

# B.SC. ENGG. THESIS

## A Thesis on Online Shop

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Submitted to

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(In partial fulfillment of the requirements for the degree of  
Bachelor of Science in Computer Science & Engineering)



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# Acknowledgment

We would like to pay our gratitude to the Almighty Allah who created us with all the abilities to understand analysis and develop the process with patience. We are thankful to our thesis supervisor Meer Muttakin Alam, Assistant Professor, Computer Science and Engineering Department, Bangladesh University of Business and Technology for his professional guidance and motivation during the work of this thesis which is a major part of it. Without his valuable support and guidance, this thesis could not reach this level of development from our point of view.

We would like to thank all the Faculty members, Department of CSE, Bangladesh University of Business and Technology for their valuable time spend in requirements analysis and evaluation of the thesis work. We would like to express our sincere and warm gratitude to all those who have encouraged us directly, provided mental encouragement and criticized our work in several phases during the development of this thesis and for preparing this thesis indirectly.

# Abstract

Working with big data faces different issues but the most important issues are the security of the data and the processing time or power. We have tried to solve these problems with the blockchain technology and parallel distribution. We have distributed the database in different blocks and used the shared storage of different machine connected to a unique network. The blocks will be kept as encrypted on the shared storages. We have used the master-slave method for accessing the data. The master will encrypt the data with a public key while storing on shared storage and when it'll need to be used, the slaves can decrypt using their private keys. As the data will be encrypted, there's no way to read the main data. We have used RSA and caesar cipher algorithm to encrypt the data that makes it more secure. And also as they will be distributed in different storages divided on blocks, it's quite impossible to access the whole database as anonymous. So there's a two step of security over the database that provides the most security of the database. The most unique part of our work is, We can run application inside our system. The data transection remains encrypted and even the result data remains encrypted. We can request for specific data for the application and the data will be pulled from different slaves based on the request.“ For the real-life example we have used neural network into our system. We have been successful to pass the input data and the output data through our system. The requested data by the application were pulled from the storages. No unnecessary data were pulled and the data selection were held on the storage memory. The final result from the application were also passed as encrypted through the system. As we have used the storage memories and processing power for the data selection and the data passing, it has improved the data passing time and data processing capacity. So we can say, we can improve the data transection speed, processing capacity and most importantly the security using our system. *BigchainDB*.

# Declaration

We hereby declare that the Thesis on Online Multi-Shop submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology (BUBT) is our own work and that it contains no material which has been accepted for the award to the candidate(s) of any other degree or diploma, except where due reference is made in the text of the project. To the best of our knowledge, it contains no materials previously published or written by any other person except where due reference is made in the project.

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# Copyright

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# Dedication

*Dedicated to our parents, teachers, friends and who loved us for all their love  
and inspiration.*

# Certificate

This is to certify that Md.Tunazzinur Rahman Kabbo (ID-19202103274), Md.Zobayer Hasan Nayem(ID-19202103274), Md. Mehedi Hasan Akas (ID-19202103264), were belong to the department of Computer Science and Engineering, have completed their Thesis on Comparison Based studies to online Multi-Shop for the requirement of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology in the year 2019.

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# Approval

A Thesis on Online Multi-Shop is submitted by Md.Tunazzinur Rahman Kabbo (ID-19202103268), Md.Zobayer Hasan Nayem (ID-19202103274), Md.Mehedi Hasan Akas (Id-19202103264) under the department of Computer Science and Engineering of Bangladesh University of Business and Technology is accepted in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering

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# Acronyms List

RSA = Rivest–Shamir–Adleman

DAO = Decentralized Autonomous Organization

DES = Data Encryption Standard

USD = United State Dollar

UK = United Kingdom

IPFS = Inter Planetary File System

IoT = Internet of Things

IBM = International Business Machines Corporation

SSL = Secure Sockets Layer

AML = Anti-Money Laundering

KYC = Know Your Customer

TiM = Trust in Motion

MIT = Massachusetts Institute of Technology

ASX = Australian Securities Exchange

JPX = Japan Exchange Group

IPO = Initial Public Offering

QR = Quick Response Code

MD5 = Message-Digest Algorithm

MAC = Message Authentication Codes

BTC = Bitcoin

NIST = National Institute of Standards and Technology

GCD = Greatest Common Divisor

AES = Advanced Encryption Standard

TLS = Transport Layer Security

VPNs = Virtual Private Network

ECC = Elliptic Curve Cryptography

DDoS = Distributed Denial of Service

URL = Uniform Resource Locator

M2M = Machine to Machine

CPU = Central Processing Unit

GPU = Graphics Processing Unit

SPV = Simplified Payment Verification

HTLCs = Hashed Timelock Contracts

ACH = Automated Clearing House

HDAC = Hyundai Digital Access Currency

ePoW = Electronic Proof of Warranty

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# Chapter 1

## Introduction

### 1.1 Introduction

Online shopping is the process whereby consumers directly buy goods or services from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. An online shop, e-shop, e-store, Internet shop, web shop, web store, online store, or virtual store evokes the physical analogy of buying products or services at a bricks-and-mortar retailer or in a shopping center. .[1]

