



Order Processing and E-commerce using Node JS

A Project Report of Capstone Project -2

Submitted by

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**SCHOOL OF COMPUTING SCIENCE AND
ENGINEERING**

BONAFIDE CERTIFICATE

Certified that this project report “**Order Processing and E-commerce using Node JS**” is the bonafide work of “**RISHABH SINGH (1613101571)**” who carried out the project work under my supervision.

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1. ABSTRACT

The drivers for electronic commerce are both technological (under the tremendous pressure of innovation) and business oriented. This paper will highlight some guidelines for companies who are entering into E-commerce to create an E-commerce strategy or who already have an E-commerce presence to revise their existing strategy. E-Commerce is now seen as a reality for many businesses and a normal part of a business plan. The immediate benefits, in terms of cost savings, efficiency and enhanced profitability are clear at every stage in the supply chain. Adopting e-business is no longer a competitive advantage, but a normal business process, without which an enterprise is unlikely to survive in the New economy. Year 2000 saw many Dot-com companies built up and many companies going into E-commerce however now it is a different story, more and more companies are failing, and investors are becoming cautious to invest money into Internet ventures. There is more cash needed than was expected. Some of them had to get on the bandwagon as everybody else were and didn't want to be left behind, and now that the bubble has burst they are facing the consequences. This paper will aim to help companies to realize what they need to follow to have a successful business if they plan well and have a good strategy.

2. INTRODUCTION

Electronic commerce (e-commerce) is a fairly new idea, and it is very common practice nowadays for businesses to conduct trade over the Internet. There are various advantages to e-commerce (e.g., lower cost, convenience). E-commerce can simply be defined as buying and selling merchandise or services online. Most successful businesses today have their own websites. Today, it is possible to conduct business nationally and globally with a click of a fingertip due to the worldwide use of the Internet. To be successful in the global marketplace, businesses need to develop culturally friendly e-commerce websites. When conducting business online, factors such as region and culture, web content accessibility, ease of use, secure authentication, payment, fraud detection, performance, trust, stability, technology, and convenience are vital to the businesses' and consumers' satisfaction and interest. This is a less focused research area and needs significant attention. commerce, therefore, is an important area for research and needs further investigation.

The primary goal of an **e-commerce site** is to sell goods online. This **project** deals with developing an **e-commerce website** for Online Product Sale. It provides the user with a catalog of different product available for purchase in the store. In order to facilitate online purchase a shopping cart is provided to the user.

We Start by adding the product by selecting it by our choice and adding it to the cart by clicking Add to Cart Button. Output : The Product gets saved to the database and on the Interface we see that some products are added to the Cart. Then we can either remove product or we can simply empty the cart according to need. For making the purchase we need to checkout and for checking out first the user should be authenticated ,so first we have to sign-up and sign-in to go to the checkout page. There we can enter our credentials and make the purchase successful by third party payment mode and then we can go to users profile and check the bought product.

3. SOFTWARE REQUIREMENT SPECIFICATION

1. Purpose -E-Commerce application is an web Application hosted on a domain which is used to sell and purchase products online in realtime.
2. Document Conventions-The Documents subsequently explains the needs and traits of the project produced, with sufficient explanation. The important data has expressed in proper fonts and using techniques.
3. Intended Audience and Reading Suggestions-The application developed is intended to be used by all the people globally who are intrested in online purchase and e commerce buissness.

Product Scope:

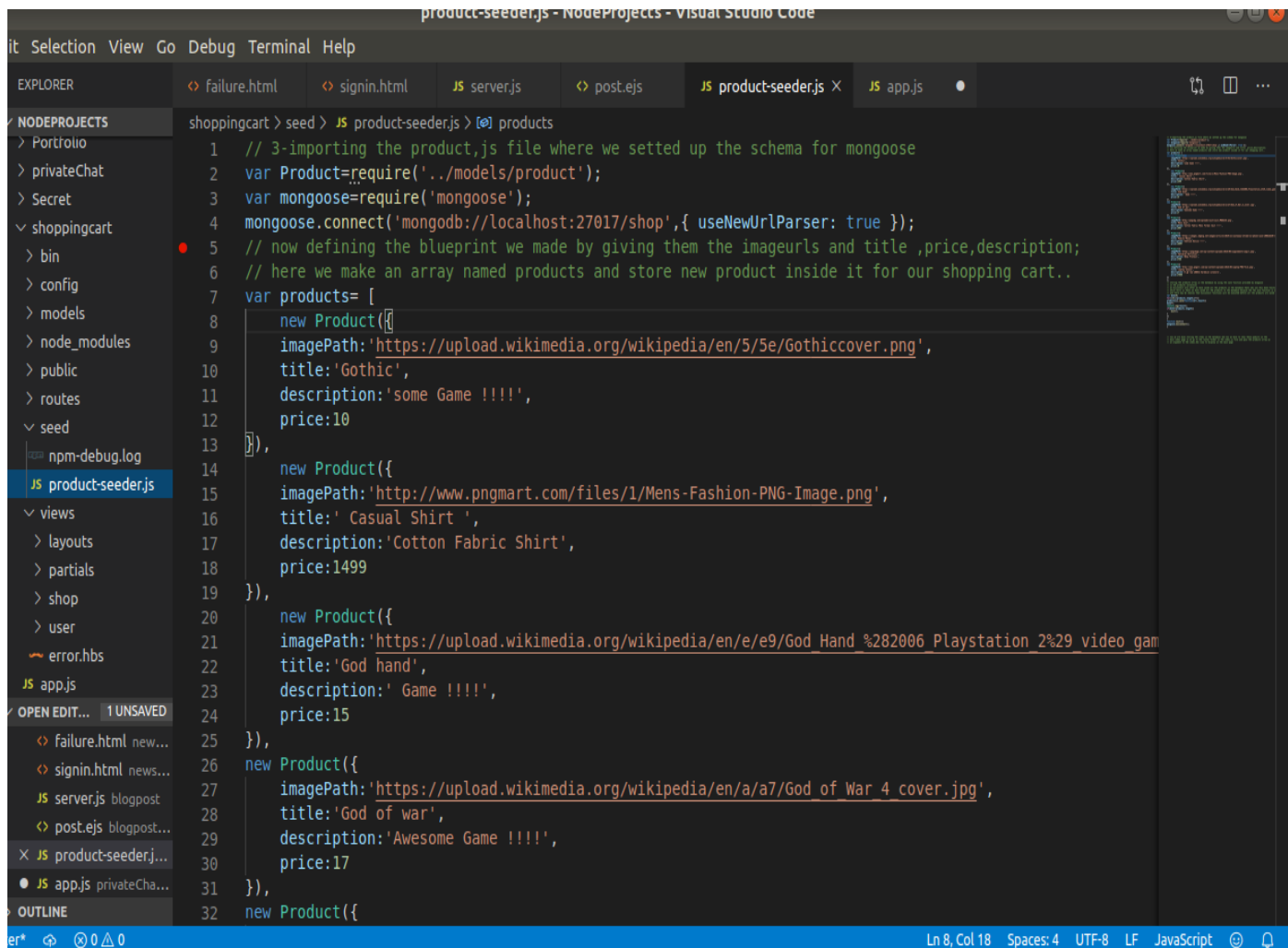
1. It is executed by technologies of the World of Web Development .
2. It's a E -Commerce Application which is easy to use.
3. It's a Application for Real Time Purchase of Products Online With payment feature.
4. Moreover it is User-Friendly.
5. It is very Cost-Effective, Faster, And Reliable, and towards the idea of Online Marketing and E Commerce Buissness.
6. This Application can be used for personal Buissness ,to sell personal product or for a large scale E commerce buissness.

