

BISMILLAHHIR RAHMANIR RAHIM

E-COMMERCE WEBSITE

BY

MD. SAIFUL ISLAM

TAHMID AZMAIN

MAINUL HASAN



FACULTY OF SCIENCE AND ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

INTERNATIONAL ISLAMIC UNIVERSITY, CHITTAGONG

E-COMMERCE WEBSITE

DONE BY

MD. SAIFUL ISLAM

TAHMID AZMAIN

MAINUL HASAN

A PROJECT REPORT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE
OF BACHELOR OF SCIENCE IN COMPUTER SCIENCE AND
ENGINEERING.

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A Project Report Submitted by

MD. SAIFUL ISLAM C131009

MAINUL HASAN C133049

TAHMID AZMAIN C133055

For the partial fulfilment of the degree of B. Sc. in
Computer Science and Engineering Examination
held on October, 2016

Approved by:

Md. Arif Hasnayeem

Supervisor

Assistant professor

Department of Computer Science & Engineering
International Islamic University Chittagong

DECLARATION

During the submission as a partial fulfilment of the System Design & Analysis Sessional (CSE 3606) Project of B. Sc. in CSE 6th semester, of the International Islamic University Chittagong, this is the declaration, that the project on ECOMMERCE WEBSITE is the Original work done by our group members are MD. SAIFUL ISLAM (C131009), MAINUL HASAN (C133049) AND TAHMID AZMAIN (C133055). This project are neither copy nor taken from anyone else.

MD. SAIFUL ISLAM
MAINUL HASAN
TAHMID AZMAIN

DEDICATION

We would like to dedicate the project on ECOMMERCE WEBSITE to our respective Sir, MD. Arif Hasnayeem for the support and help.

ACCKNOWLEDGEMENT

We first express our gratitude to the Almighty Allah (SWT). By the mercy of Allah (SWT) we have completed our project successfully.

We feel profound and very much thankful to our supervisor Md. Arif Hasnayeem our System Analysis & Design Sessional (CSE-3606) course teacher, International Islamic University Chittagong for his every support, inspiration, encouragement, advice and guidance and direction throughout the execution of this project and without his valuable support this website would not be Successful.

ABSTRACT

This is a project report on “E-COMMERCE WEBSITE”. The project is the output of our planning, schedule, programming skill and hard work. During the developing of this project we used HTML as our front design and backend, we used PHP, MYSQL.

This is a web based application which helps people to find and buy various kinds of products at any place. It is easier to find and buy any kinds of products via online. The website has been developed with a database system where manipulation and modification of data are made easily.

BRIEF CONTENTS

<u>1. Introduction</u>	<u>10</u>
1.1 Objective	10
1.2 Present System Overview	11
1.3 Project Scope	11
1.4 Project Deliverables	11
<u>2. Feasibility Study</u>	<u>13</u>
2.1 Gantt Chart	13
2.2 Feasibility Study	14
2.2.1 Technical Feasibility	15
2.2.2 Economic Feasibility	15
2.2.3 Operational Feasibility	16
2.2.4 Schedule Feasibility	16
<u>3. Methodology</u>	<u>17</u>
<u>4. Evaluation Criteria</u>	<u>18</u>
<u>5. Activity Program</u>	<u>19</u>
<u>6. System Design</u>	<u>21</u>
6.1 ER Diagram	21
6.2 Relational Schema	23
6.3 Database Tables	24
6.3.1 Customers	24
6.3.2 Products	24
6.3.3 Categories	24
6.3.4 Brands	25
6.3.5 Cart	25

<u>7. Data Flow Diagram</u>	<u>26</u>
7.1 Context Diagram	26
7.2 Level 0 DFD	27
7.3 Level 1 DFD	28
7.4 Level 2 DFD	29
7.5 Level 2 for 4 DFD	30
7.6 Level 2 for 5 DFD	31
7.7 Level 3 for 4.3 DFD	32
<u>8. Use case diagram</u>	<u>33</u>
<u>9. Sequence diagram</u>	<u>34</u>
<u>10. Implementation and Coding</u>	<u>35</u>
10.1 Software Implementation	35
10.2 Snapshots	36
<u>11. Testing</u>	<u>47</u>
11.1 Unit Testing	47
11.2 Integration Testing	47
11.3 System Testing	48
11.4 Acceptance Testing	48
<u>12. Limitations</u>	<u>49</u>
<u>13. Conclusion</u>	<u>50</u>
<u>14. References</u>	<u>51</u>

1. Introduction

The project is concerned with any kinds of E-Commerce Website where the aim of this project is on the online shopping application which is developed by using HTML5, JAVA script, CSS, PHP. The application is very useful where the customer can directly buy the products from home via internet on various kinds of devices. The website is fully user friendly, so customer can easily order products via internet from home using smartphone, laptop, PC or using tablet. The transaction of money is completed in real time system. By this online shopping the product is directly delivered to customer home with cash on delivery.

1.1 OBJECTIVE

- The Website is for the online shopping.
- It has maintained by only administrator.
- The website featured as follow:
 - Various types of product details.
 - It has a login system, where anyone can create an account easily.
 - Payment system will be cash on delivery.
 - Website is designed user friendly.

1.2 PRESENT SYSTEM OVERVIEW

The system containing of such features such as account login, add to cart, update the cart, adding or deleting products by admin.

1.3 PROJECT SCOPE

The website can be used in any place of the world via internet. Anyone can visit our website and purchase products as their wish by searching categorically. For cash on delivery, we just restricted the ordering system within Bangladesh.

1.4 PROJECT DELIVERABLES

Our project is Online based website which has some following features:

➤ Product Category:

In the website, there exists different types of products in different Categories.

➤ Product Brand:

In the website, there exists different types of products in different Brands.

➤ Product Details:

Each and every product, there has a specific individual details with their real photos and authentic prices.

➤ Order:

People may order any kinds of products with their existing accounts or newly registration at that time.

➤ Add To Cart:

Customers can easily add their wanted products to Cart or delete from the Cart.

➤ Helpline

There are an email system to contact with the administrator to fix any kind of problem and information.

➤ Account:

Customers must need an account to buy any products. Un-Register or Unauthorized Person does not have the rights to purchase any products.

2. FEASIBILITY STUDY

2.1 GANTT CHART

1 Click Shop			
Task name	Start date	End date	Duration day
▼ Web Site Designed	20/04/16 11:36	01/09/16 05:20	133.79
▼ 1 Click Shop's Web Site	20/04/16 11:36	01/09/16 05:20	133.79
▼ Initial activities	20/04/16 11:36	03/05/16 04:36	12.75
Project Selection	20/04/16 11:36	20/04/16 12:36	0.04
Planning	20/04/16 11:36	21/04/16 11:36	1.04
Initial meeting	20/04/16 11:36	21/04/16 15:36	1.21
Assessment	21/04/16 15:36	26/04/16 20:36	5.21
Research	26/04/16 20:36	03/05/16 04:36	6.33
+ Add a task Add a milestone			
▼ Site Outline	28/04/16 19:20	13/05/16 05:20	14.46
Site outline	28/04/16 19:20	05/05/16 22:20	7.17
Site outline review	04/05/16 22:20	09/05/16 05:20	4.29
Site map	05/05/16 19:20	09/05/16 22:20	4.17
Site map review	09/05/16 22:20	13/05/16 05:20	3.29
+ Add a task Add a milestone			
▼ Database Create	04/05/16 19:20	15/05/16 02:20	10.33
Tables Create	04/05/16 19:20	11/05/16 22:20	7.17
Product Adding	11/05/16 22:20	15/05/16 02:20	3.13
+ Add a task Add a milestone			
▼ Content	04/05/16 19:20	19/05/16 02:20	14.33
Site content outline	04/05/16 19:20	13/05/16 22:20	9.17
Site content submissions	13/05/16 22:20	19/05/16 02:20	5.13
+ Add a task Add a milestone			
▼ Designing	16/05/16 19:20	03/06/16 08:20	17.58
Choose the perfect design	16/05/16 19:20	23/05/16 22:20	7.17
Take review from others	23/05/16 22:20	27/05/16 07:20	3.29
Correct the design	24/05/16 19:20	30/05/16 22:20	6.17
Take final review	30/05/16 22:20	03/06/16 08:20	3.29
+ Add a task Add a milestone			
Coding	27/05/16 19:20	06/06/16 22:20	10.17
Validation	05/06/16 22:20	11/06/16 02:20	5.13
Content population	09/06/16 02:20	17/06/16 10:20	8.25
Cross Platform and Browser testing	15/06/16 10:20	21/06/16 21:20	6.38
Final review	21/06/16 21:20	21/06/16 21:20	
Refinement	21/06/16 21:20	01/09/16 05:20	71.33

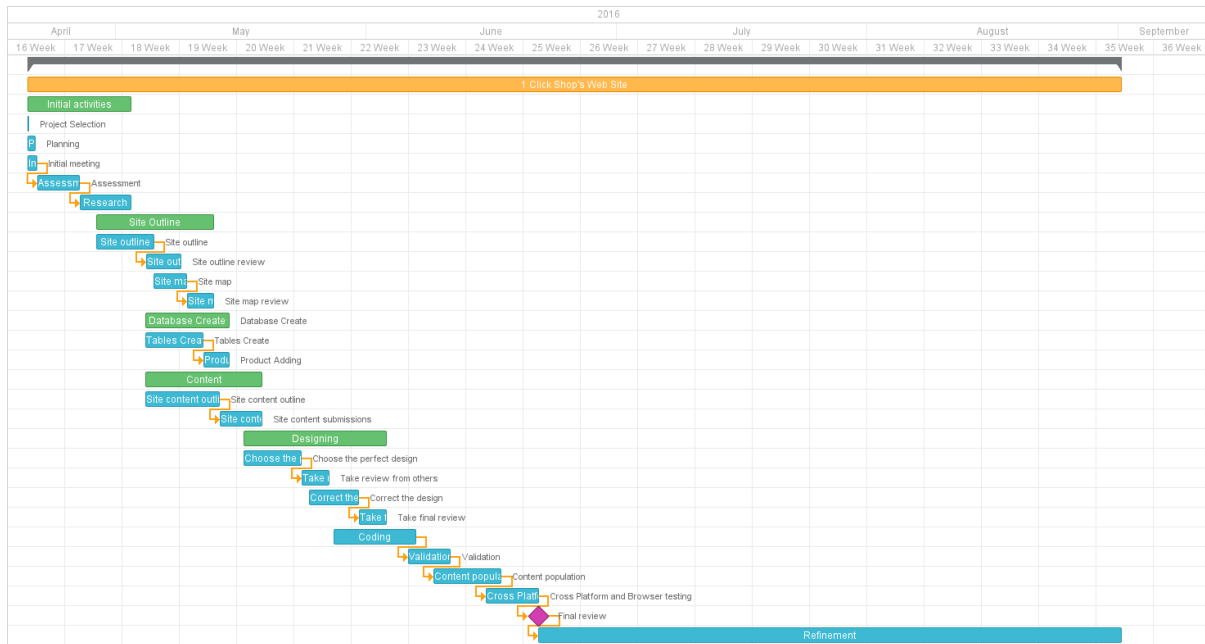


Fig 2.1: Gantt Chart

2.2 FEASIBILITY STUDY

Feasibility study is an assessment of the practicality of a proposed project. A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the environment.

Some primary areas of interest are considered to complete the feasibility analysis for this project.

Different steps of Feasibility Analysis:

1. For a project team.
2. Prepare system flowchart.
3. Enumerate potential proposed system.
4. Defined & evaluate performance & cost effective of each proposed system.
5. Select best proposed system.

6. Prepare and report final project direct to management.

2.2.1 TECHNICAL FEASIBILITY

This assessment is based on an outline design of system requirements, to determine whether the company has the technical expertise to handle completion of the project.

The technical needs of the system may include:

1. Feasibility
2. Robustness
3. Easy to maintain
4. Scalability and extensibility
5. The operator must have IT related.
6. Efficiently data handling
7. Efficient data retrieval and maintenance

2.2.2 Economic Feasibility

The purpose of the economic feasibility assessment is to determine the positive economic benefits to the organization that the proposed system will provide. It includes quantification and identification of all the benefits expected.

The financial and economic questions during the preliminary investigation are verified to estimate the following:

1. The cost to conduct a full system investigation.

2. The cost of hardware and software for the class of application being considered.

3. The benefits in the form of reduced cost.

2.2.3 OPERATIONAL FEASIBILITY

Operational feasibility is a measure of how well a proposed system solves the 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.

2.2.4 SCHEDULE FEASIBILITY

A project will fail if it takes too long to be completed before it is useful. Typically this means estimating how long the system will take to develop, and if it can be completed in a given time period using some methods like payback period. Schedule feasibility is a measure of how reasonable the project timetable is.

3.METHODOLOGY

To make a software, developers have to follow some methodology. In our project we follow **SDLC** methodology. Because using this method we can do our job step-by-step & schedule wise.

SDLC is a process of understanding how an information system can support business needs, designing the system, building it and delivering it to users. It includes five steps.