The process is called business-to-consumer (B2C) online shopping. When a business buys from another business, it is called business-to-business (B2B) online shopping.[2], In 1991 the Worldwide Web opened for commercial use. In 1994 other advances took place, such as online banking and the opening of an online pizza shop by Pizza Hut.[3], During that same year, Netscape introduced Secure Sockets Layer encryption of data transferred online, which has become essential for secure online shopping. [4] Also, in 1994, the German company Inter shop introduced its first online shopping system. In 1995, Amazon launched its online shopping site, and in 1996, eBay appeared. .[1] A good online store is a website that is easy to navigate and browse for possible purchases. It has a product catalog that customers can use to browse the search criteria (usually a type, price, material, age, etc.), and information about the products, the sellers, and the service center. Online stores may also discuss business conditions and a Complaints Procedure. [5] If a shopper finds a product to purchase, clicking "send" will add the item to the shopping cart. The shopping cart collects all items to be purchased. Once a

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shopper is satisfied with their selections, [2] the shopper makes a binding order and payment using a credit card or other financial arrangement. Therefore, implementing usability testing is highly important for an online store to avoid the reduce of overall performances of the online store [6] In the twenty first century, online shopping has become very popular, especially with the lifestyles of business people who are always busy and are looking for a convenient way to shop. .[3]



## 1.2 The Multi Online-Shop

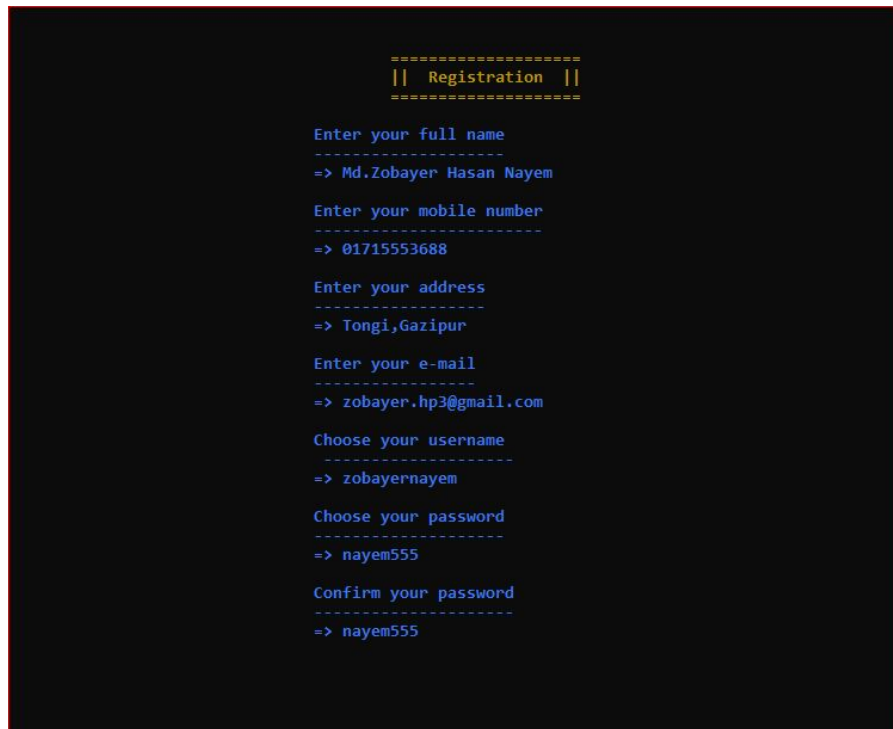
An online multi-shop is an online system market through which People can easily buy things at home and other necessities at home. People do not have to go to the market for this. The suffering of the people for this online market has been reduced many times. In this opportunity, these small markets have come together to create a big market. As a result, people can buy or sell all kinds of products. An Online Shop has many kind of parts there is Registration, Sign Up, Shopping Menu, Credits, Exit[1]



Figure 1.1: Online Shop Menu

### 1.2.1 Working System of Registration

Through registration we take all kinds of customer information. Through this a person writes his identity in our shop. Later he can shop by logging in to our shop.[?]



```
=====
|| Registration ||
=====

Enter your full name
-----
=> Md.Zobayer Hasan Nayem

Enter your mobile number
-----
=> 01715553688

Enter your address
-----
=> Tongi,Gazipur

Enter your e-mail
-----
=> zobayer.hp3@gmail.com

Choose your username
-----
=> zobayernayem

Choose your password
-----
=> nayem555

Confirm your password
-----
=> nayem555
```

Figure 1.2: Working procedure of Registration

The Customer's full name, mobile number, address, email, username, password, is taken while registration is made here. Through this, an account in the name of customer is started. By jar he can buy goods from the shop.

