# DESIGN AND DEVELOPMENT OF ONLINE MOBILESHOP FOR NEWAND OLD MOBILES

 $\mathbf{BY}$ 

# **MD.IMRAN ALAM**

ID: 122-15-1906

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

#### Md. Sadekur Rahman

Lecturer

Department of CSE

**Daffodil International University** 



# DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH AUGUST, 2015

#### APPROVAL

This Project titled "Design and Development of Online Mobile Shop for New and Old Mobiles", submitted by Md. Imran Alam to the Department of Computer Science And Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 19 August 2015.

#### BOARD OF EXAMINERS

Dr. Sved Akhter Hossain

Professor and Head

Department of Computer Science and Engineering Faculty of Science & Information Technology

**DaffodilInternationalUniversity** 

Dr. Sheak Rashed Haider Noori

Assistant Professor

Department of Computer Science and Engineering Faculty of Science & Information Technology

DaffodilInternationalUniversity

Muhammad Sarawar Jahan Morshed

Assistant Professor

Department of Computer Science and Engineering Faculty of Science & Information Technology

DaffodilInternational University

Dr. Mohammad Shorif Uddin

Professor and Chairman

Department of Computer Science and Engineering

i

Jahangimagar University

cont.

Chairman

Internal Examiner

Internal Examiner

External Examiner

# **DECLARATION**

We hereby declare that, this project has been done by us under the supervision of Md. Sadekur Rahman, Lecturer, Department of CSE Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised l	by:
——————————————————————————————————————	r Rahman
Lecturer	
Department	of CSE
Daffodil Inte	ernational Univ
Submitted b	oy:
Md. Imran A	Alam

ID: -122-15-1906

Department of CSE

**Daffodil International University** 

### **ACKNOWLEDGEMENT**

First we express our heartiest thanks and gratefulness to almighty Allah for His divine blessing makes us possible to complete this project successfully.

To complete our software and project report there are number of people who always helped and encouraged us. We really thanked and gratefully remember them.

We are immensely indebted to our supervisor, Md. Sadekur Rahman, Lecturer, Department of CSE, Daffodil International University, Dhaka, for his wonderful guidance, inspiration, encouragement and also for through review of our project paper. We would not be able to finish or document our project paper without his help.

There are many people who helped us in various ways. We are also thanking all of them from our heart.

Last of all, we would like to thank our parents who have given us tremendous inspirations and supports without their mental and financial supports; we would not able to complete our project

#### **ABSTRACT**

The general aim of this project is to make a system called "**Design and implementation of Online Mobile Shop for new and old mobiles**" to develop a better Online Shopping System of Mobile Sets of new and pre-owned mobiles and Customer satisfaction for the particular field.

Today's world very much depends on Internet for information, communication, shopping and many other daily needs. World becomes smaller and nearer to us through Internet. Shopping through online is increasing and becoming popular very rapidly. Bangladesh, bearing the burden of acute poverty, at the same time with 97% Population living within mobile phone network coverage, has 16% Mobile phone penetration rate which is expected to be doubled within next couple of years. Now a day's. One of the most commonly used products is Mobile Phones. In our country there is no dedicated web-based site for shopping of Mobile Sets. All these situations encouraged me to develop my project. In this project I tried to develop an Online Shopping of Mobile Sets. In addition, we also tried to provide bidding for pre-owned mobiles and home delivery services for interested buyer.

# **TABLE OF CONTENTS**

CONTENTS	PAGE	
Board of examiners	i	
Declaration	ii	
Acknowledgement	iii	
Abstract	iv	
CHAPTER		
CHAPTER 1: INTRODUCTION OF ONLINE SHOPPING	1-6	
1.1 Introduction.	1	
1.2 About E-Commerce	1	
1.2.1 Benefits to Organization.	2	
1.2.2 Benefits to Consumers		
1.2.3 Benefits of Society		
1.3 Online Shopping.	3	
1.3.1 Existence of Online Shopping.	3	
1.3.2 Consumer Expectations		
1.3.3 Disadvantages Of Manual Shopping Process		
1.3.4 Advantages of Online Shopping Process.	4	
1.4 Analysis Of Current Online Shopping System In Bangladesh	5	
1.5 Disadvantages Of Current Online Shopping Systems.	5	
1.6 How Online Shopping Works	5	
1.7 Object	6	
CHAPTER 2: FEASIBILITY STUDY	7-8	
2.1 Feasibility Study	7	