4. RELATED WORK

1. We Store the products on the database and the show those products on the User Interface
And there we can add products to cart, Empty Cart ,Sign-In ,User Sign-Up ,User Checkout ,Check Ordered Product ,Log-Out ,Login.
2. We work with various approaches of web Development and client-server programming and made a successful E commerce website which is secure and Authenticated.
3. We used agile Approach in development as we make a feature and test it on the point to create a well working End Product.

5. IMPLEMENTATION

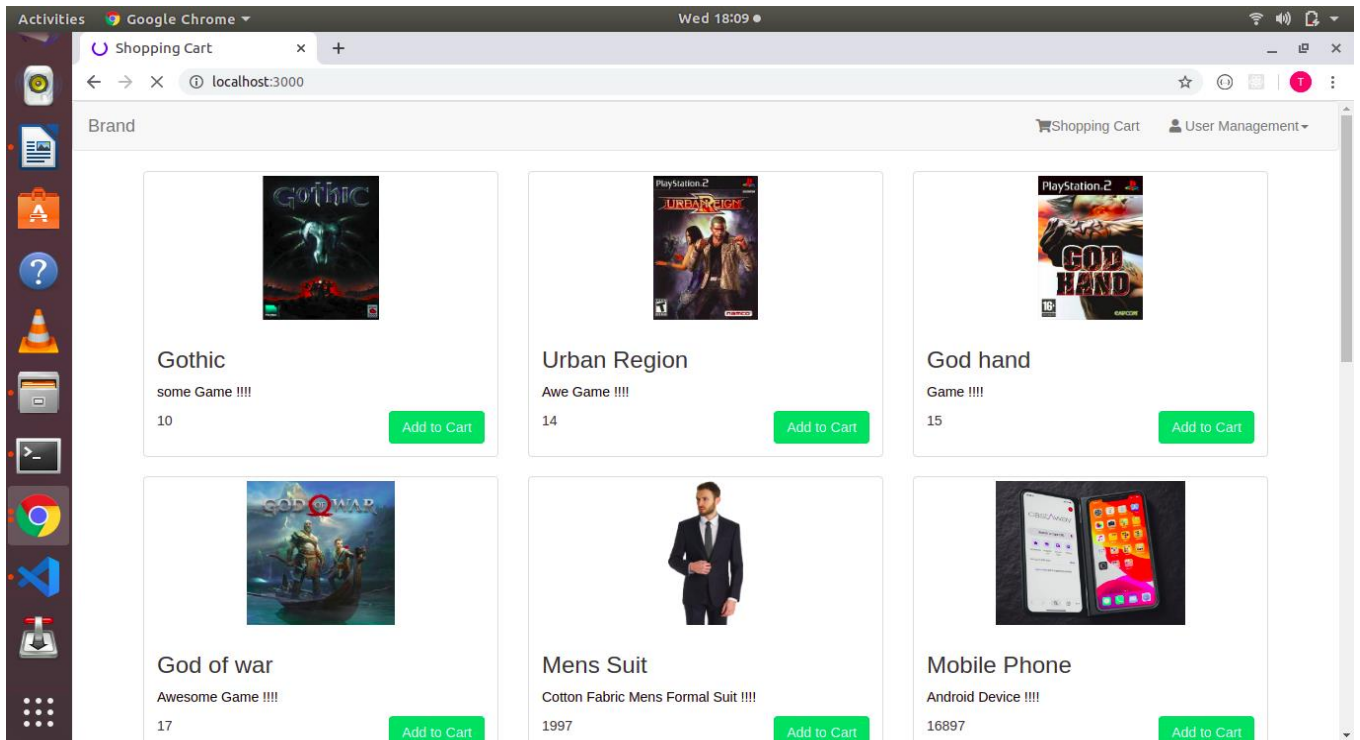
Step 1:- Adding Products To The DataBase.