### 1.2.2 Working System Of Sign-in

By signing up, the buyer can access his own account with his username and password. No one can know the identity of the buyer of this system. This system is very important in this online multi shop.

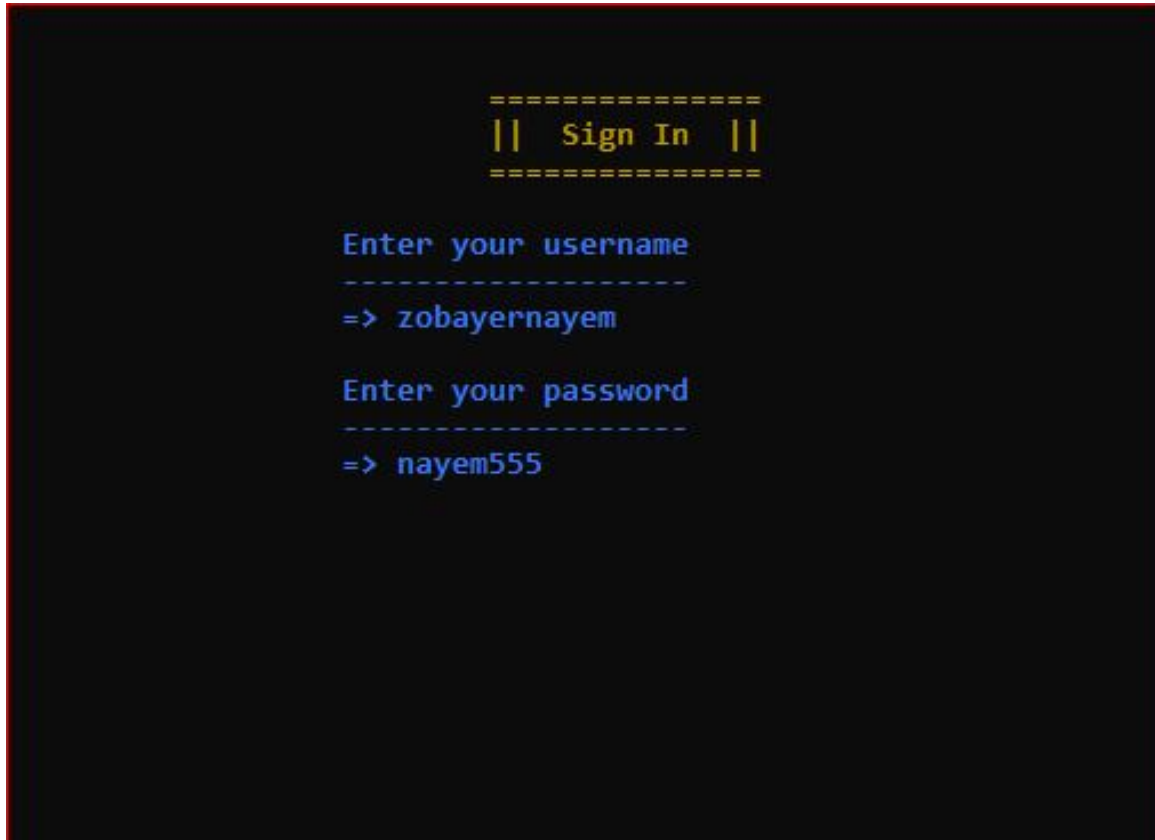


Figure 1.3: Working procedure of Sign-Up System

This sign-up system is the most security thing a user has in his or her case. Because this allows the buyer to enter his online shop using only passwords. They can easily get-in-to the shop.

## 1.3 Shopping Section

Shop Here we have all kinds of products of this market, clothes choppers, electronics, healthcare, consumer products, digital facilities and are available here.