These are:

- **Planning**
- **Analysis**
- **Design**
 - ☞ Logical Design
 - ☞ Physical Design
- **Implementation**
- **Maintenance**

4. EVALUATION CRITERIA

Hardware Requirements						
CPU			Parts	Network	Web	
Processor	RAM	Disk Space			Domain	Hosting
Pentium IV or higher version	1 GB or more	100 GB or more	Monitor, Keyboard, Mouse	Modem, Telephone	1clickshop.com	100MB Space, 30GB Bandwidth

Software Requirements			
Operating System	Database	Browser	Invoice
Windows 7 or higher version	MYSQL	Google Chrome, Mozilla, Opera or others	Invoice creating software

Fig 4.1: Hardware and Software requirements

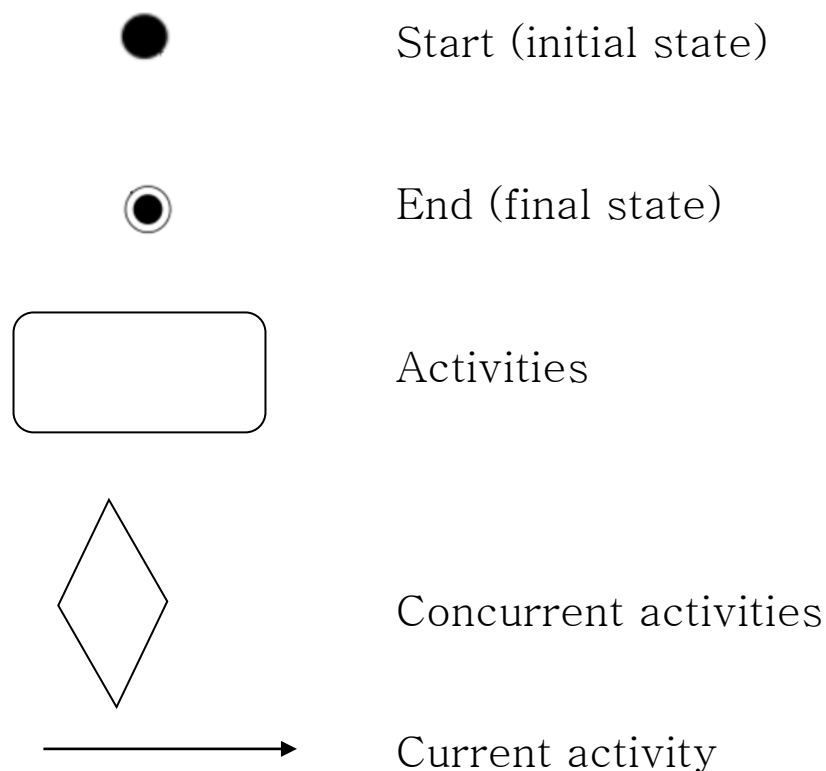
5. ACTIVITY DIAGRAM

Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency with support choice, iteration and concurrency.

Online customer can browse or search items, view specific item, add it to shopping cart, view and update shopping cart, do checkout. User can view shopping cart at any time.

Construction:

Activity diagrams are constructed by the following shapes:



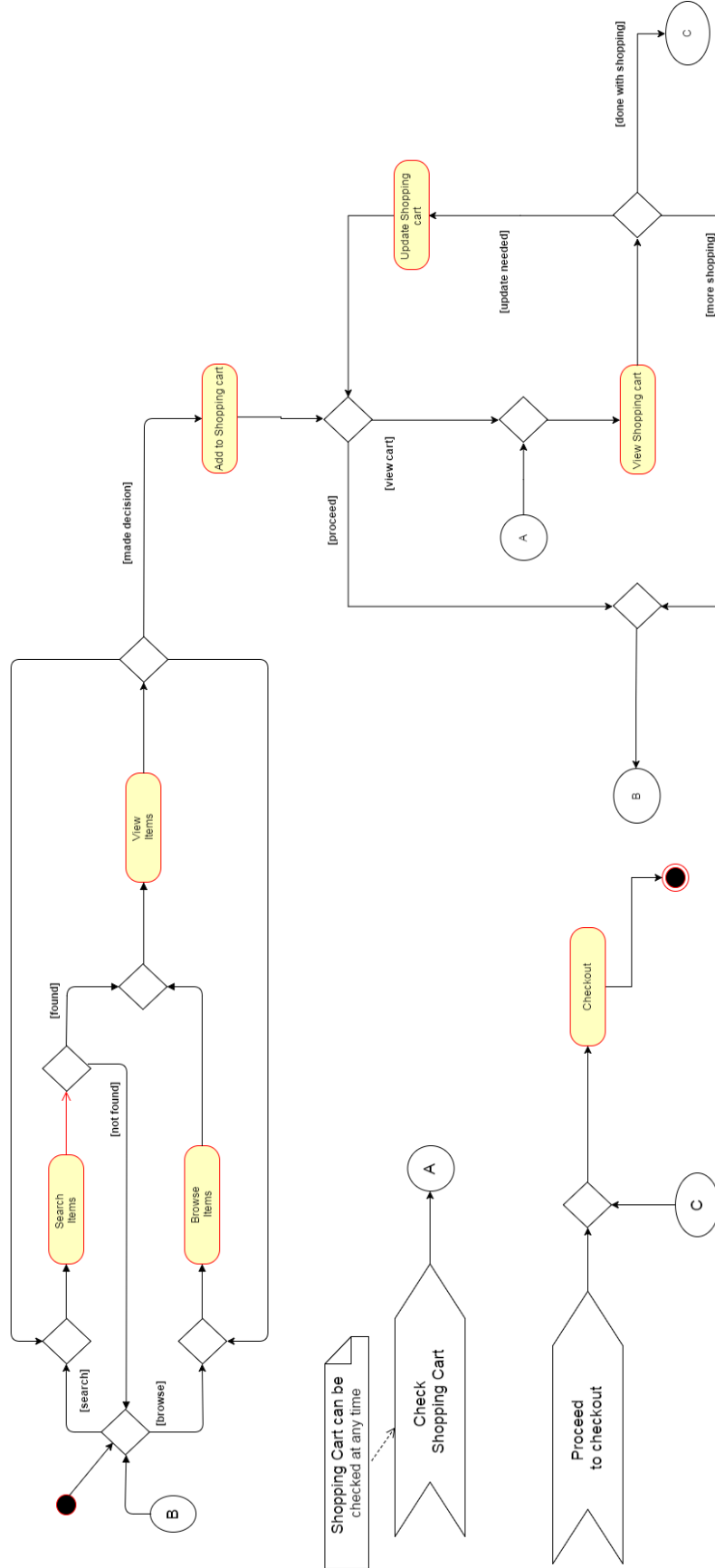


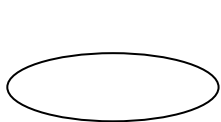
Fig: 5.1: Activity diagram of Online Shopping System

6. SYSTEM DESIGN

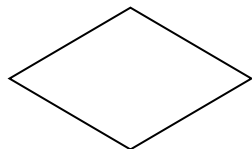
6.1 ENTITY REALTIONSHIP DIAGRAM (ERD)

An entity-relationship diagram (ERD) is a data modelling technique that graphically illustrates an information system's entities and the relationships between those entities. An **ERD** is a conceptual and representational model of data used to represent the entity framework infrastructure.

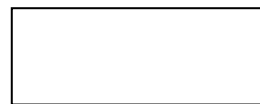
ER diagram are constructed by following shapes:



Attribute



Relationship



Entity Set



Connector

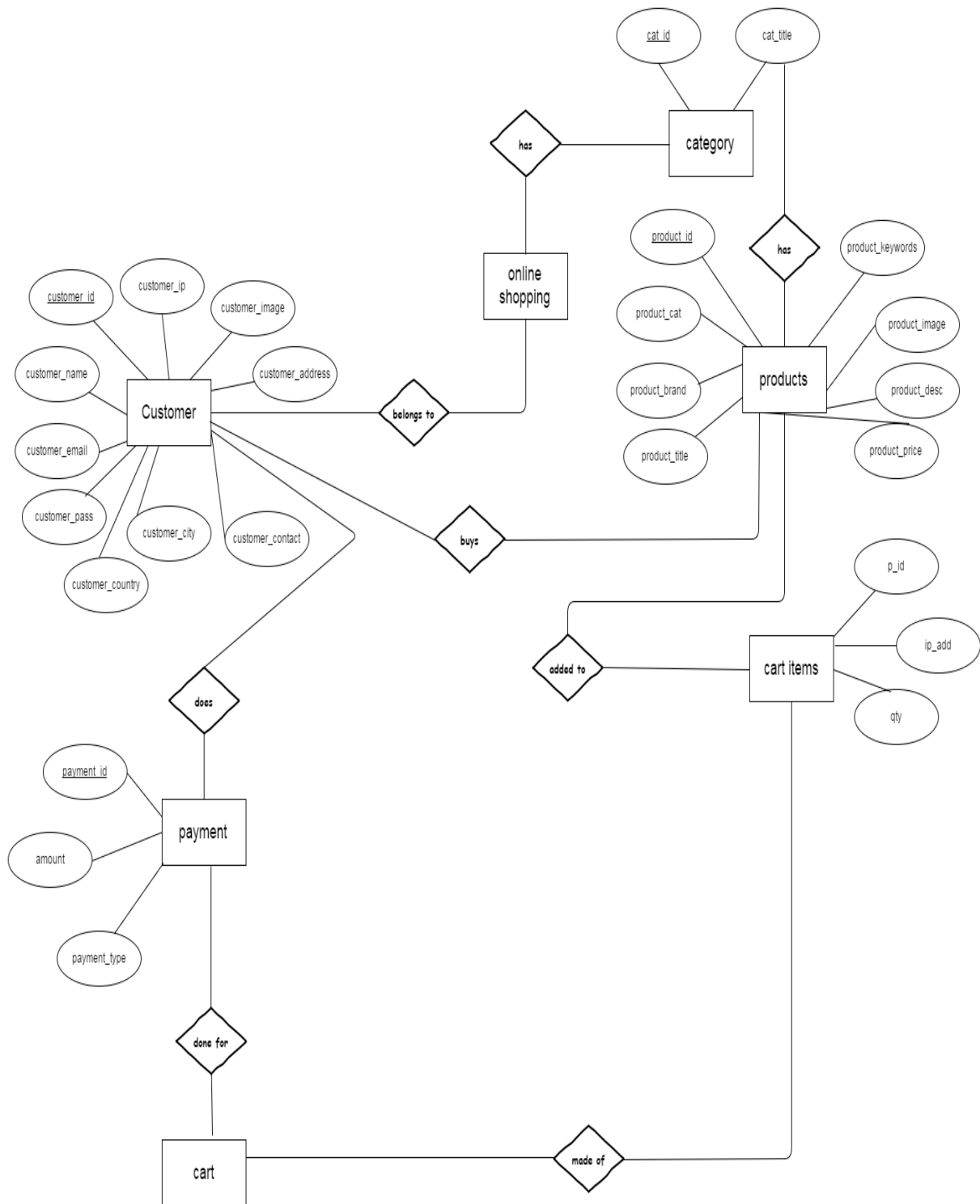


Fig 6.1: ERD with attribute

6.2 RELATIONAL SCHEMA

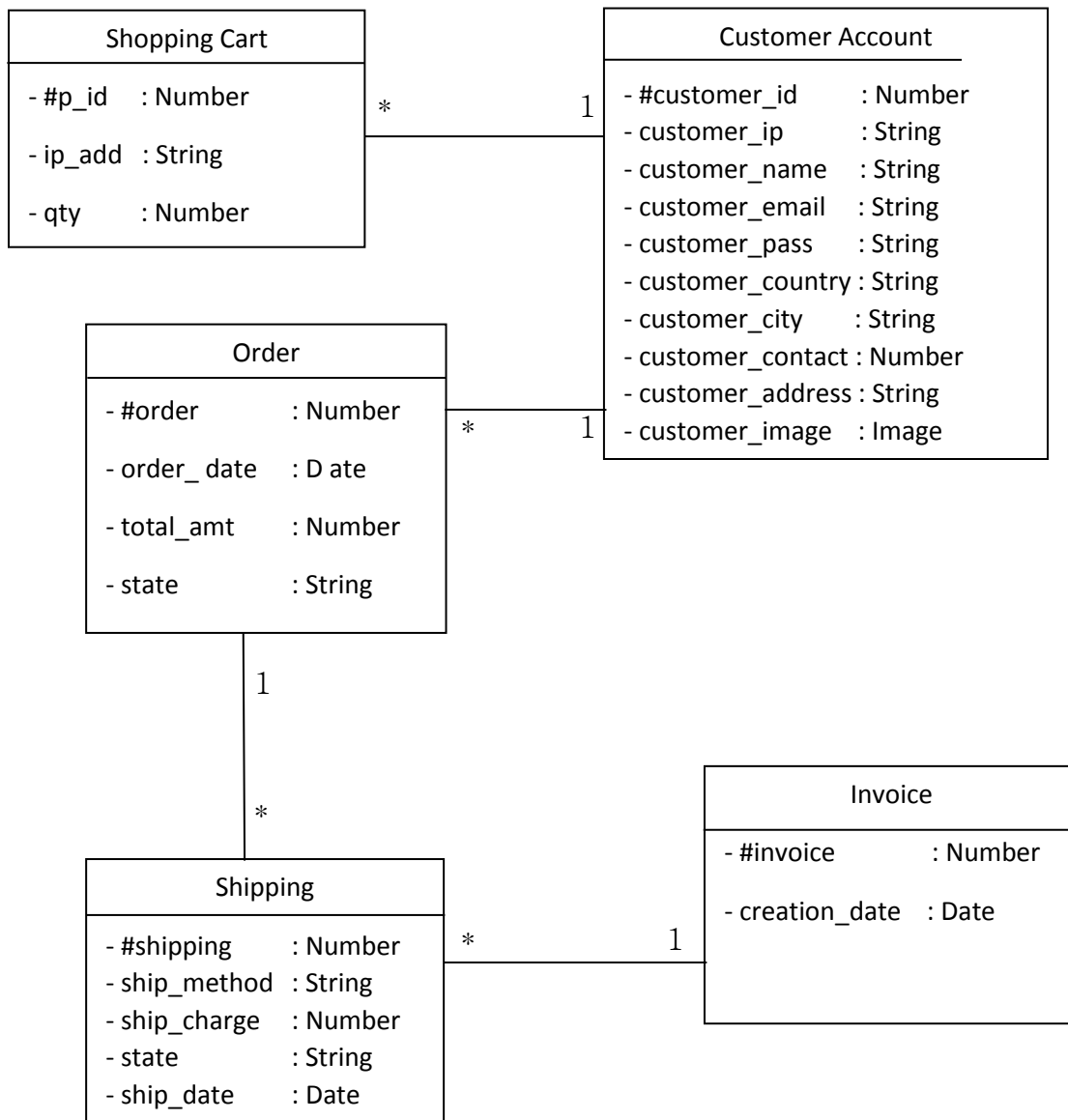


Fig 6.2: Relational schema

6.3 DATABASE TABLES

6.3.1: Customers

Field	Type
<u>customer_id</u>	int
customer_ip	varchar
customer_name	text
customer_email	varchar
customer_pass	varchar
customer_country	text
customer_city	text
customer_contact	text
customer_address	text
customer_image	text