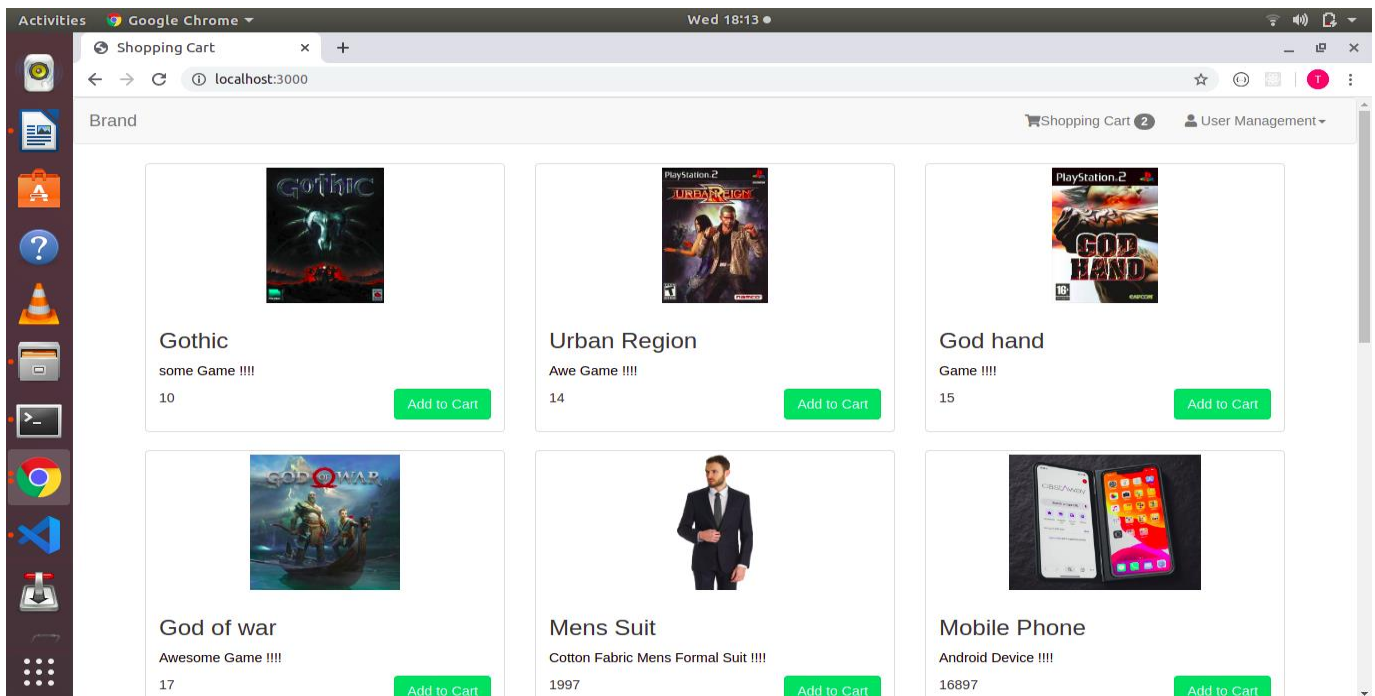
The screenshot shows the Visual Studio Code editor with a project named 'shoppingcart'. The file explorer on the left shows the project structure, including folders like 'bin', 'config', 'models', 'node_modules', 'public', 'routes', 'seed', 'views', and 'shop'. The 'seed' folder contains the file 'product-seeder.js', which is currently open in the editor. The code in 'product-seeder.js' is as follows:

```
1 // 3-importing the product.js file where we setted up the schema for mongoose
2 var Product=require('../models/product');
3 var mongoose=require('mongoose');
4 mongoose.connect('mongodb://localhost:27017/shop',{ useNewUrlParser: true });
5 // now defining the blueprint we made by giving them the imageurls and title ,price,description;
6 // here we make an array named products and store new product inside it for our shopping cart..
7 var products= [
8   new Product({
9     imagePath:'https://upload.wikimedia.org/wikipedia/en/5/5e/Gothiccover.png',
10    title:'Gothic',
11    description:'some Game !!!!',
12    price:10
13  }),
14  new Product({
15    imagePath:'http://www.pngmart.com/files/1/Mens-Fashion-PNG-Image.png',
16    title:' Casual Shirt ',
17    description:'Cotton Fabric Shirt',
18    price:1499
19  }),
20  new Product({
21    imagePath:'https://upload.wikimedia.org/wikipedia/en/e/e9/God Hand %282006 Playstation 2%29 video gam
22    title:'God hand',
23    description:' Game !!!!',
24    price:15
25  }),
26  new Product({
27    imagePath:'https://upload.wikimedia.org/wikipedia/en/a/a7/God of War 4 cover.jpg',
28    title:'God of war',
29    description:'Awesome Game !!!!',
30    price:17
31  }),
32  new Product({
```

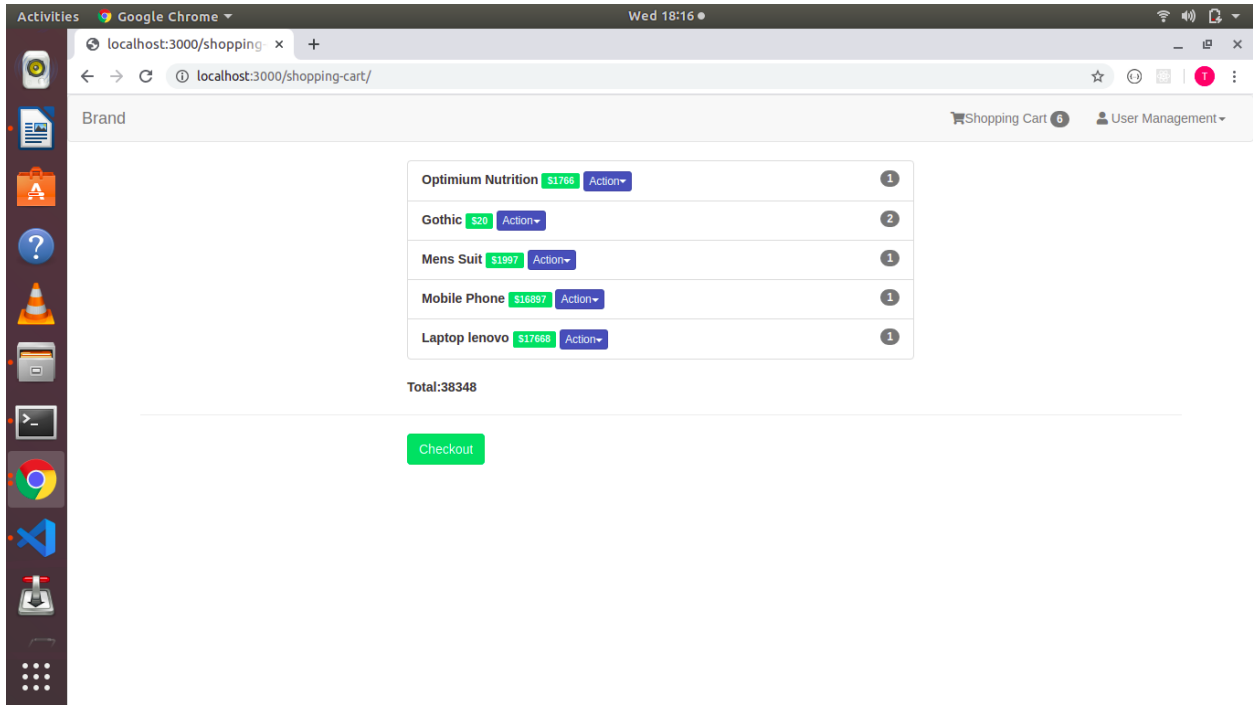
The status bar at the bottom indicates the current position is Line 8, Column 18, with 4 spaces, UTF-8 encoding, LF line endings, and the JavaScript language mode.