2.2 Feasibility Of The New System.	7
2.3 Technical Feasibility.	7
2.4 Operational Feasibility	8
CHAPTER 3: METHODOLOGY OF ONLINE SHOPPING	9-13
3.1 Introduction.	9
3.2 Information Gathering.	10
3.3 Analysis and Design.	10
3.4 Determination of Tools & Coding.	11
3.4.1 Hyper Text Markup Language (HTML)	11
3.4.2 The Structured Query Language (SQL)	11
3.4.3 PUP: Hyper Text Preprocessor (PHP)	12
3.5 System Implementation.	13
3.6 System Evaluation (Test)	13
Chapter-4: System Analysis	14-17
4.1 System Analysis.	14
4.2 Input Analysis	14
4.3 Input Data.	14
4.4 Data Analysis	14
4.5 The System Development Life Cycle	15
4.6 Database Oriented System Approach	16
4.6.1 Reduced Data Redundancy And Increased Consistency	16
4.6.2 Sharing Of Data Between Applications	16
4.6.3 Multilevel Security	17
4.6.4 Flexible User Interface.	17
CHAPTER 5: SYSTEM DESIGN	18-22
5.1 System Design	18
5.2 DFD (Data Flow Diagram)	18
5.2.1 DFD Symbols.	18
5.2.2 Data Flow Diagram Of The System	19

5.3 Entity Relationship Diagram (ERD).	20
5.4 Page Preview	20
5.4.1 Product Tab.	20
5.4.2 Home page.	21
5.4.3 Latest Products.	21
5.4.4 Details page.	22
CHAPTER 6: CONCLUSION.	23
6.1 Conclusion.	23
6.2 Limitation.	23
6.3 Future Scopes	23
CHAPTER 7: REFERENCE	24
APPENDIX	25-30

# LIST OF FIGURES

	PAGE NO
Figure 1.3: How Online Shopping Works.	6
Figure 3.1: Step of System.	9
Figure 4.5: System Development Life Cycle.	15
Figure 4.6.2: Sharing of Data between Multiple Applications	16
Figure 4.6.3: Multiple Level of Database User Privilege.	17
Figure 5.2.1: DFD-Basic Symbols.	18
Figure 5.2.2: Data Flow Diagram.	19

#### **CHAPTER 1**

#### INTRODUCTION OF ONLINE SHOPPING

#### 1.1 Introduction

For better understanding of the readers the authors try to develop an easiest analyzing techniques to explain the subject matter in this chapter, those are: Overall view of feature, purpose and scope of E-Commerce and this proposed system.

The Electronic Commerce (e-Commerce) is a general concept covering any form of business transaction or information and communication technology (ICTs). Commerce takes place between companies and public administration. E-Commerce includes electronic trading of goods, service and electronic material [1].

A typical definition used for e-Commerce is as follows- "E-Commerce- The buying and selling of products and services by business and consumers over the internet.". Much of the initial hype relating to e-Commerce was in the area of business- to-consumers, particularly in the selling of products such as CDs, Videos, Computer-related products, electronic products and travel service. There is now a relation that in the scheme of things this is a limited area, and whilst there will still be tremendous growth, the future will be in the application of e-Commerce in a business- to—business environment [1].

#### 1.2 About E-Commerce

E-Commerce describes the process of buying and selling or exchanging of product, services and information via computer networks including Internet. EC is general concept covering any form of boniness transactions or information exchange using information and communication technology, between companies, between companies and their customers or between companies and public administration [1].

Several terms are used to describe developments in the world of electronic trading and their use often causes confusion within the SME community:

• E-Commerce- one of the first terms to be used as a generic title for electronic trading activities. For some it is synonymous with selling from a Website, but the broader definition is more applicable to most SMEs.

- E-Business- widely applied to business-to-business interactions using the Internet and other solutions, but also used by companies such as IBM as a generic title for all electronic trading activities.
- M-Business- an emerging term which applies to the use of Mobile Communications and their interaction with the Internet. Not a term that most SMEs will need to consider at the present time [1].