6.3.2: Products

Field	Type
<u>product_id</u>	int
product_cat	int
product_brand	int
product_title	varchar
product_price	int
product_desc	text
product_image	text
product_keywords	text

6.3.3: Categories

Field	Type
<u>cat_id</u>	int
cat_title	text

6.3.4: Brands

Field	Type
<u>brand_id</u>	int
<u>brand_title</u>	text

6.3.5: Cart

Field	Type
p_id	int
ip_add	varchar
qty	int

7. DATA FLOW DIAGRAM

7.1 CONTEXT DIAGRAM

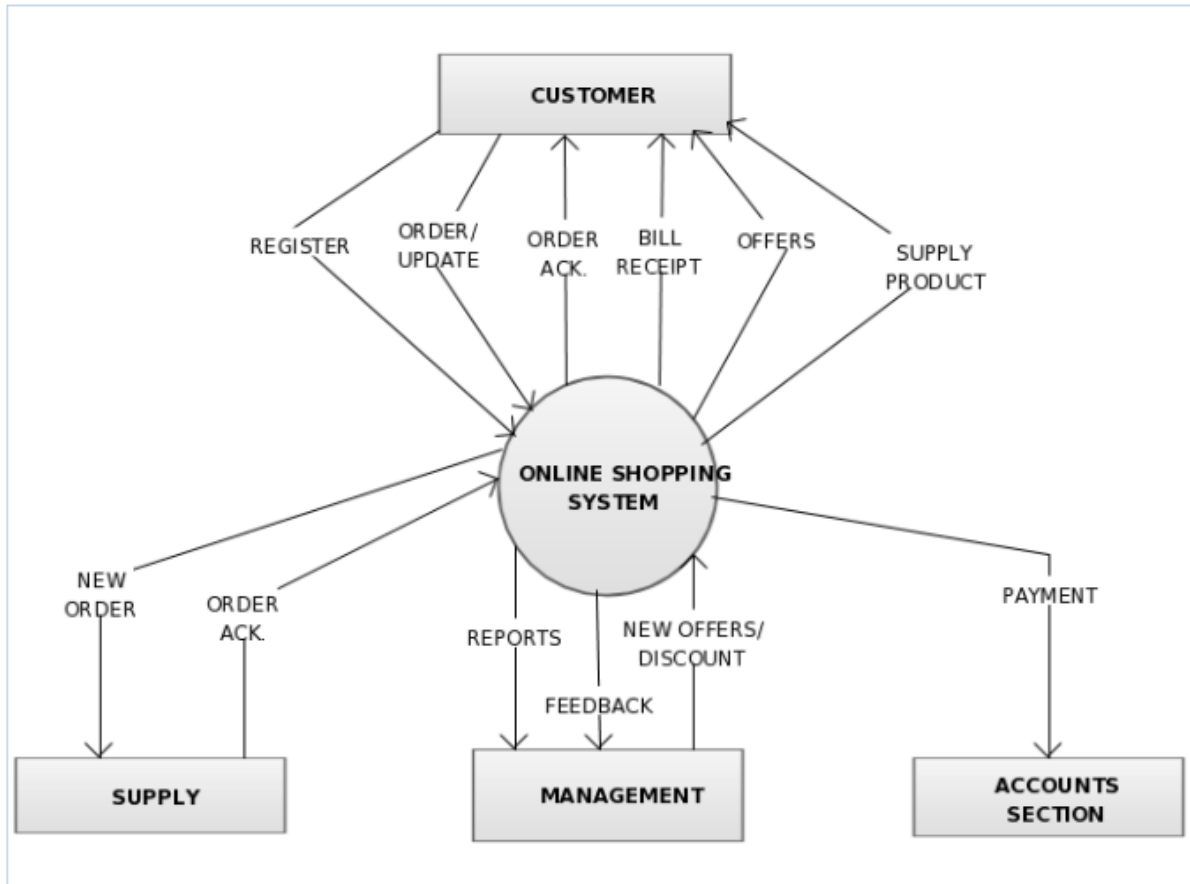


Fig 7.1: Context diagram of DFD

7.2 LEVEL-0 DFD

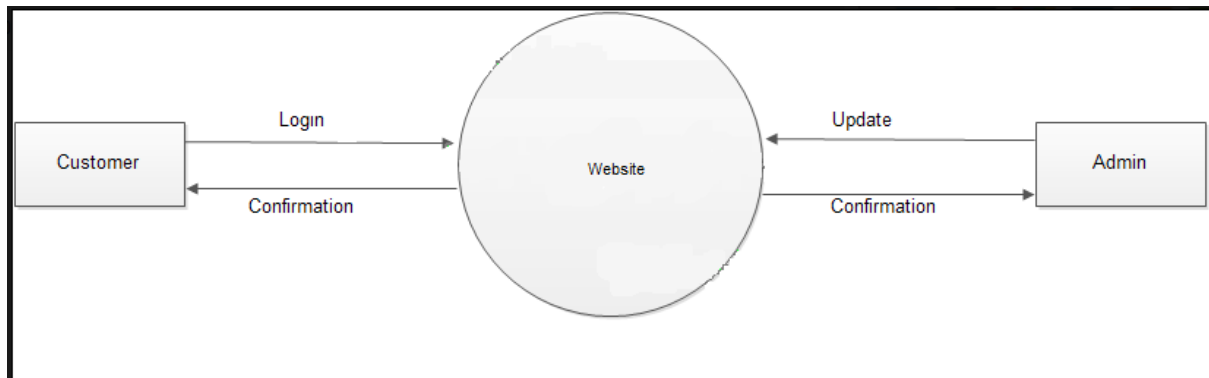


Fig 7.2: Level 0 DFD of online shopping system

7.3 LEVEL-1 DFD

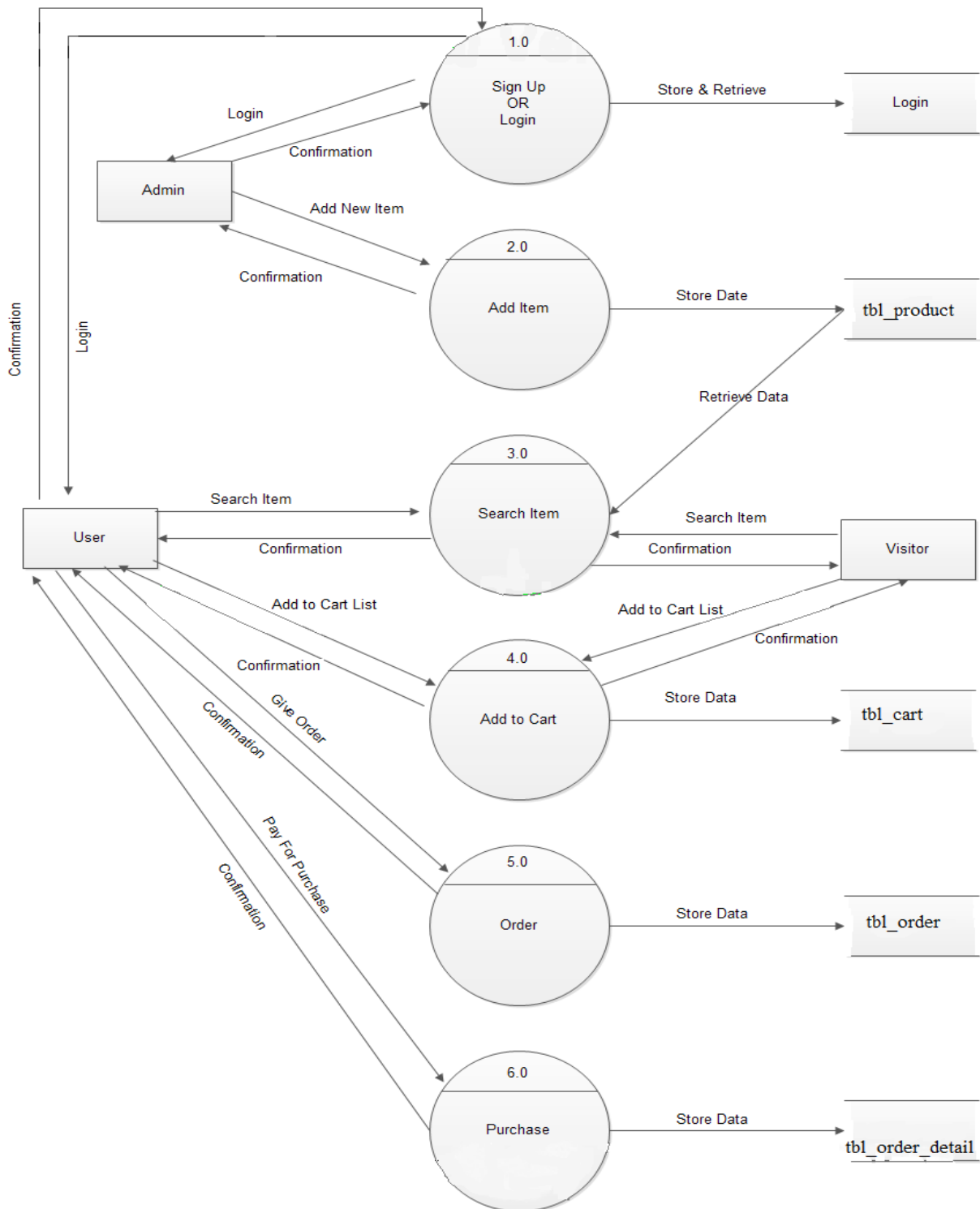


Fig 7.3: Level 1 DFD of online shopping system

7.4 LEVEL-2 DFD

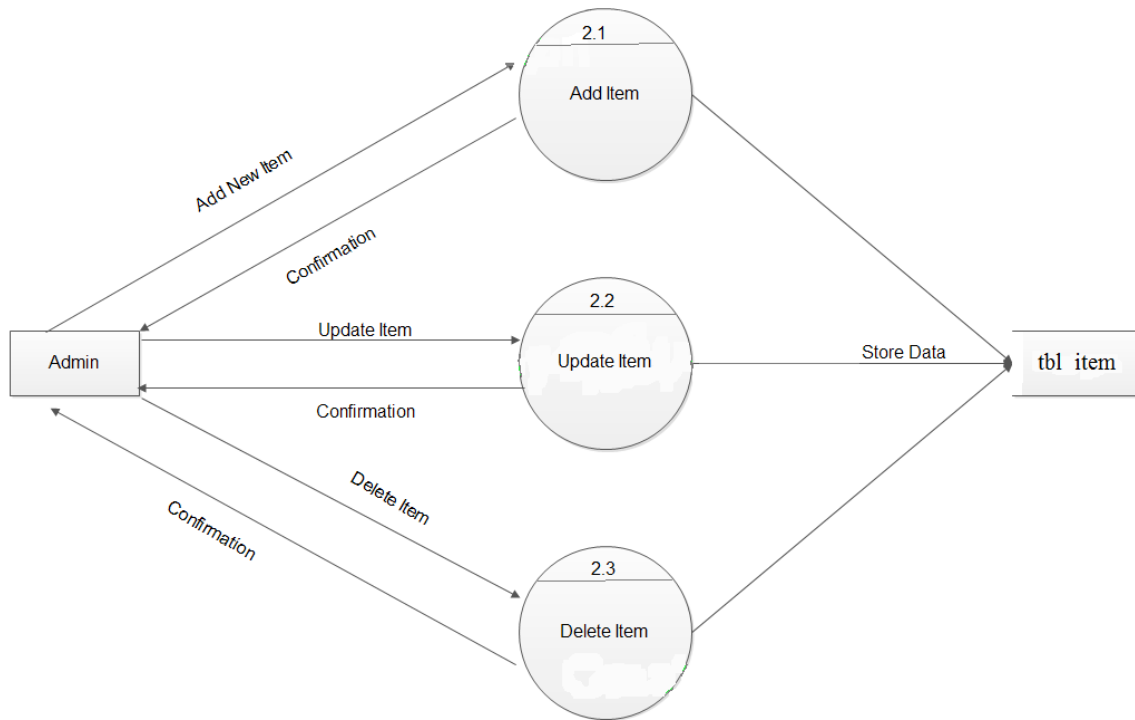


Fig 7.4: Level 2 for 2.0 DFD of online shopping system

7.5 LEVEL-2 for 4 DFD

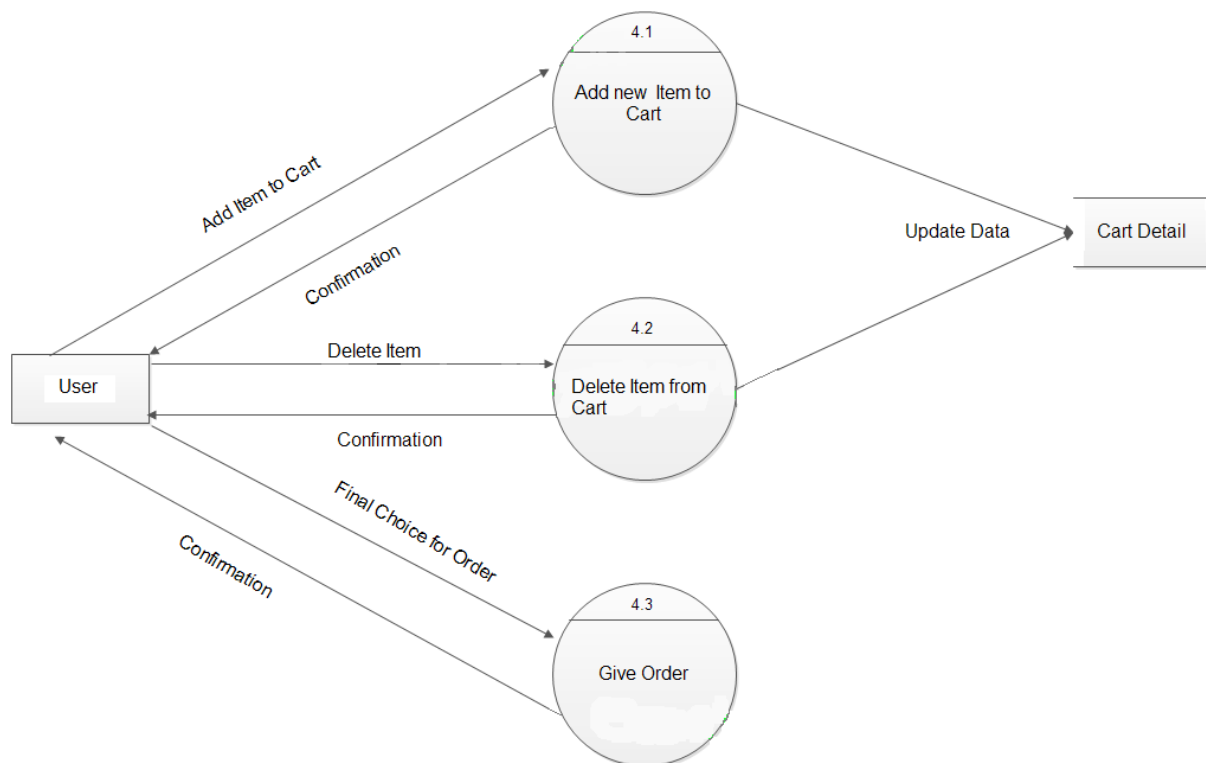