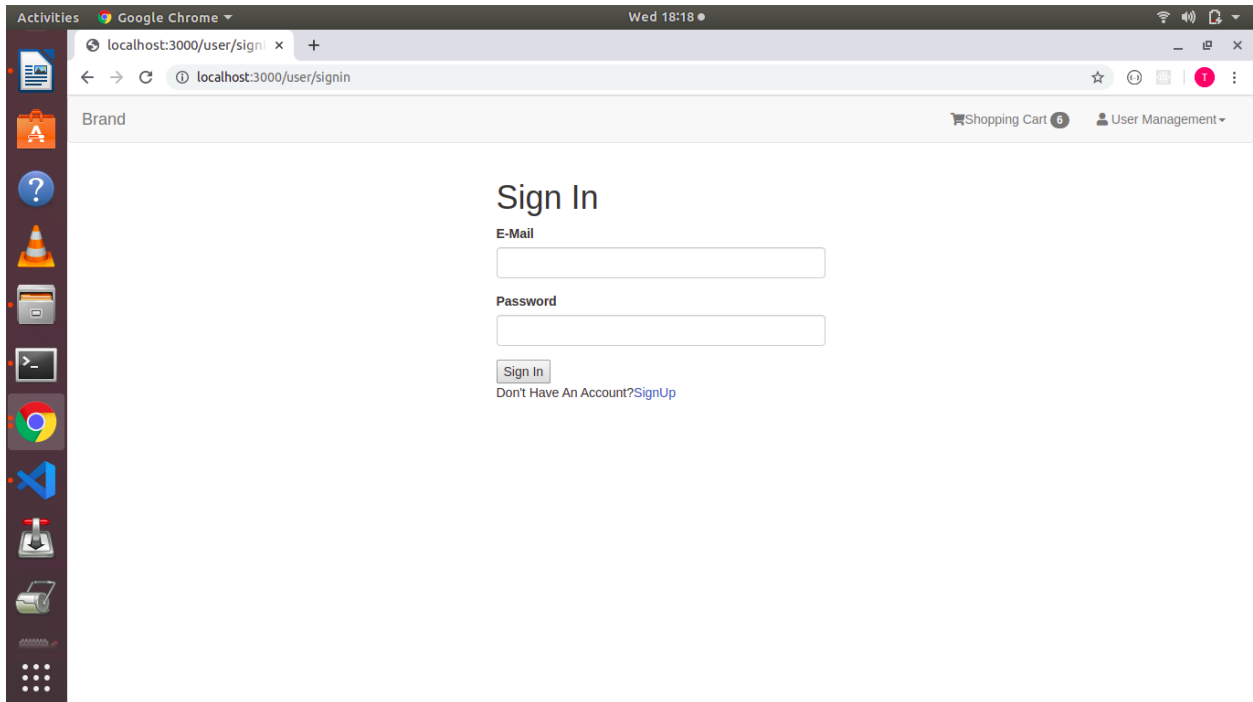
Step 2 – Adding Product to cart-

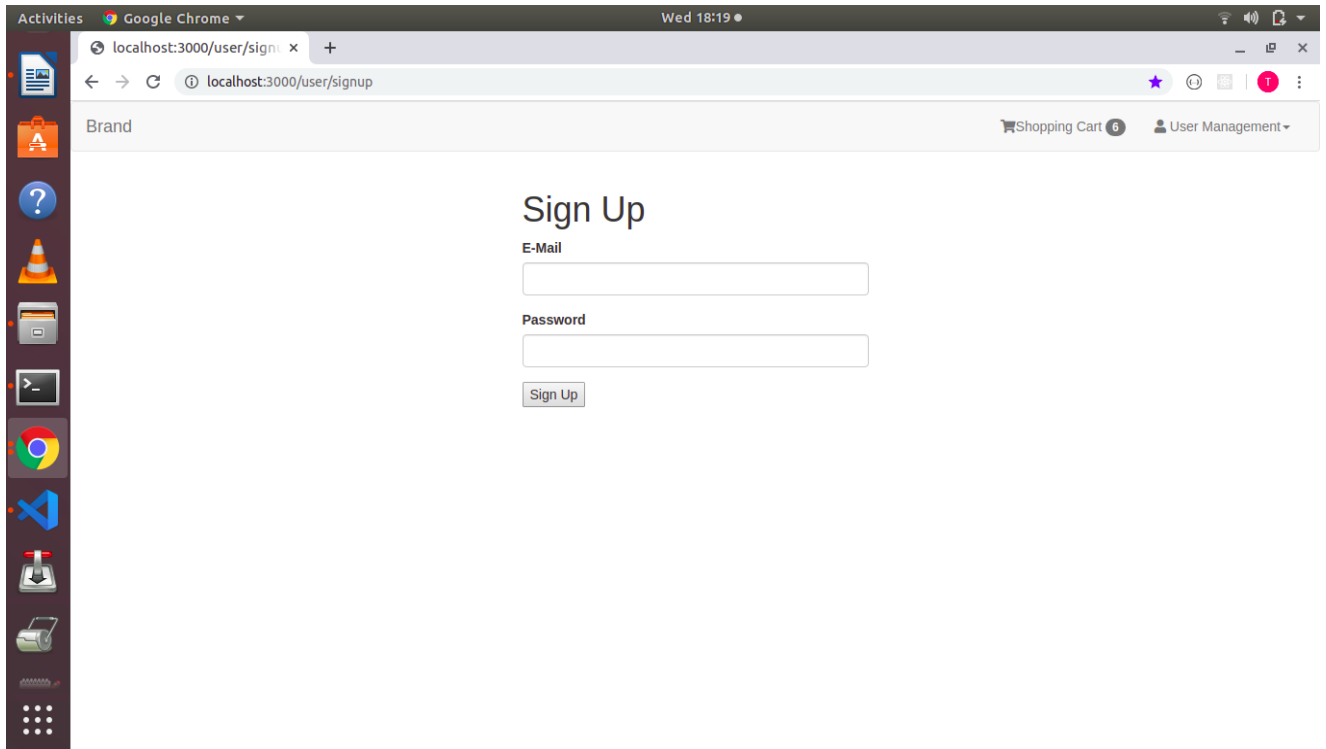


Step 3- Cart Page View-

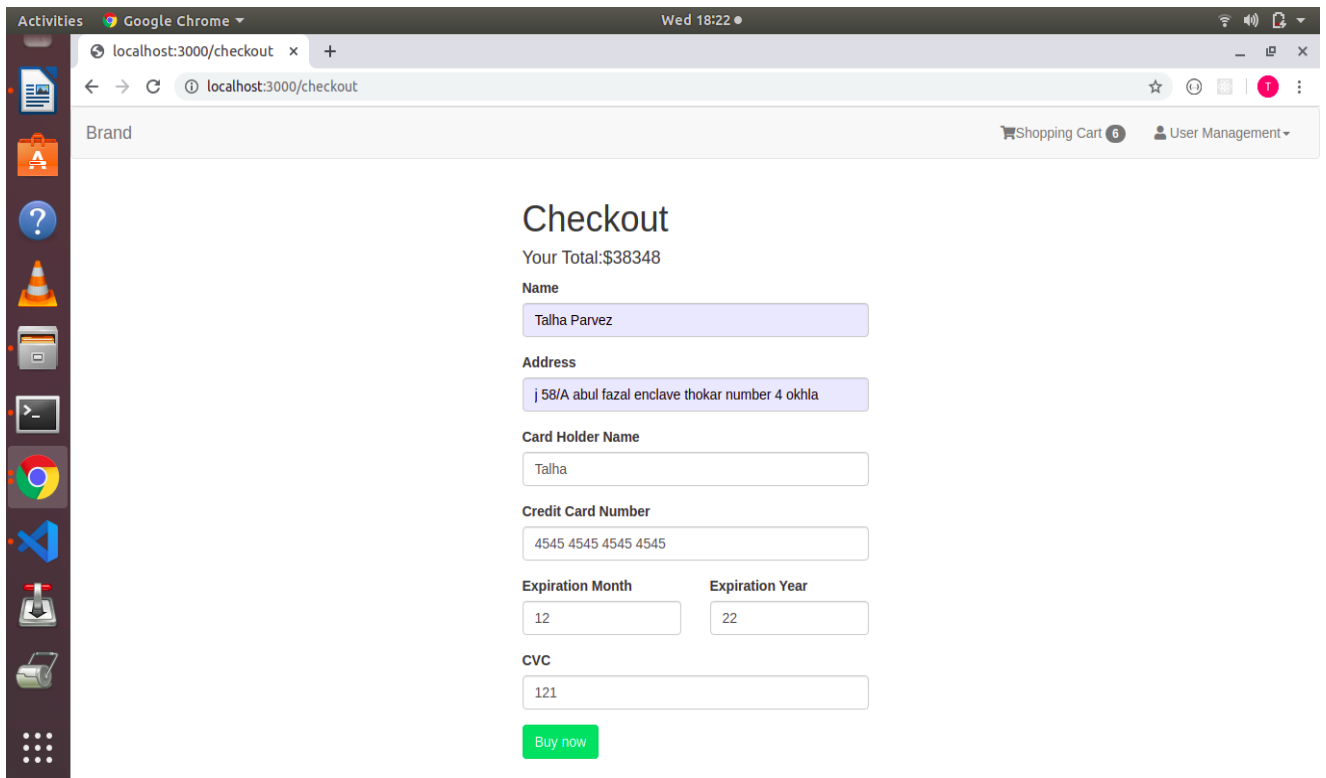


Sign In Page/Sign Up Page

