a lock icon and is filled with asterisks. Below these fields is a checkbox labeled "Remember me". At the bottom center of the form is a button labeled "SGIN IN".

Sign in with

G GOOGLE

f FACEBOOK

or Sign in with email & password

enter email

☐ Remember me

SGIN IN

6.5 Load cart:

 HOME CATEGORY CONTACT Orders My Profile 🔄 🛒 8				
PRODUCT	NAME	UNIT PRICE	QUANTITY	TOTAL
	Apple iPhone 11 Pro ELECTRO	385 TK	— 1 +	385 TK 
	Sony WH-CH510 ELECTRO	475 TK	— 1 +	475 TK 
	Apple iPhone 11 ELECTRO	800 TK	— 1 +	800 TK 

6.6 Empty Cart:

Cart Empty 😞

You probably haven't ordered any product yet.
To order, go to the main page

[Go back](#)**6.7 Order page:****Cart Totals**

Shipping	50 TK (Inside Dhaka)
Total	4460 TK
Email	rakib123@gmail.com
Contact	+88 01796278459
Address	Mohammadpur

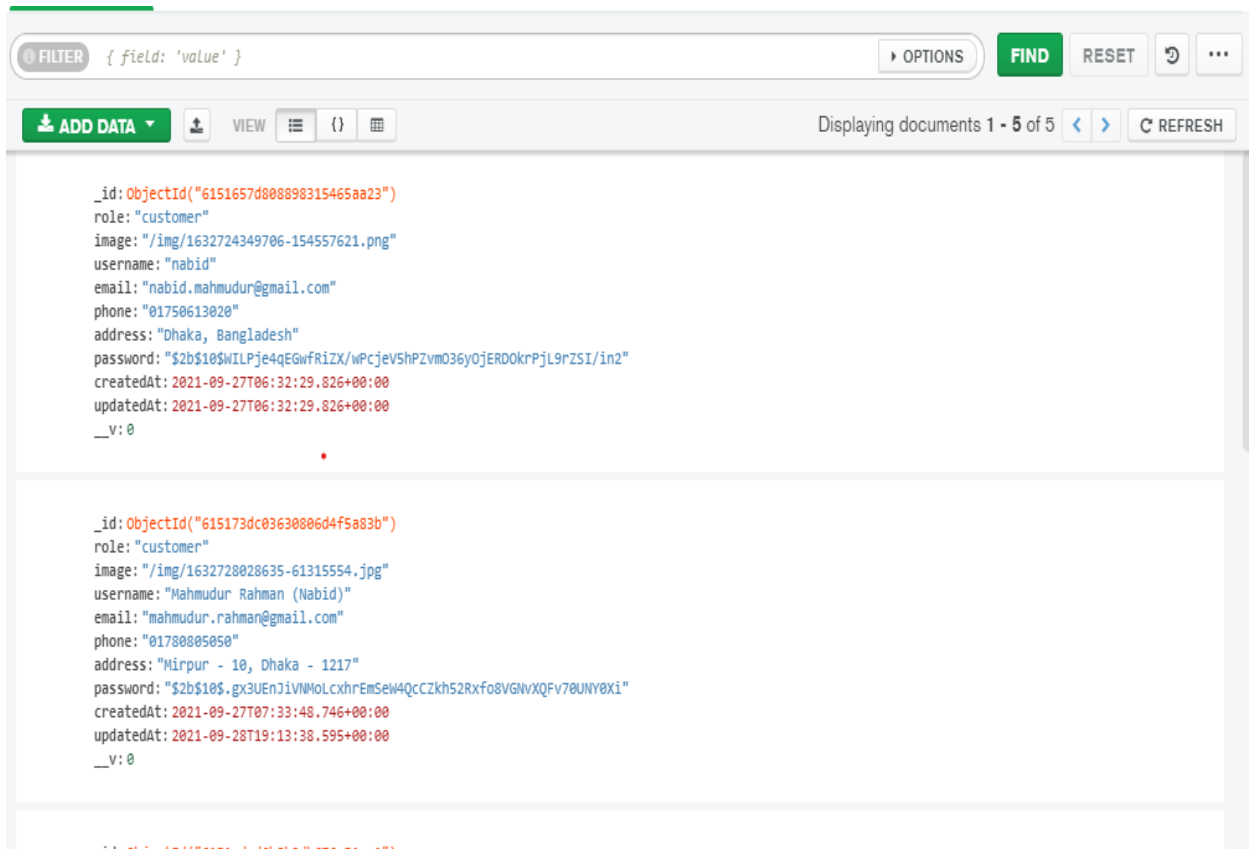
[ORDER NOW](#)**6.8 Order Confirmation page:**