Fig 7.5: Level 2 for 4.0 DFD of online shopping system

7.6 LEVEL-2 for 5 DFD

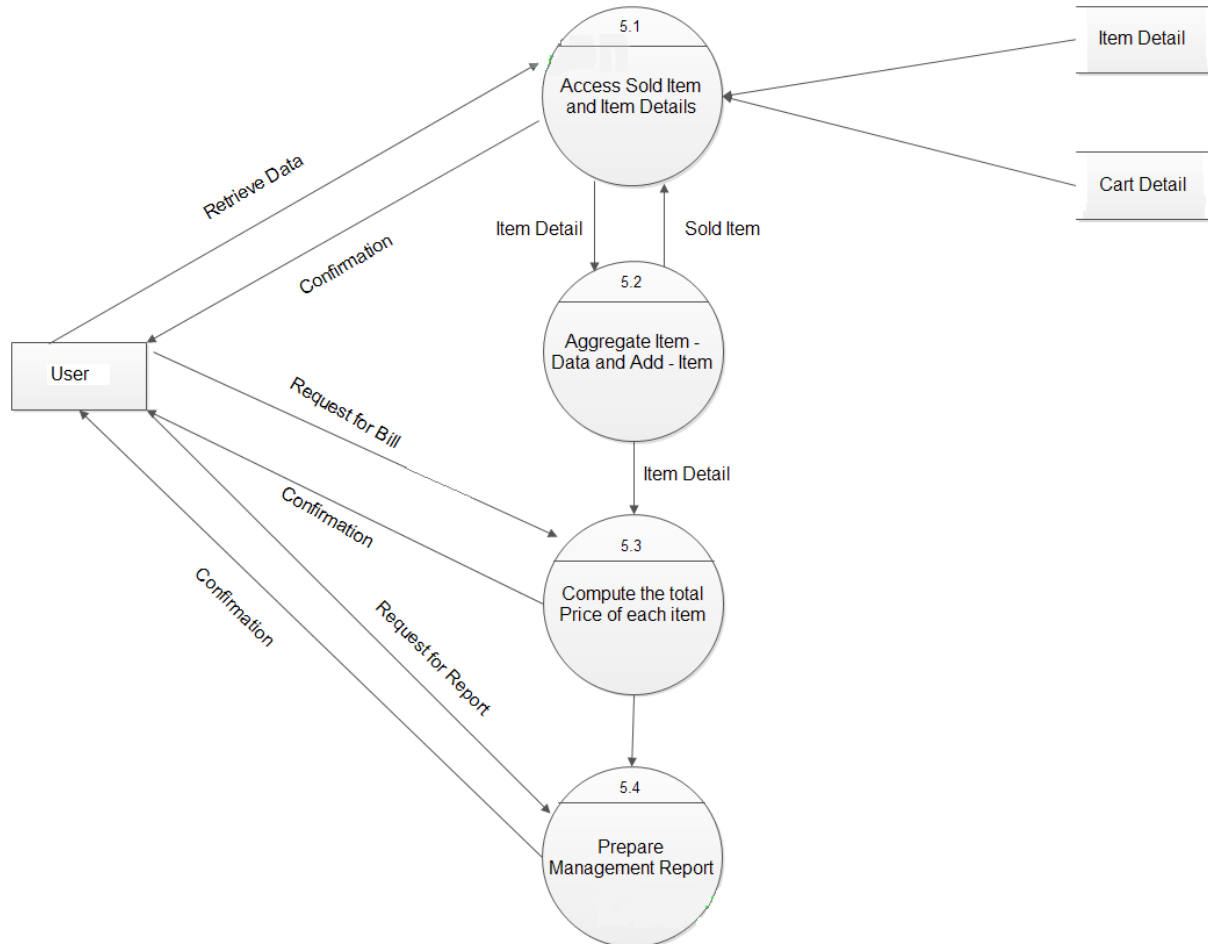


Fig 7.6: Level 2 for 5.0 DFD of online shopping system

7.7 LEVEL-3 for 4.3 DFD

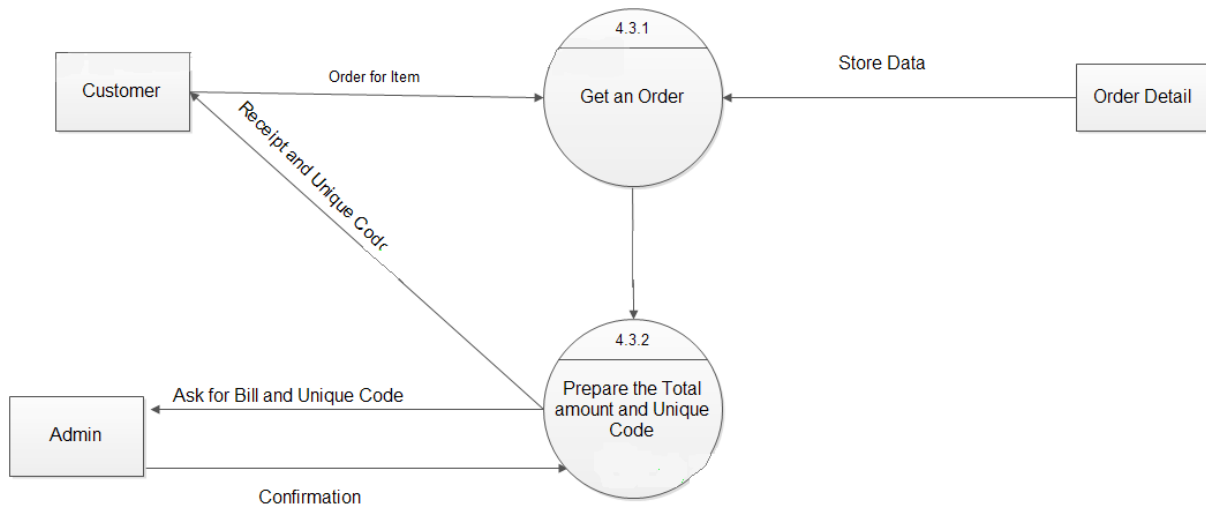


Fig 7.7: Level 3 for 4.3 DFD of online shopping system

8. USE CASE DIAGRAM

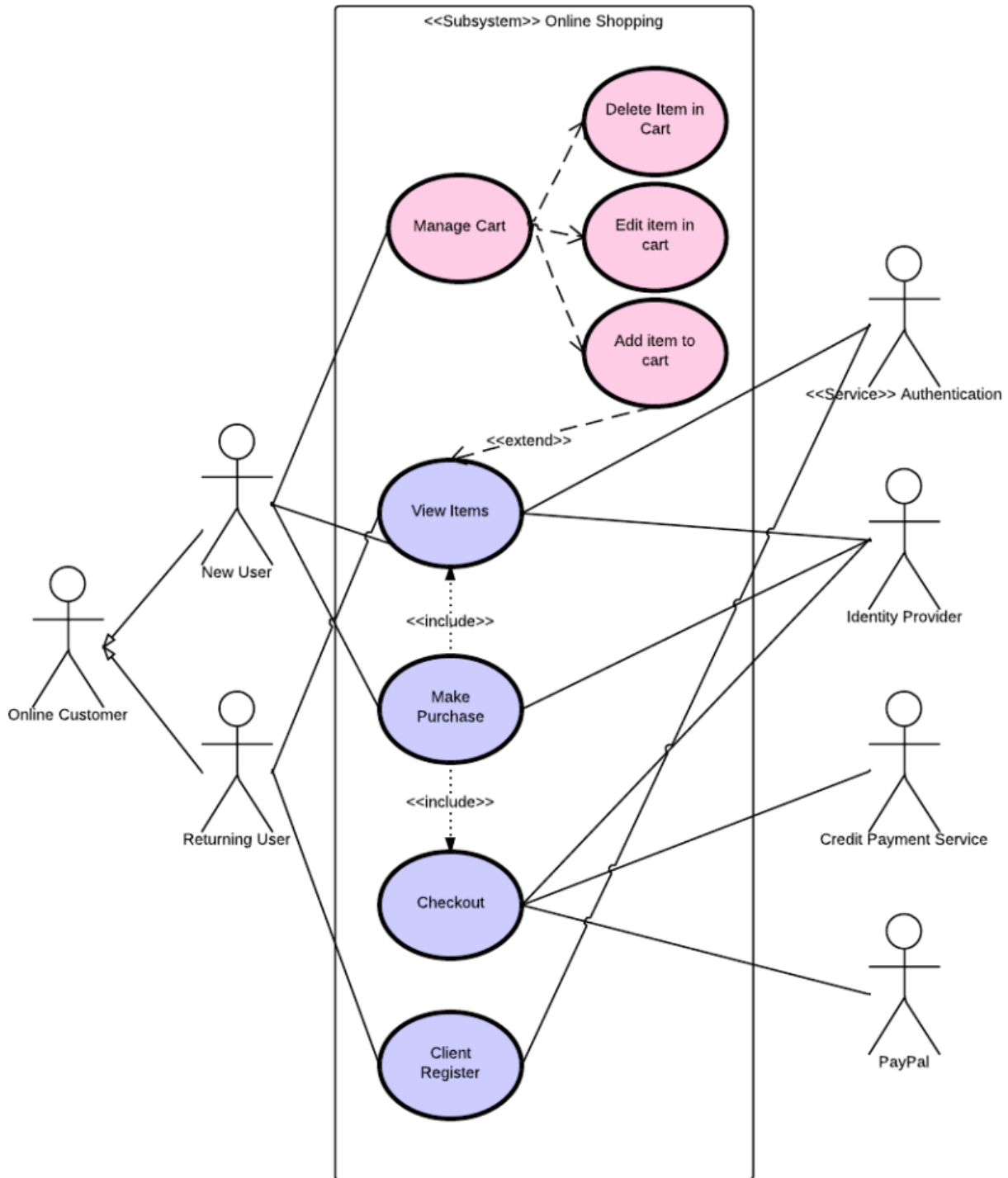


Fig 8: Use case diagram of online shopping system

9. SEQUENCE DIAGRAM

A sequence diagram is shows how processes operate with one another and in what order. It is a construct of a message sequence chart. A sequence diagram shows object interactions arranged in time sequence. It is depicts the objects and classes involved in the scenario and the sequence of messages of exchanged between the objects needed to carry out the functionality of the scenario. Sequence diagram are sometimes called event diagrams.