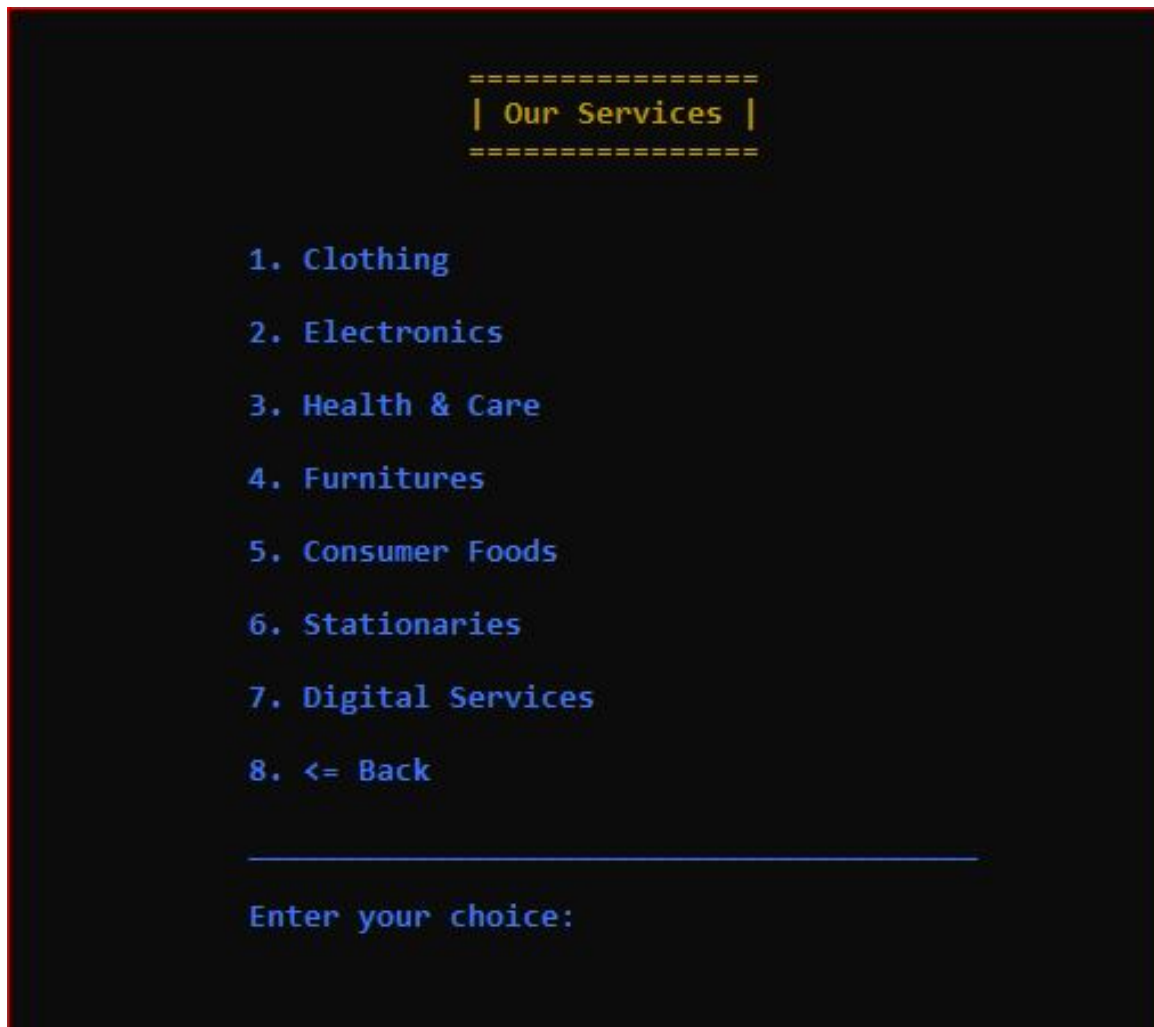


Figure 1.4: Working procedure of Sign-Up System

# Chapter 2

## Existing Literature

### 2.1 Introduction

Online shop allows people to shop for products from any part of the world. Through this service, people do not have to suffer and win the market. This has only only made people suffer . So that people can sit online and buy things they want, maybe they buy for his house, clothes, or his shop, even to give gifts to people. It's a virtual system that has made people want to suffer. Online shopping is something that people themselves take out income sources and process themselves as disabled people. As a result, people are introducing him to the cause of it, to make their work reach everyone's cause.

### 2.2 Online Multi Shop Project

Inside the online shopping, people choose to buy everything they want. It can be that clothes, electric devices, medical items, healthcare, furniture, food, stationery items, digital services, all these facilities are delivery opportunities, so that people do not have to suffer.

#### 2.2.1 Why our enthusiasm

This is our kind of enthusiasm because we want people to give something good, their money doesn't go aback, which is our kind of enthusiasm. It is only when people suffer.

## **2.3 Conclusions**

Lastly, one thing is not to the benefit of Manus, who says man is the one who likes him.

# Chapter 3

## Proposed Model

### 3.1 Introduction

Online shopping is the process whereby consumers directly buy goods or services from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. An online shop, e-shop, e-store, Internet shop, web shop, web store, online store, or virtual store evokes the physical analogy of buying products or services at a bricks-and-mortar retailer or in a shopping center. There are many Kind Of Section in Our Projects: 1.Clothing 2.Electronic Accessories 3.Health Care 4.Furnitures 5.Consumer Foods 6.Stationaries 7.Digital Service

#### 3.1.1 Oder

1.Order Number 2.Product Code Number 3.Order Time 4.Order Location 5.Order Price 6.Number of Products 7.Total Price of The Product

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