Orders of Customers

Image	Orders	Name	Contact	Email	Address	Placed Time	Placed Date	Payment Status	Stat
	6159bff2db4b7325f8281ef3 Apple iPhone 11 Pro - 1 Sony WH-CH510 - 1 Apple iPhone 11 - 1 Sony WH-CH510 - 2 Samsung Galaxy - 2 Apple iPhone 11 - 1 Sony WH-CH510 - 1 Apple iPhone 11 - 2 Apple iPhone 11 - 1 Samsung Galaxy - 1 Sony WH-CH510 - 1	Rakib	01796278459	rakib123@gmail.com	Mohammadpur	08:36PM	03:10:2021	Not Paid	
	6159ada4db4b7325f8281ccc Samsung Galaxy - 2 Sony WH-CH510 - 3	Rakib	01796278459	rakib123@gmail.com	Mohammadpur	07:18PM	03:10:2021	Not Paid	
	615481db289df4069886728a Apple iPhone 11 - 2 Samsung Galaxy - 2 Sony WH-CH510 - 3	Mahmudur Rahman (Nabid)	01780805050	mahmudur.rahman@gmail.com	Mirpur - 10, Dhaka - 1217	09:10PM	29:09:2021	Not Paid	

Implementation of Database:

1.Customer Database:



The screenshot displays the MongoDB Compass web interface. At the top, there is a filter bar with a placeholder '{ field: 'value' }' and buttons for 'OPTIONS', 'FIND', 'RESET', and a refresh icon. Below this is a toolbar with 'ADD DATA', a download icon, and view options (list, JSON, grid). The status bar indicates 'Displaying documents 1 - 5 of 5' and includes a 'REFRESH' button. The main area shows two documents in a list view. Each document is a JSON object representing a customer.

```
{
  "_id": ObjectId("6151657d808898315465aa23"),
  "role": "customer",
  "image": "/img/1632724349706-154557621.png",
  "username": "nabid",
  "email": "nabid.mahmudur@gmail.com",
  "phone": "01750613020",
  "address": "Dhaka, Bangladesh",
  "password": "$2b$10$WILPje4qEGwfr1ZX/wPcjev5hPZvm036yOjERDokrPjL9rZSI/in2",
  "createdAt": 2021-09-27T06:32:29.826+00:00,
  "updatedAt": 2021-09-27T06:32:29.826+00:00,
  "__v": 0
}
```

```
{
  "_id": ObjectId("615173dc03630806d4f5a83b"),
  "role": "customer",
  "image": "/img/1632728028635-61315554.jpg",
  "username": "Mahmudur Rahman (Nabid)",
  "email": "mahmudur.rahman@gmail.com",
  "phone": "01780805050",
  "address": "Mirpur - 10, Dhaka - 1217",
  "password": "$2b$10$.gx3UEnJivNMolCxhREmSeW4QcCZkh52Rxfo8VGWvXQFv70UNY0Xi",
  "createdAt": 2021-09-27T07:33:48.746+00:00,
  "updatedAt": 2021-09-28T19:13:38.595+00:00,
  "__v": 0
}
```

2.Order Database:

FILTER

{ field: 'value' }

OPTIONS

FIND

RESET

ADD DATA

VIEW

Displaying documents 1 - 3 of 3

REFRESH

>

```
_id: ObjectId("615481db289df4069886728a")
status: "completed"
customerId: ObjectId("615173dc03630806d4f5a83b")
> product: Object
  createdAt: 2021-09-29T15:10:19.936+00:00
  updatedAt: 2021-09-29T15:15:09.010+00:00
  __v: 0
```

>

```
_id: ObjectId("6159ada4db4b7325f8281ccc")
status: "completed"
customerId: ObjectId("6159ad15db4b7325f8281c09")
> product: Object
  createdAt: 2021-10-03T13:18:28.722+00:00
  updatedAt: 2021-10-03T13:20:08.153+00:00
  __v: 0
```

>

```
_id: ObjectId("6159bfff2db4b7325f8281ef3")
status: "order_placed"
customerId: ObjectId("6159ad15db4b7325f8281c09")
> product: Object
  createdAt: 2021-10-03T14:36:34.634+00:00
  updatedAt: 2021-10-03T14:36:34.634+00:00
  __v: 0
```

Chapter 7

Conclusion and Future Scope

7.1 Discussion and conclusion:

Activity in online trading has increased around the world. Following large companies making computer equipment, traders began to enter the network with traditional therapeutic products. Now, almost any product can be purchased through the network.

E-commerce is the process of making money using internet technology, or it is a form of product delivery through which product selection and ordering is accomplished by computer network, and buyer and made using settlements between supplier electronic documents and / or means of payment. At the same time, both individuals and the agency acts as the buyer of the scanned product (or service).

7.2 Scope for Further Developments:

The idea Development of e-commerce in the medium term. The main direction, competitive environment ways and means of expansion, growth of modern infrastructure and additional employment laws related to e-commerce are further improved along with creation.

Reference:

- [1] Use Case, <https://www.tutorialspoint.com/>
- [2] Fundamentals of E-commerce, <https://www.CreativeWorld99.com/>
- [3] Related Work and Design, <https://www.amazon.com/>
- [4] Coding tutorial, <https://www.w3schools.com/>
- [5] Related Work and Design ,<https://www.daraz.com.bd/>
- [6] Related Work and Design, <https://ajkerdeal.com/>
- [7] Report layout and information,
<https://sites.google.com/daffodilvarsity.edu.bd/picsediu/downloads/>
- [8] Overall information, <https://www.wikipedia.org/>

Appendices

Appendix A: Project Reflection:

Online Electronic gadget shopping is mine Business plan online customer. Them you can buy Using the website International of the brand thinking of products. I will add many features here products. Options to use them in features can be seen. Every day I shop online for the E-commerce beta version which is not just the market of Bangladesh This is a global market Consumer.