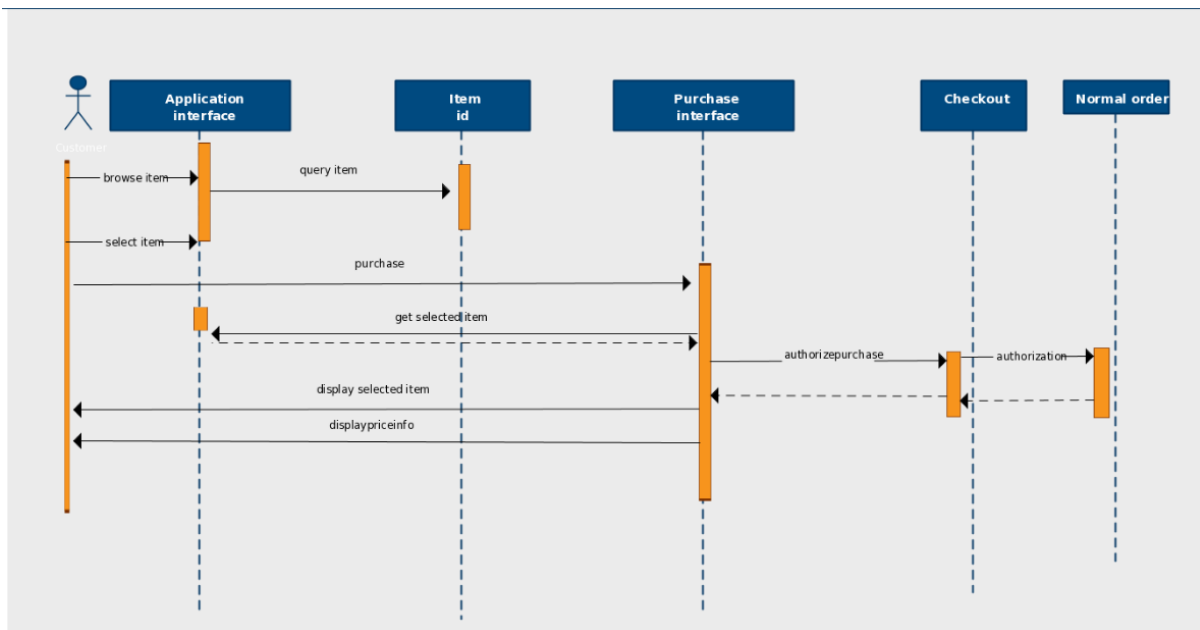


Fig 9: Sequence diagram of online shopping system

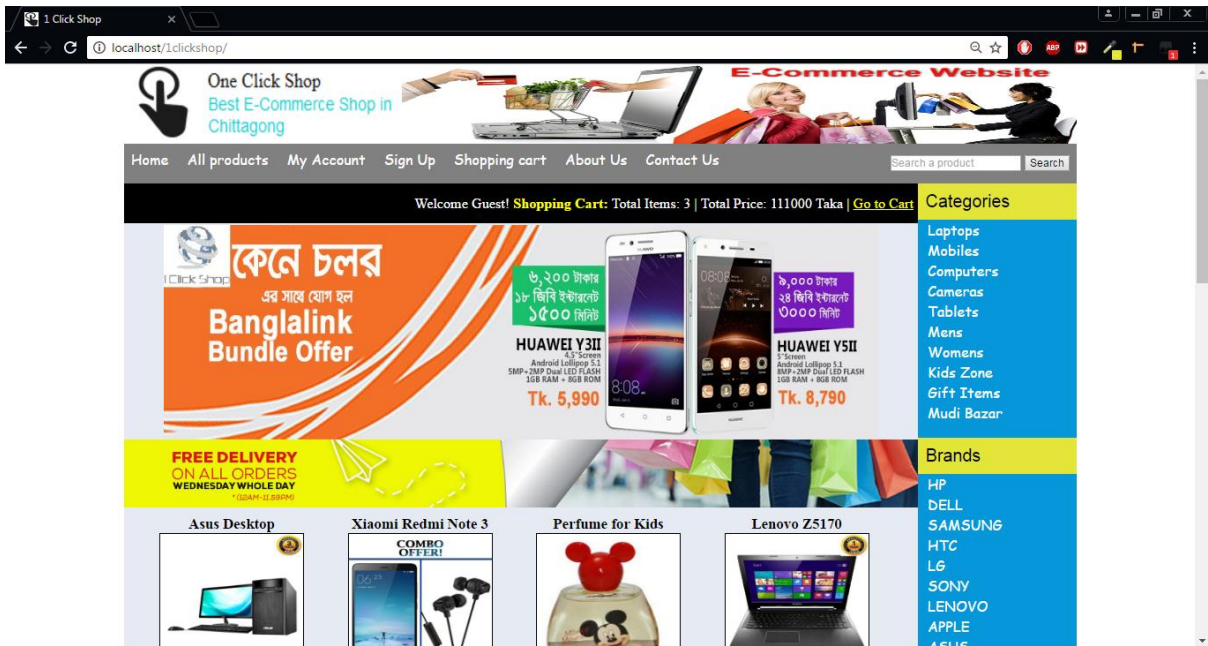
10. IMPLEMENTATION AND CODING

10.1 SOFTWARE IMPLEMENTATION

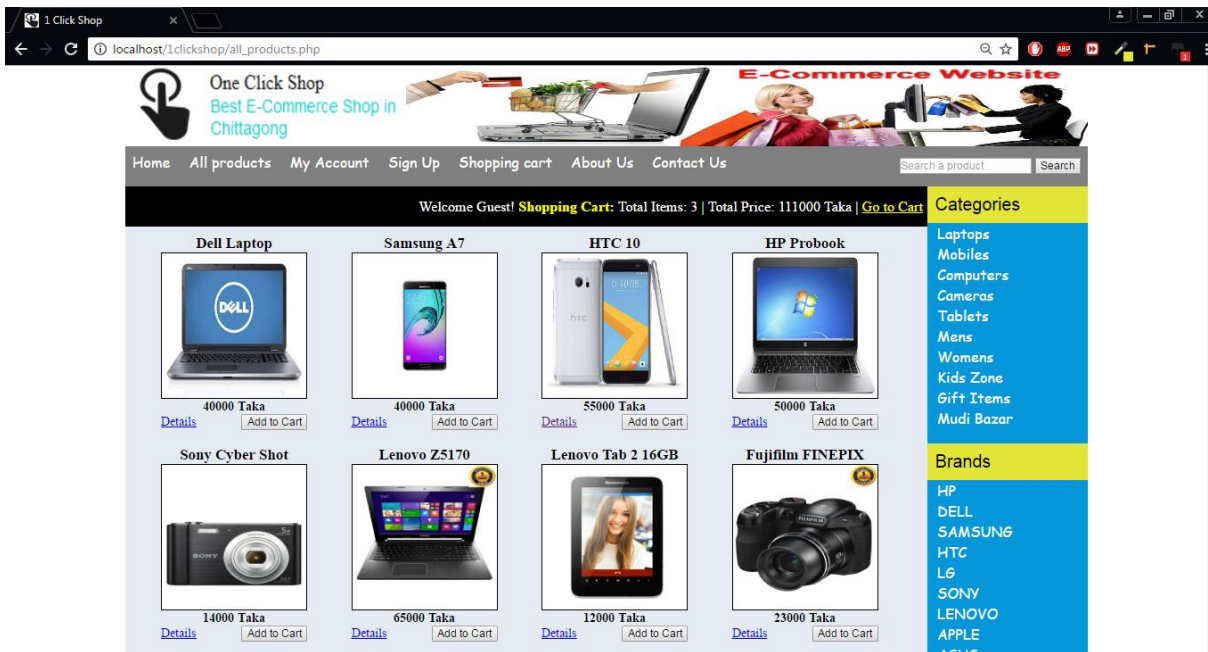
We implement our software using given below