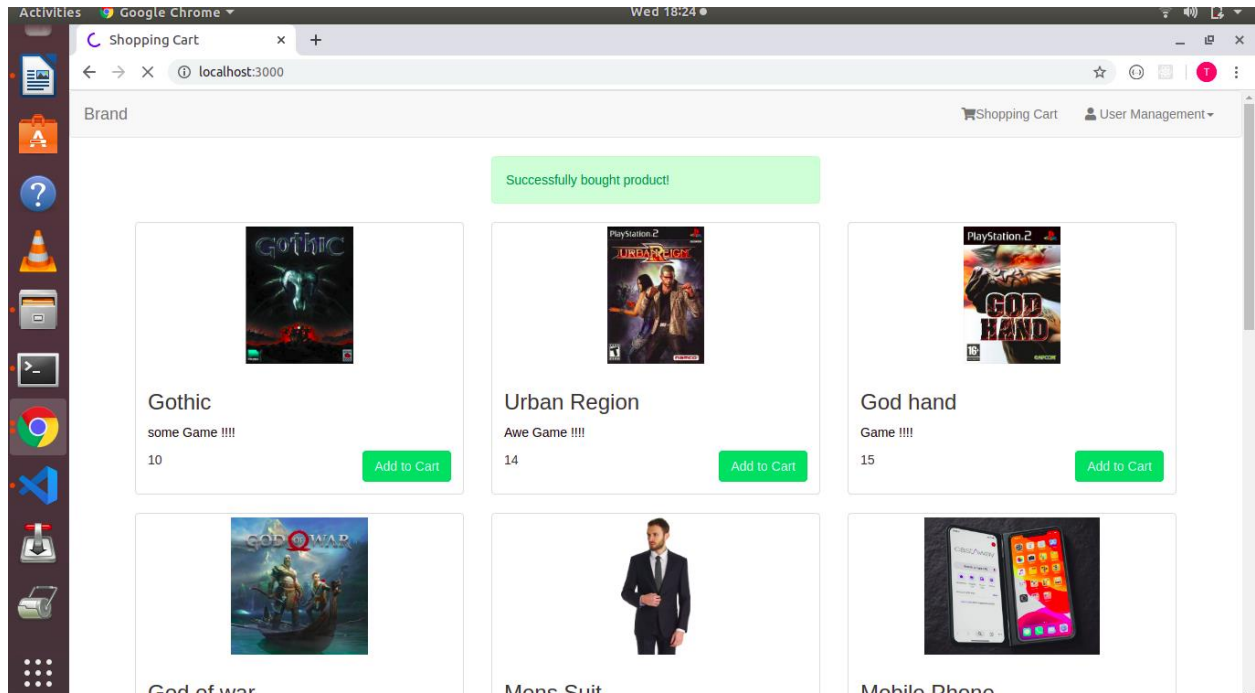




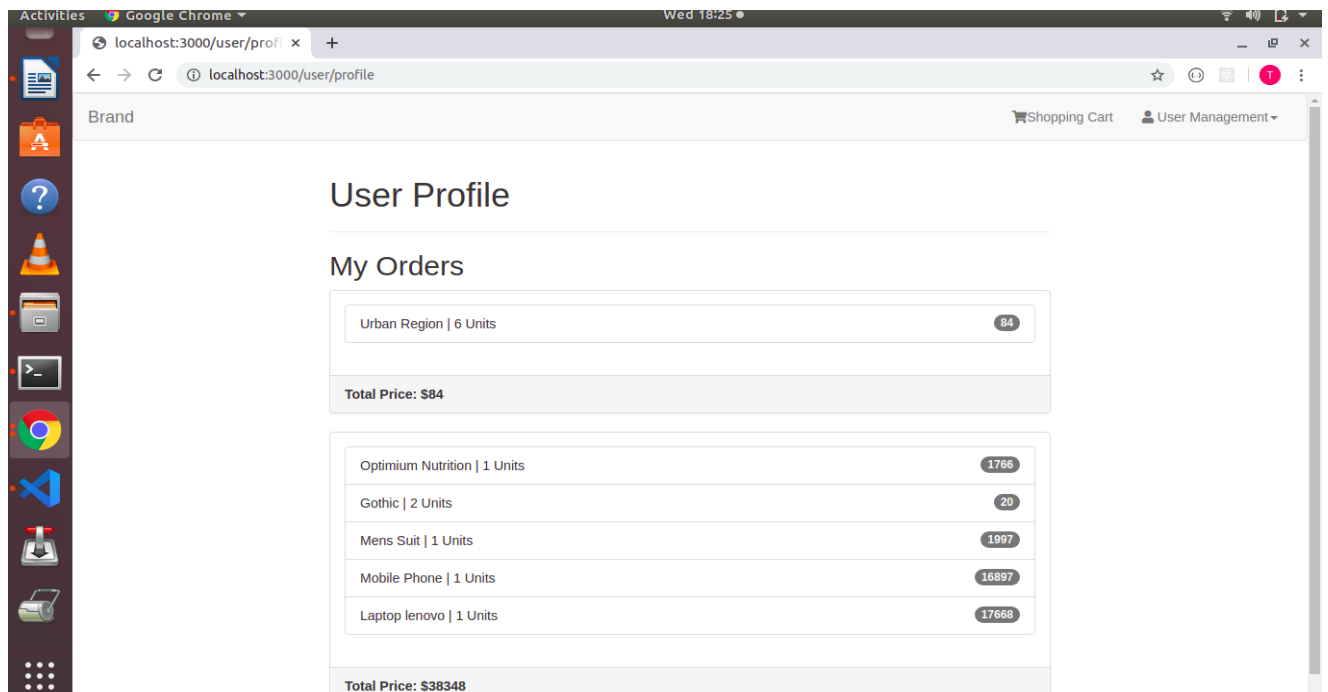
Checkout page After User Authentication



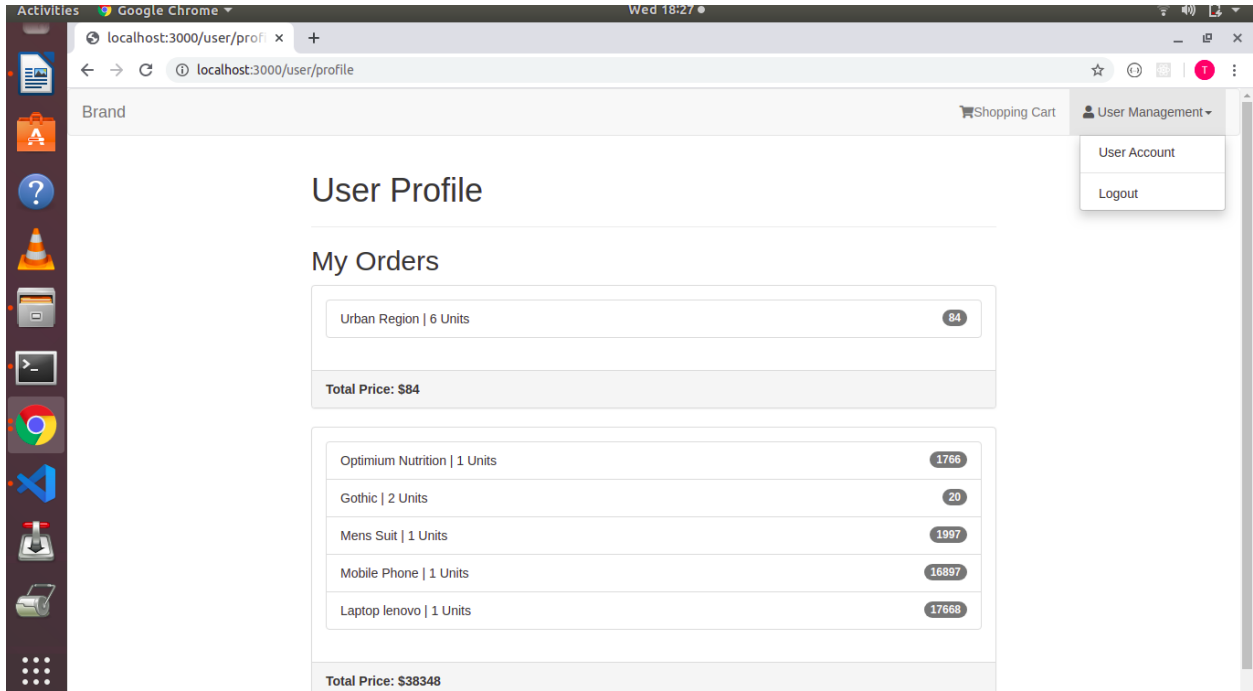
Home Page after Purchase Successful