- ☞ PHP
- ☞ HTML
- ☞ CSS
- ☞ MYSQL
- ☞ JavaScript

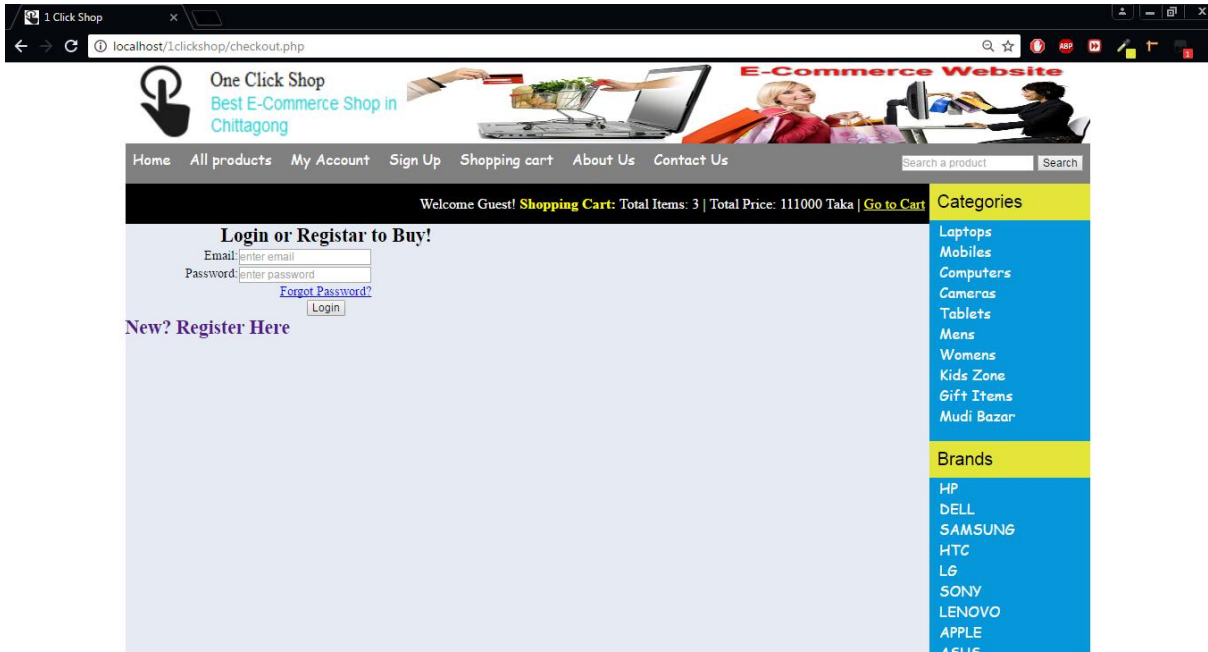
10.2 SNAPSHOTS



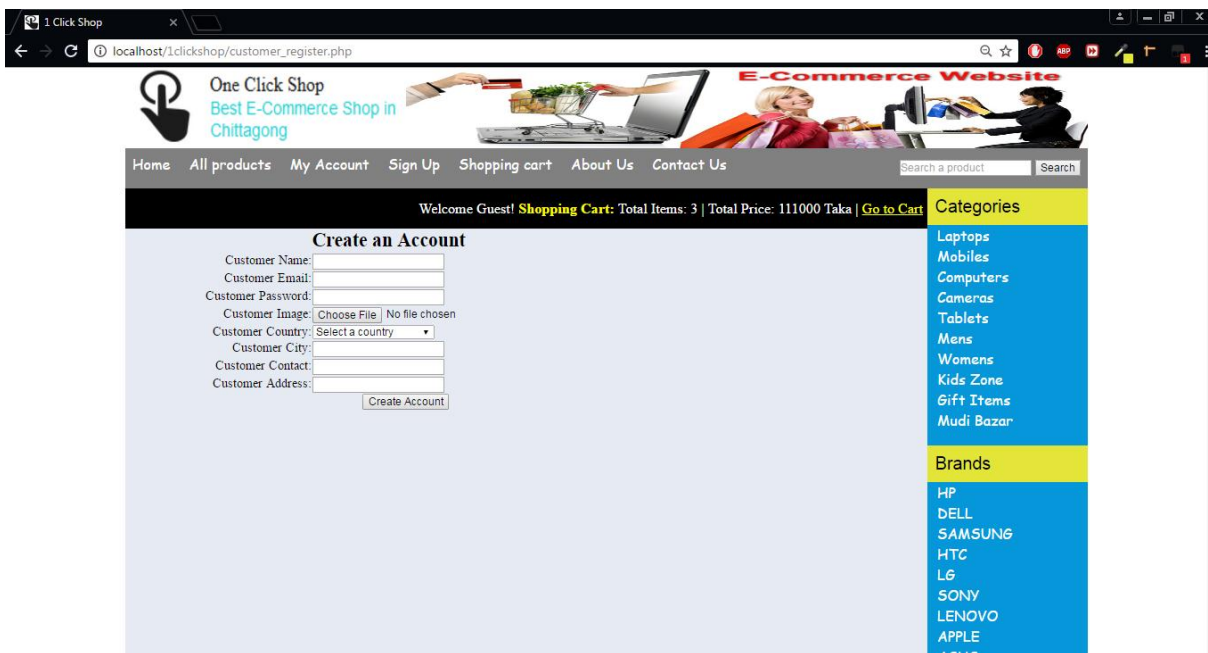
Home Page



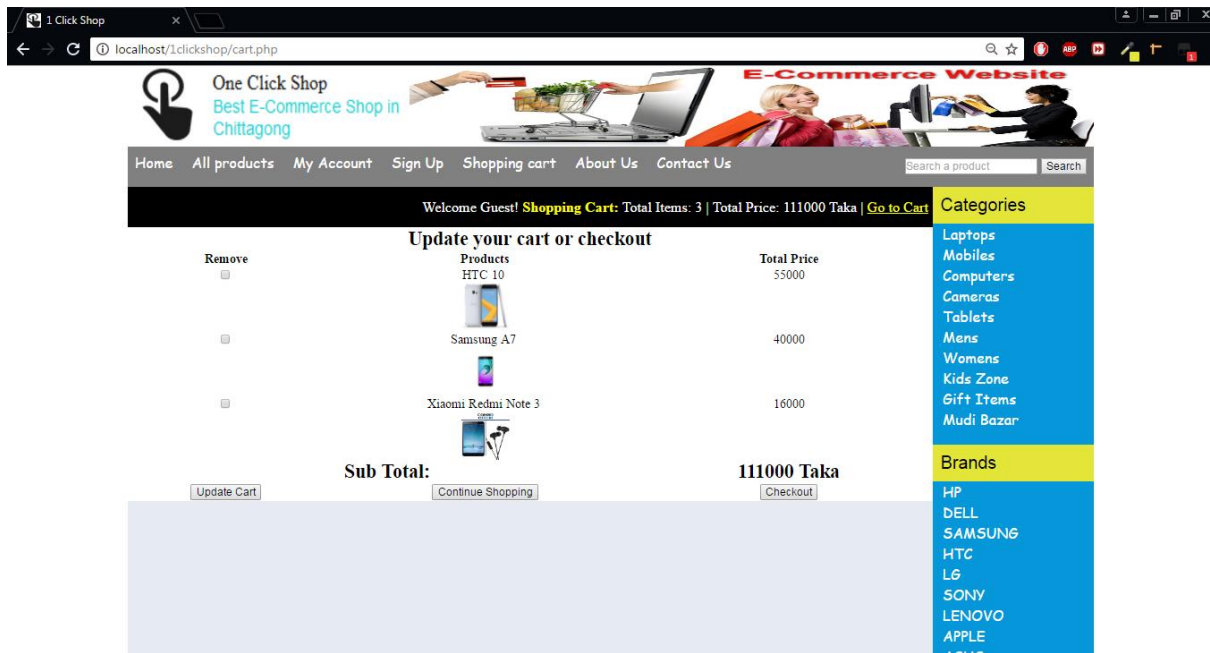
All Products Page



My Account Page



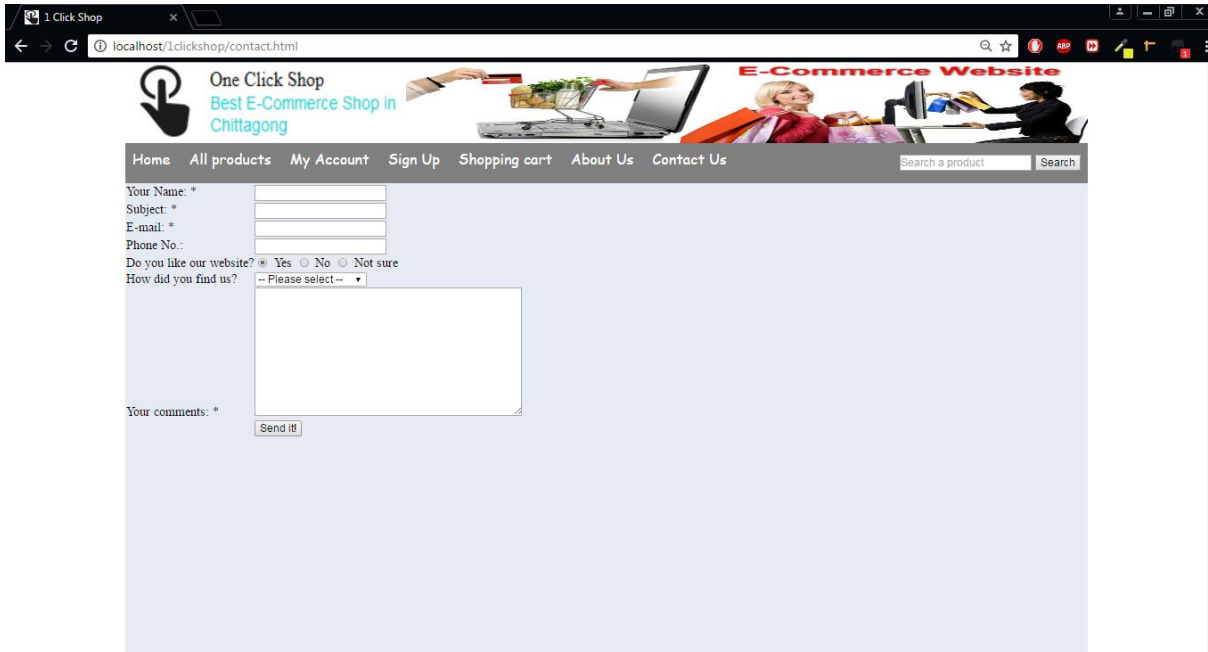
Sign Up Page



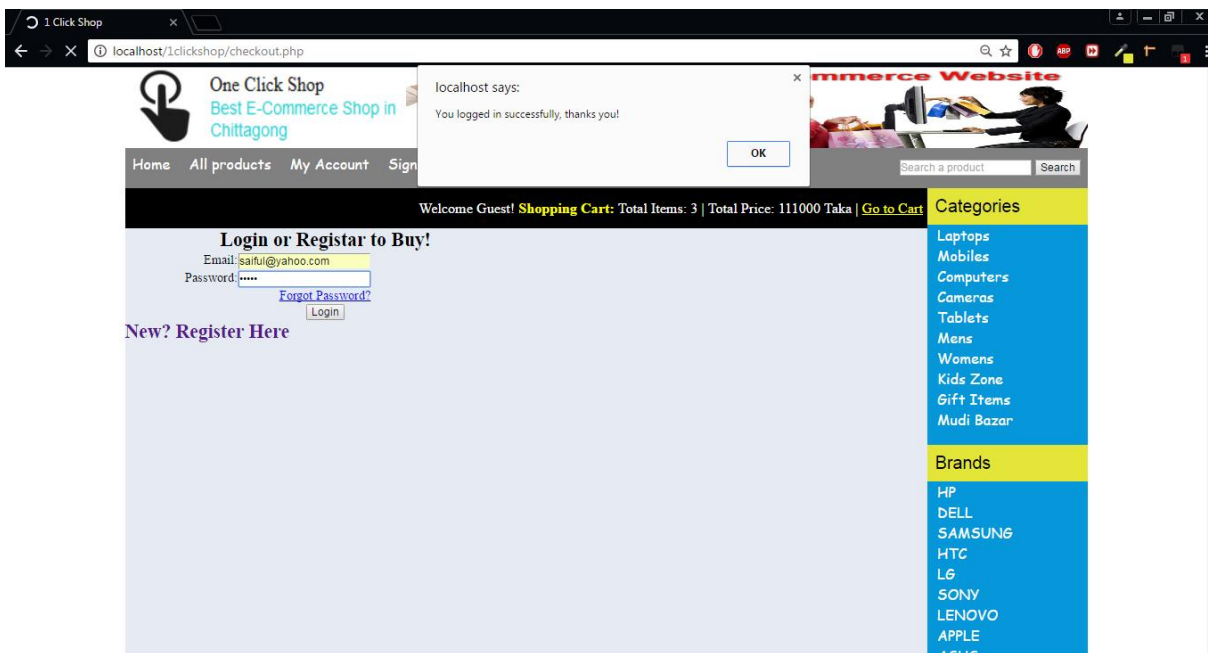
Shopping Cart Page



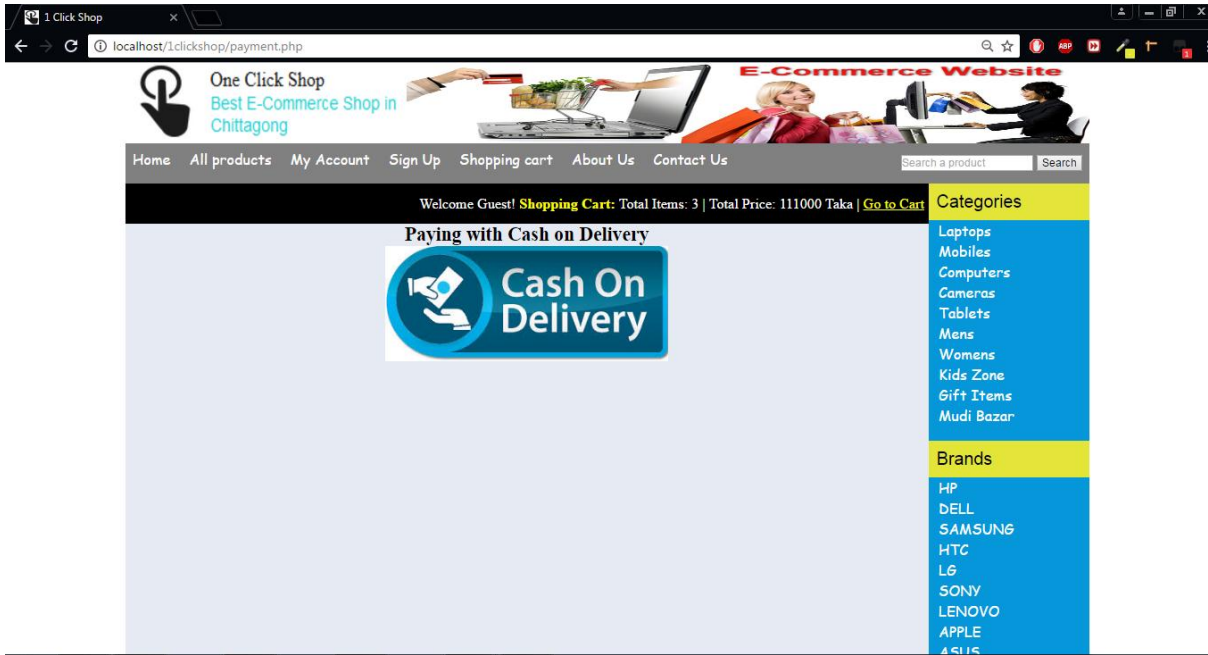
About Us Page



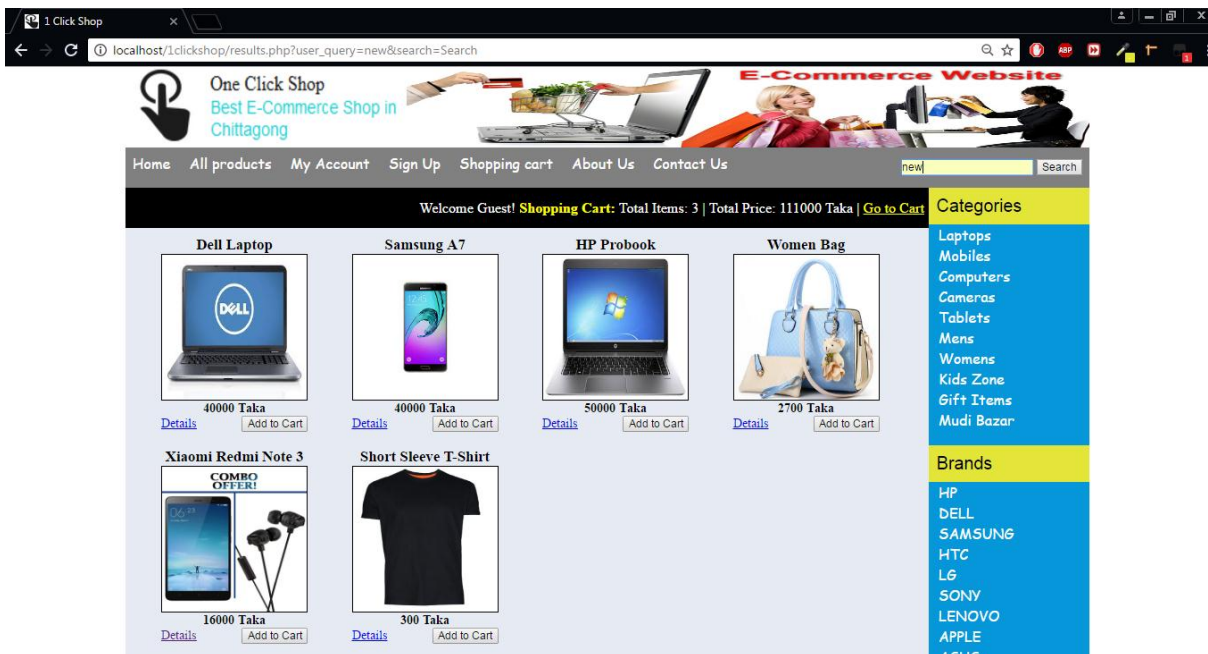
Contact Us Page



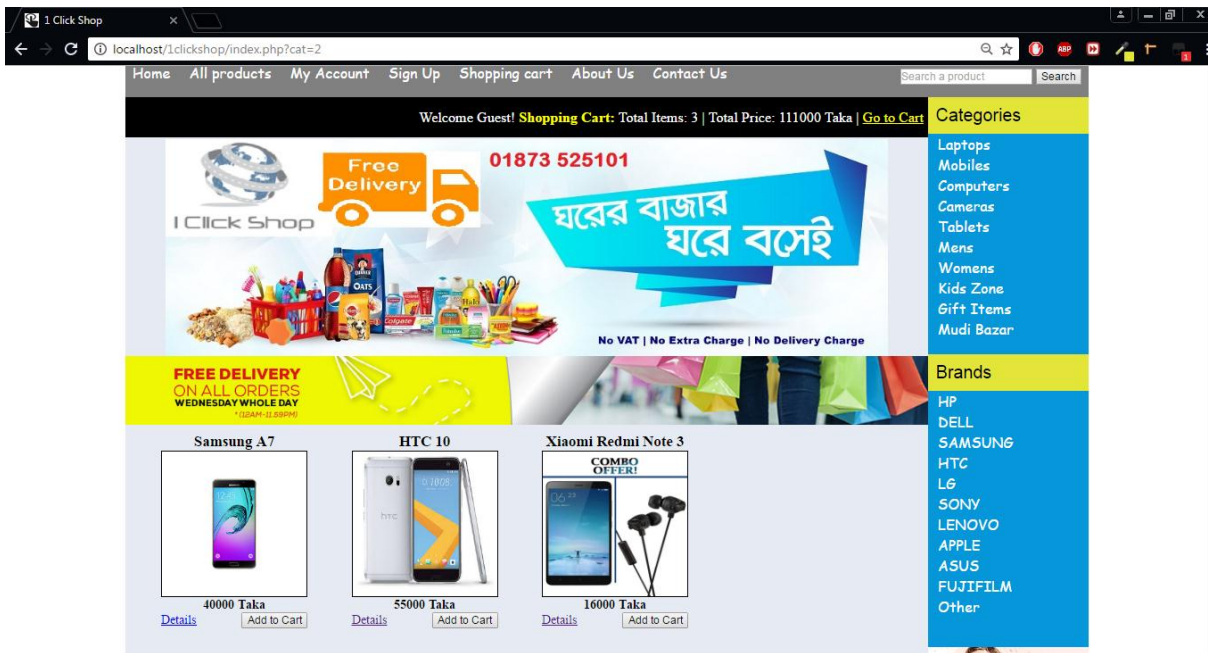
Login Page



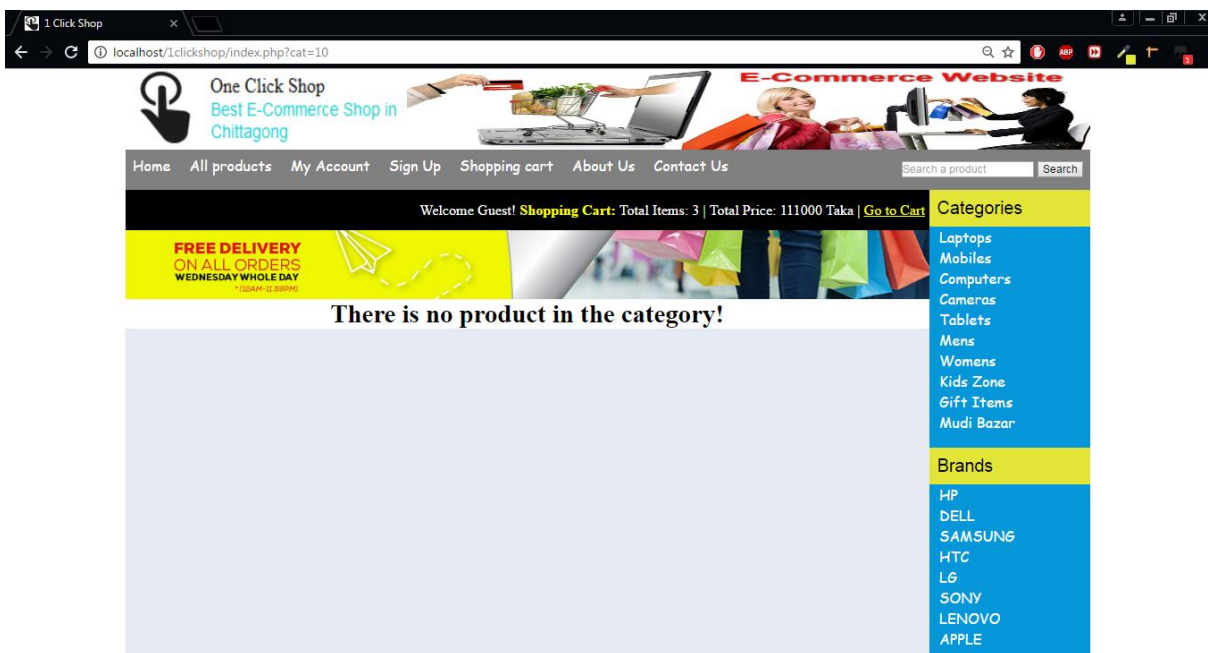
Payment Page



Search with new



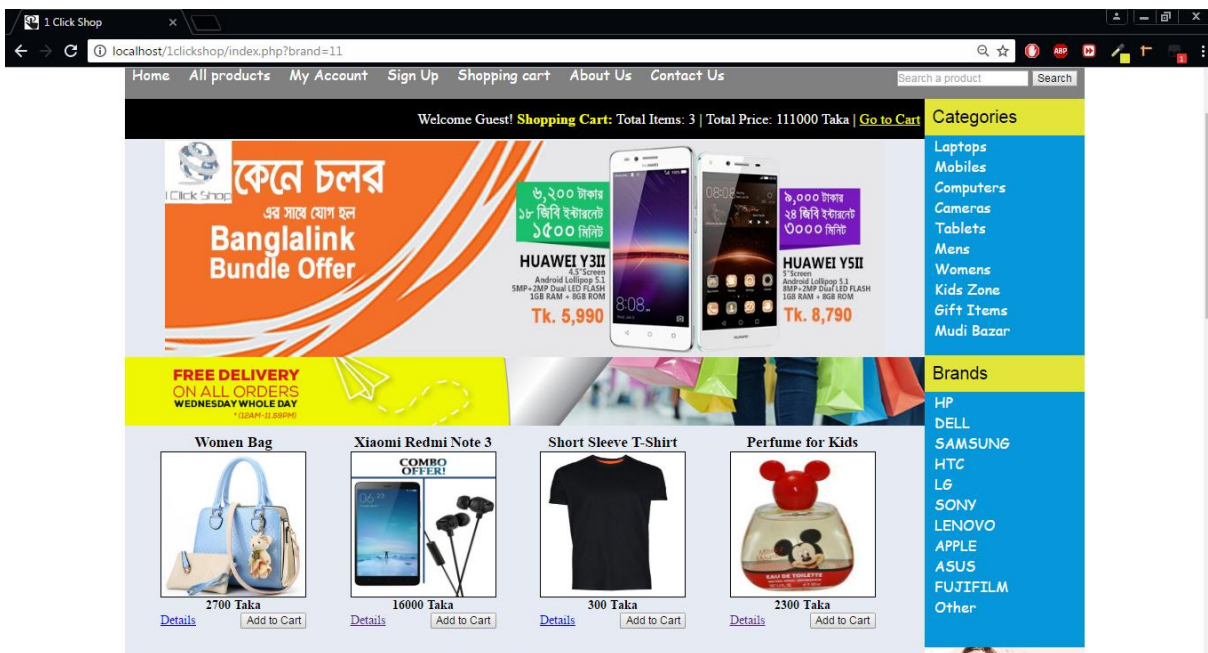
Click on Mobiles Category



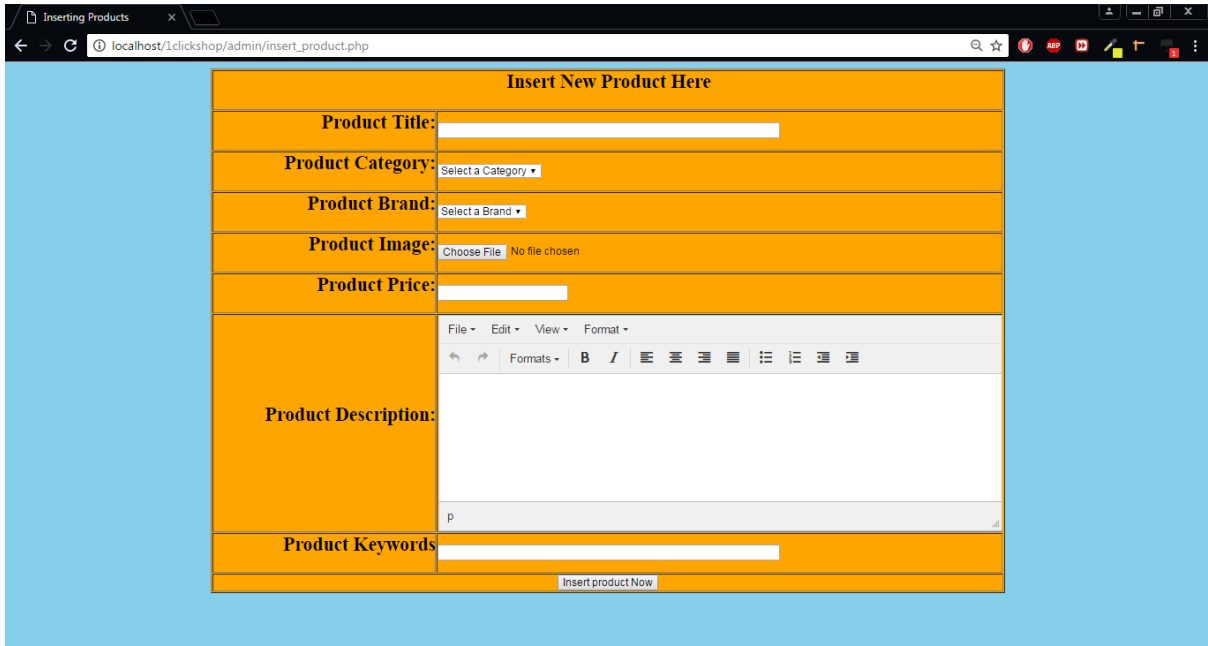
Click on Mudi Bazar Category



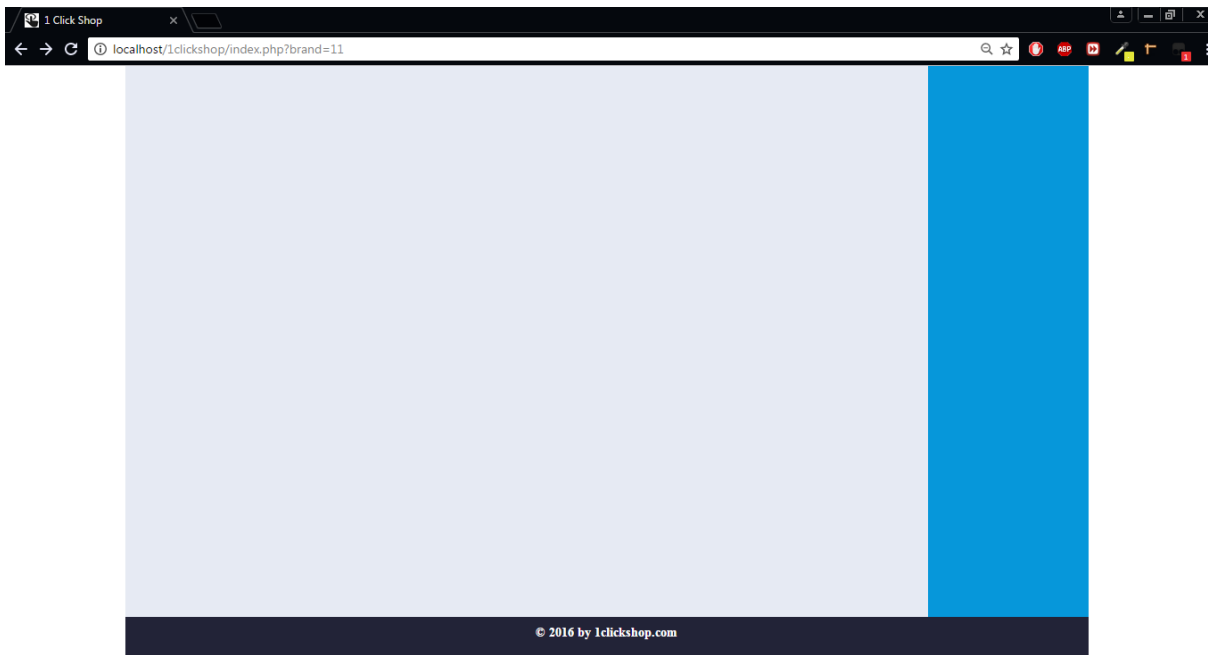
Click on Lenevo Barnd



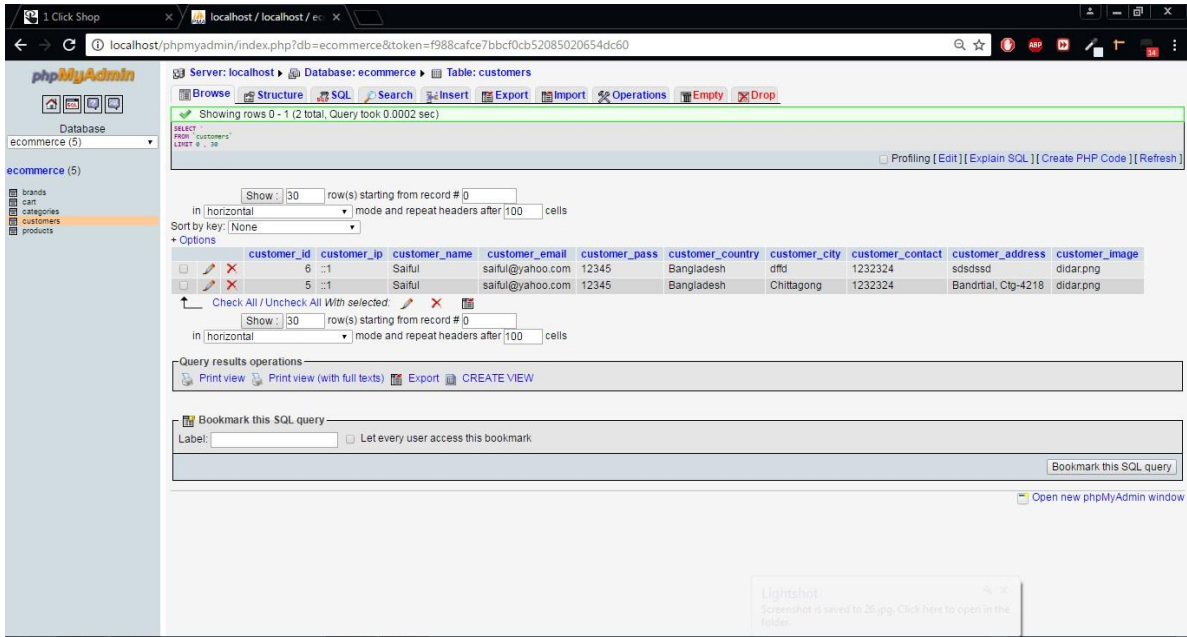
Click on Other Brand



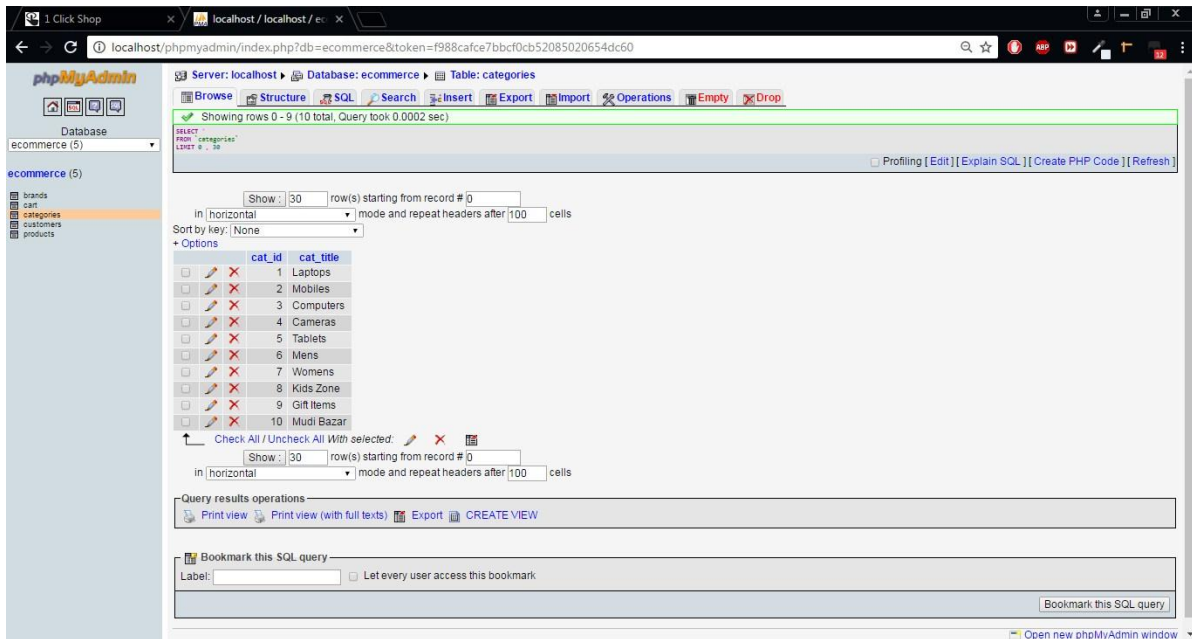
Admin panel

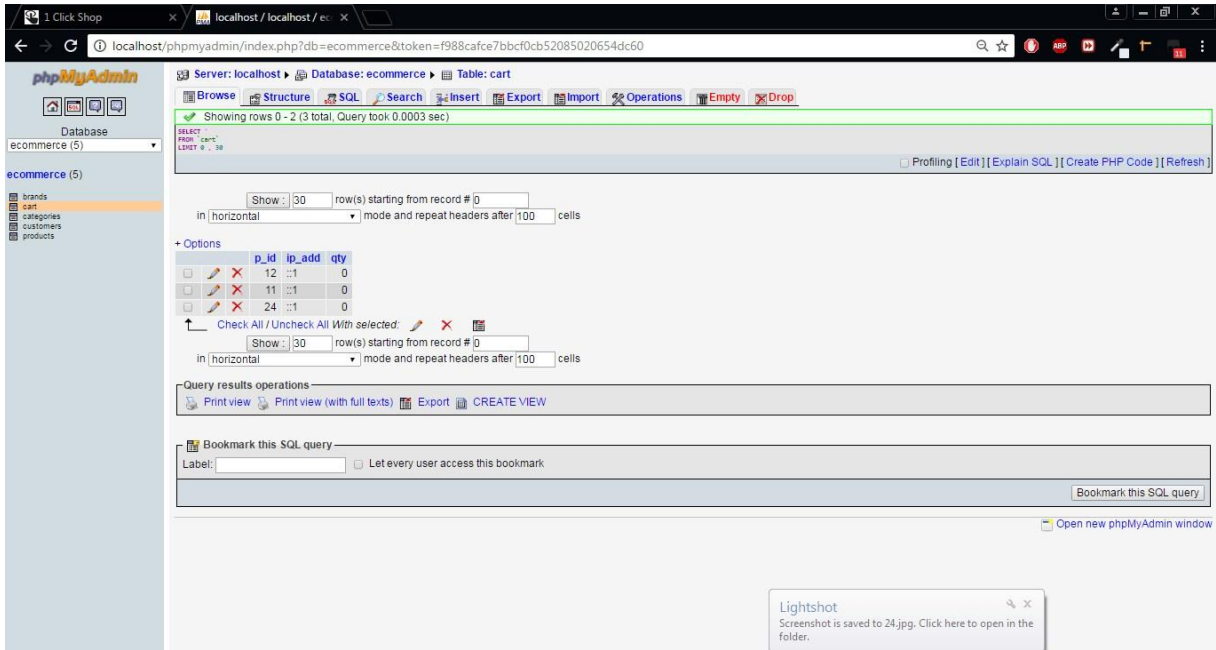


Footer

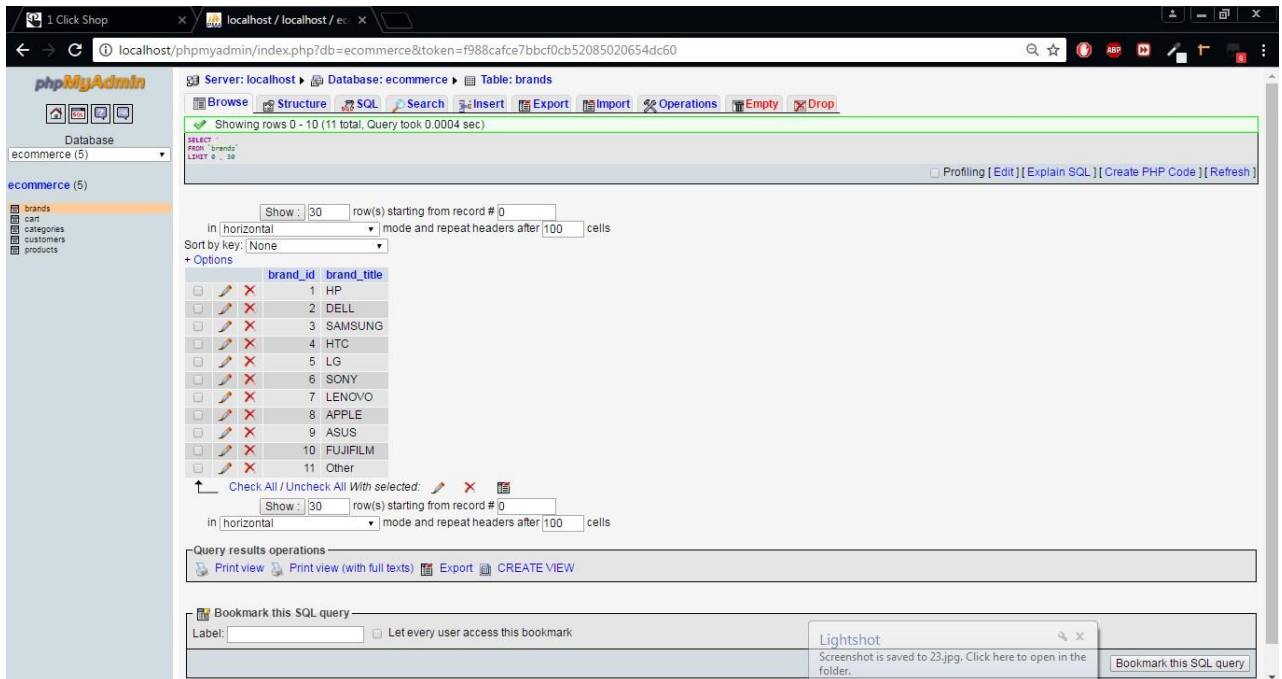


Database





Database



Database

localhost/phpmyadmin/index.php?db=e-commerce&token=f988cafce7bbcf0cb52085020654dc60

Server: localhost Database: e-commerce

Table	Action	Records	Type	Collation	Size	Overhead
brands		11	MyISAM	latin1_swedish_ci	2.2 KiB	-
cart		3	MyISAM	latin1_swedish_ci	1.3 KiB	120 B
categories		10	MyISAM	latin1_swedish_ci	2.2 KiB	-
customers		2	MyISAM	latin1_swedish_ci	2.4 KiB	82 B
products		13	MyISAM	latin1_swedish_ci	29.4 KiB	-
5 table(s)	Sum		MyISAM	latin1_swedish_ci	29.4 KiB	212 B

Check All / Uncheck All / Check tables having overhead With selected: ▾

Create new table on database e-commerce

Name: Number of fields:

Go

May be approximate. See FAQ 3.11

Open new phpMyAdmin window

localhost/phpmyadmin/index.php?db=e-commerce&token=f988cafce7bbcf0cb52085020654dc60

Server: localhost Database: e-commerce Table: products

Showing rows 0 - 12 (13 total. Query took 0.0006 sec)

SELECT * FROM `products` LIMIT 0, 30

Profiling [Edit] [Explain SQL] [Create PHP Code] [Refresh]