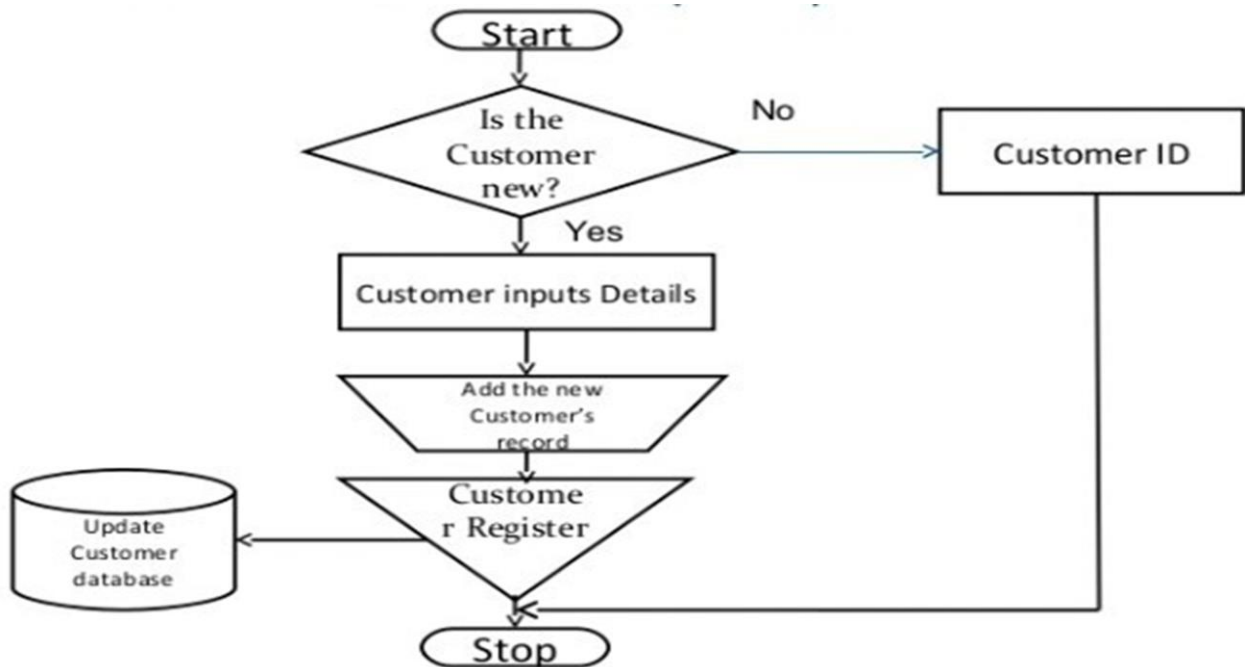
User Profile Page After Purchase



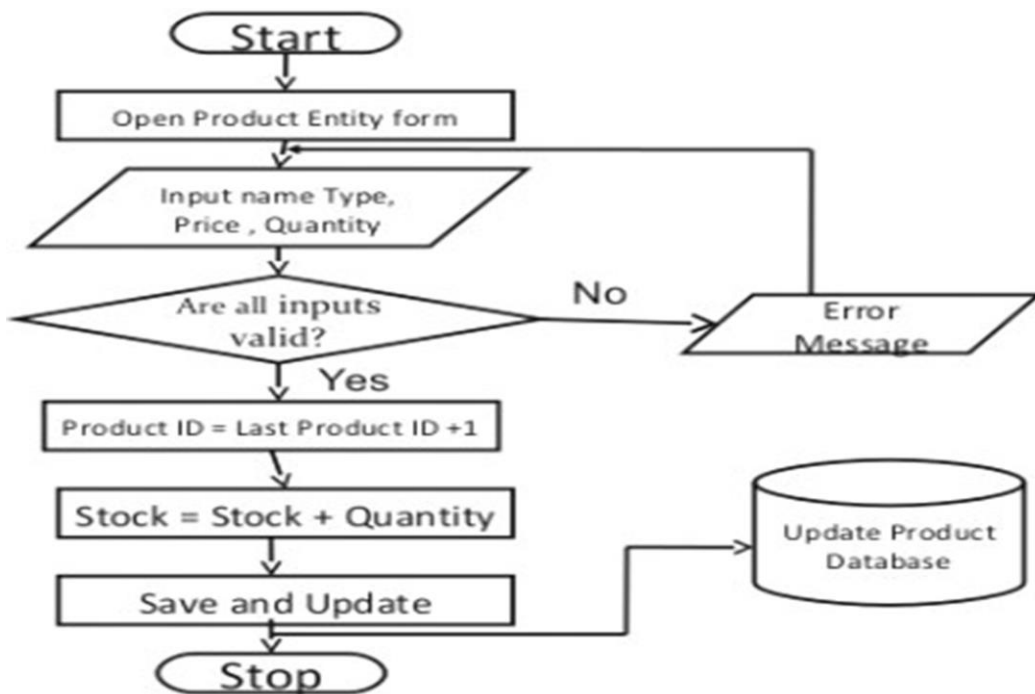
Logout Option UI



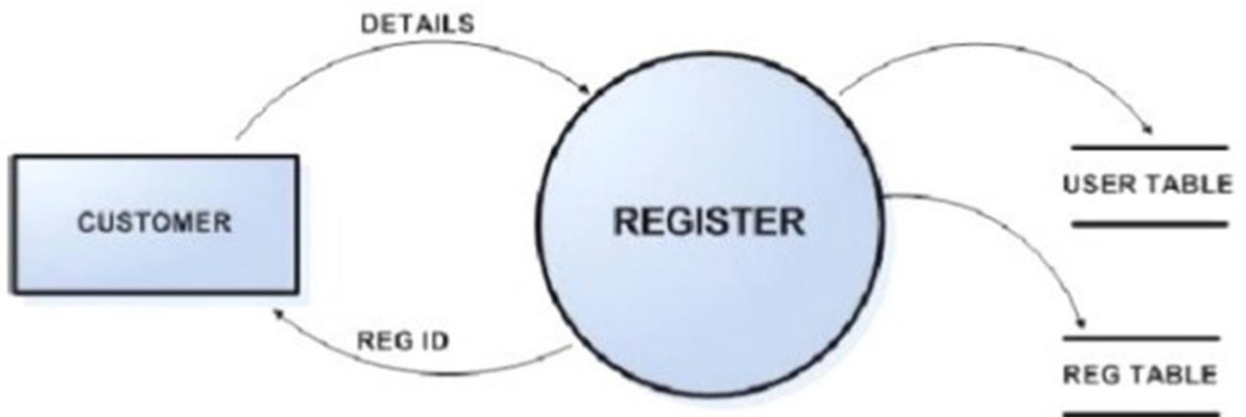
6. ARCHITECTURE DIAGRAM



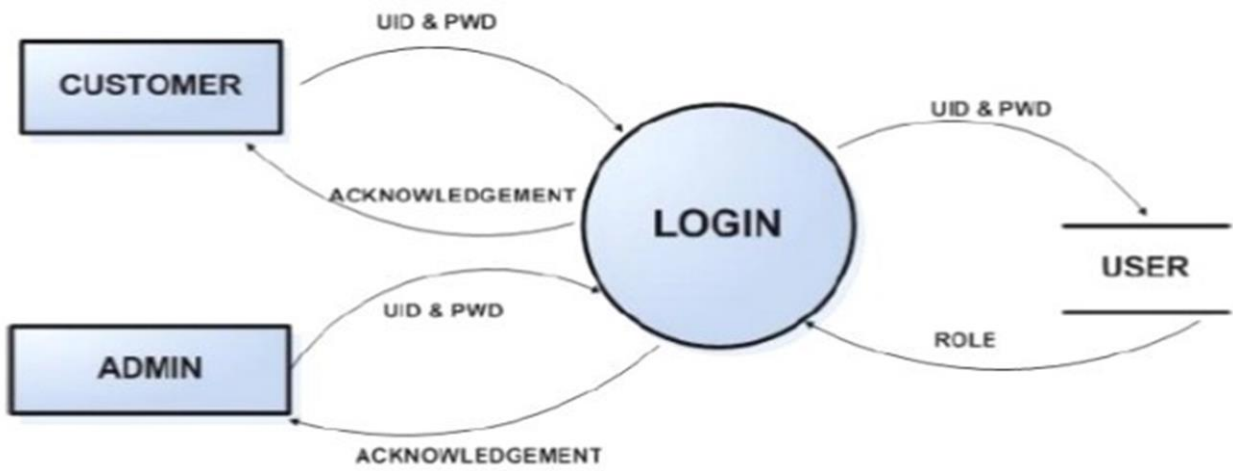
(Figure:- Flow chart for Adding new customer)



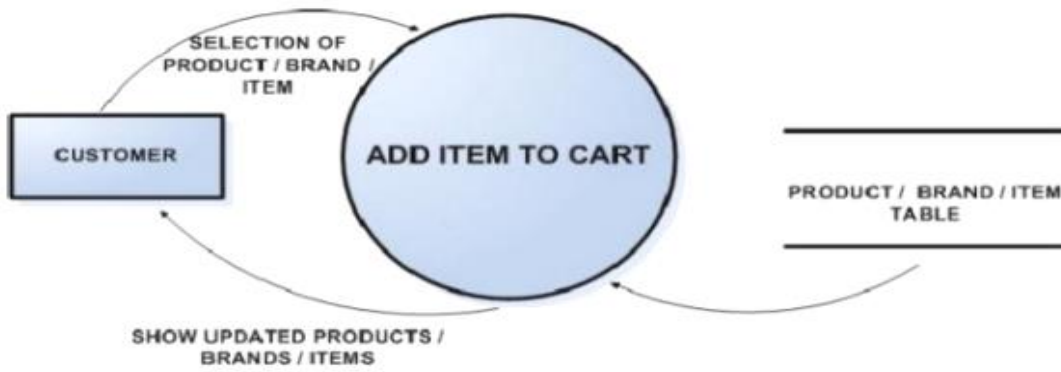
(Figure:- Flow chart for Adding new products)