Show: 30 row(s) starting from record # 0

In horizontal mode and repeat headers after 100 cells

Sort by key: None

product_id	product_cat	product_brand	product_title	product_price	product_desc	product_image	product_keywords
13	1	2	Dell Laptop	40000		dell_laptop.jpg	new,dell
11	2	3	Samsung A7	40000		samsunga7.jpg	new
12	2	4	HTC 10	55000		htc_10.jpg	htc
10	1	1	HP Probook	50000	<h2>Nice Laptop</h2>	hp_probook.jpg	new,laptop,hp
19	4	6	Sony Cyber Shot	14000	<p>Sony Cyber Shot DSC W800</p>	Sony Cyber shot.jpg	Sony Cyber Shot DSC W800
15	1	7	Lenovo Z5170	65000	<p>Lenovo Z5170 - Core i7 - 8GB RAM</p>	Lenovo Z5170 - Core i7 - 8GB RAM.jpg	Lenovo, Z5170, Core i7, 8GB RAM
16	5	7	Lenovo Tab 2 16GB	12000	<p>Lenovo Tab 2 (A7-30) 16GB - White</p>	Lenovo Tab 2 (A7-30) 16GB - White.jpg	Lenovo, Tab 2, (A7-30), 16GB, White
17	4	10	Fujifilm FINEPIX	23000	<p>Fujifilm FINEPIX S2980 - 14MP - 18x Optical Zoo...	Fujifilm FINEPIX S2980 - 14MP - 18x Optical Zoom.jpg	Fujifilm, FINEPIX, S2980, 14MP
18	3	9	Asus Desktop	78000	<p>Asus K31AD Desktop - Core i5 - 4GB</p>	Asus K31AD Desktop - Core i5 - 4GB.jpg	Asus, K31AD, Desktop
23	7	11	Women Bag	2700	<p>Shoulder Bag for women with original leather. L...	handbag.png	bag, new, women, leather
24	2	11	Xiaomi Redmi Note 3	16000	<div class="list-features" style="box-sizing: bor...	xiaomi.jpg	new, xiaomi, redmi, note 3 pro
21	6	11	Short Sleeve T-Shirt	300	<h1 class="title" style="box-sizing: border-box, L...	tshirt.jpg	tshirt, men, new, black
22	8	11	Perfume for Kids	2300	<div class="list-features" style="box-sizing: bor...	kids_perfume.jpg	kids, perfume, disney

Check All / Uncheck All With selected:

Show: 30 row(s) starting from record # 0

In horizontal mode and repeat headers after 100 cells

Database

11. TESTING

Testing: It is a process to check the system either any error occurs or not. There are four methods of testing are exist. These are:

11.1 Unit Testing

Each module is tested alone in an attempt to discover any errors in its code. It is Two types:

- ☞ **Black Box Testing:** The tester focuses on whether the unit meets the requirements stated in the program specification.

- ☞ **White Box Testing:** It looks inside the program to test its major elements.

11.2 Integration Testing

It is the process of bringing together all modules that a program comprises for testing purposes. There are four types of integration testing:

- ☞ **User Interface Testing:** The tester test each interface function.

- ☞ **Use Scenario Testing:** The tester test each use scenario.

- ☞ **Data Flow Testing:** It test each process in a step-by-step fashion.

☞ **System Interface Testing:** It test the exchange of data with other systems.

11.3 System Testing

It is the process of bringing together all of the programs that a system comprises for testing purposes. There are five types of system testing:

☞ **Requirements Testing:** It test whether original business requirements are met.

☞ **Usability Testing:** Test how convenient the system is to use.

☞ **Security Testing:** Test disaster recovery and unauthorized access.

☞ **Performance Testing:** Examines the ability to perform under high loads.

☞ **Documentation Testing :** It test the accuracy of the documentation.

11.4 Acceptance Testing

Actual user test a completed information system. There are four types of acceptance testing:

☞ **Alpha Testing:** Conducted by users to ensure they accept the system.

☞ **Beta Testing:** Users closely monitor the system for errors or useful improvements.

12. LIMITATIONS

1. Poor website design will turn a visitor off immediately. Our website design is not fully user friendly.
2. Shopping cart and checkout are not dynamic.
3. Local customers are encouraged.

13. CONCLUSION

The project will be helpful for the people who aren't able to shopping for busy schedule. It will make their life easier. Customer will be able to buy products of various categories from home via internet using any smart device. Payment system also very trustable as we maintain cash on delivery.

14. REFERENCES

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