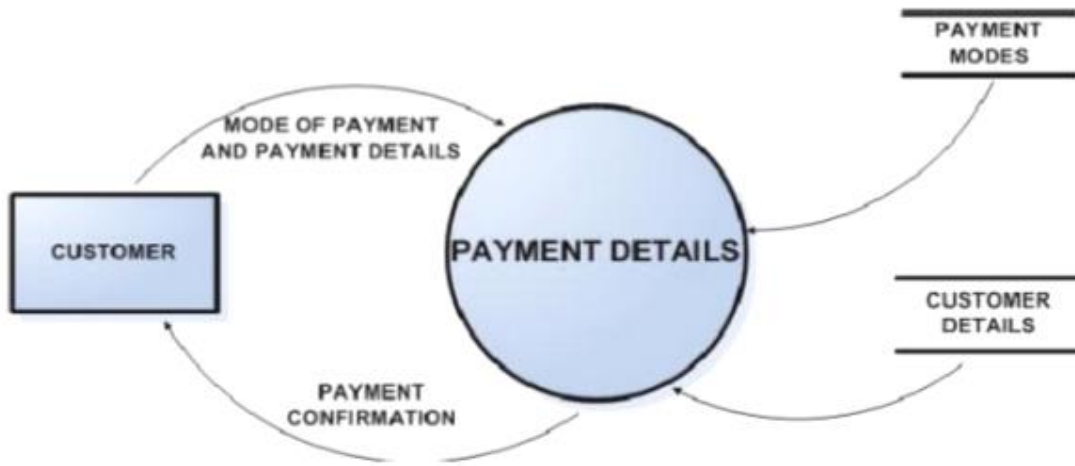
(Figure:- DFD for customer registration)



(Figure:- DFD for customer Login)

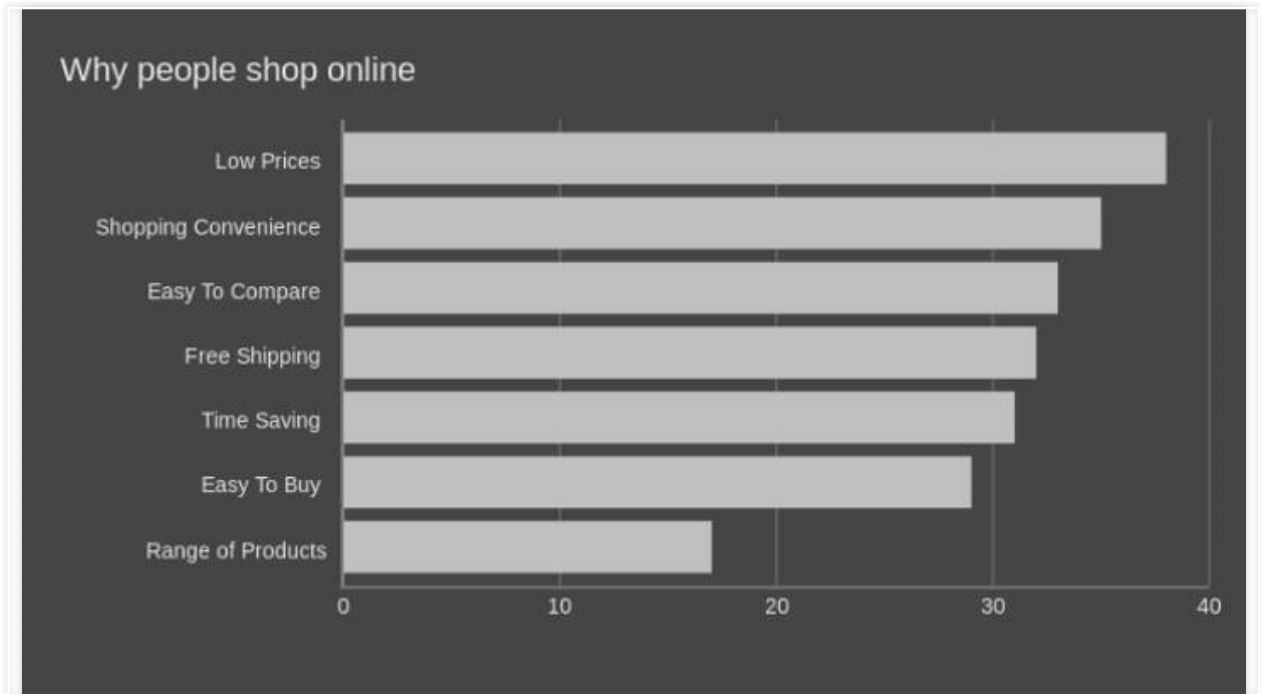


(Figure:- DFD for Adding Item to cart)



(Figure:- DFD for customer Payment details)

7. RESULT



8. CONCLUSION

1. *To know the future Scope in India itself i went through several articles and came to this conclusion from those articles To understand this scenario, we can divide E-commerce into three broad categories which include physical services, physical goods and virtual goods.*
2. Another category that is gradually making its mark is the local commerce (couponing, yellow pages, classifieds etc.) which offers significant overlaps with E-commerce.
3. The 1st category of physical services is definitely the major contributor which includes travel ticketing, jobs, matrimonial and event management websites with travel sites accounting for 75% of all E-commerce industries! It provides attractive deals too.
4. The 2nd category of physical goods is the one currently gaining considerable attention, thanks to the hype created by new startups/stores being launched daily.

9. LIMITATIONS

1. The purpose of any e-commerce website is to help customers narrow down their broad ideas and enable them to finalize the products they want to purchase.
2. For example, suppose a customer is interested in purchasing a mobile. His or her search for a mobile should list mobile brands, operating systems on mobiles, screen size of mobiles, and all other features as facets.
3. As the customer selects more and more features or options from the facets provided, the search narrows down to a small list of mobiles that suit his or her choice. If the list is small enough and the customer likes one of the mobiles listed, he or she will make the purchase
4. These facets were different for mobiles that we discussed earlier. Similarly, each category will have different facets and it needs to be designed properly so that customers can narrow down to their preferred products, irrespective of the category they are looking into.

10.REFERENCES

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4. Elizabeth Goldsmith and Sue L.T. McGregor(2000); E-commerce: consumer.