A classification of EC is by the transaction. The following types are distinguished [2].

- Business to Consumer (B2C)
- Business to Business (B2B)
- Business to Government (B2G)
- Consumer to Consumer (C2C).

#### 1.2.1 Benefits to Organization

Expands the market place to national and international market with minimal capital and outlay. Decreases the cost of creating, processing and distribution, storing and retrieving paper based information. Ability for creating highly specialized business. Allows reduce inventories and overhead. EC lowers the telecommunication costs if it uses Internet than VANs. Improve images; improve customer service, simplified process etc [3].

#### 1.2.2 Benefits to Consumers

Enables customers to shop or do other transactions 24- hours a day, all year round, form almost any location. Provides customers with more choices; they can select form many vendors and form many products. Allowing them to shop in many places and conduct quick comparisons. In case of digital products EC allows quick delivery. It make possible to take part in virtual actions. Facilitates healthy completion that results substantial discounts [3].

#### 1.2.3 Benefits of Society

E-Commerce enables more individual to work at home and to do less traveling for e-Commerce allows some merchandise to be sold at lower price, so less affluent people can buy more and increases the living std. E-Commerce enables people in the rural areas to enjoy products and services, such as healthcare, education and distribution of government social services at a reduced cost and / or improve quality [3].

#### 1.3 Online Shopping

Online shopping is an application of E-Commerce. Online shopping is the process by which consumers go through to purchase products or services over the Internet. 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 mall [4].

The metaphor of an online catalog is also used, by analogy with mail order catalogs. All types of stores have retail web sites, including those that do and do not also have physical storefronts and paper catalogs. Online shopping is a type of electronic commerce used for business-to-business (B2B) and business-to-consumer (B2C) transactions. The term "Web-shop" also refers to a place of business where web development, web hosting and other types of web related activities take place [4].

#### 1.3.1 Existence of Online Shopping

There are some reasons for existence of online shopping. For customers it is not only because of the high level of convenience, but also because of the broader selection; competitive pricing and greater access to information. For organizations it increases their customer value and the building of sustainable capabilities, next to the increased profits [5].

### 1.3.2 Consumer Expectations

The main idea of online shopping is not in having a good looking website that could be listed in a lot of search engines and it is not about the art behind the site. It also is not only just about disseminating information, because it is all about building relationships and making money. Mostly, organizations try to adopt techniques of online shopping without understanding these techniques and/or without a sound business model. Rather than supporting the organization's culture and brand name, the website should satisfy consumer's expectations. Many researchers notify that the uniqueness of the web has dissolved and the need for the design, which will be user centered, is very important. Companies should always remember that there are certain

things, such as understanding the customer's wants and needs, living up to promises, never go out of style, because they give reason to come back. And the reason will stay if consumers always get what they expect [7].

#### 1.3.3 Disadvantages of Manual Shopping Process

Some disadvantages of manual shopping process are given below:

- Customers have to go to the shop or seller manually for buying products and to know about the latest product updates
- It is time-consuming process.
- Sometimes it is wasteful in terms of cost in the case of communication between seller and buyer.
- In manual shopping process customers does not get 24-hour service [7].

#### 1.3.4 Advantages of Online Shopping Process

The main advantage of online shopping is that, it allows people to browse through many items and categories without leaving their house, to compare the prices of as many shops as they want, and also to order as many items as they can afford without having to worry about how they will transport them, because the online shopping websites also deliver the things to the buyer's home. When people buy from online store, they have the comfort to take their time while checking for the things of their choice, this will lead them to a simple and quick way to perform price comparison unlike the dissatisfied and hurried shopping they do in the local stores. Furthermore, the Internet is open 24 hours a day, 365 days a year, so people don't have to hurry or worry about finding a parking spot [7].

# 1.4 Analysis of Current Online Shopping System In Bangladesh

Actually online shopping system is not widely used by people in Bangladesh still now. But day by day it is developing and people are interested in online shopping Although there are some online shopping web sites in Bangladesh, www.cellbazaar.com and www.clickbd.com are most popular now. These sites motivated people by their system, correct and huge information, mobility and easy

accessibility. These two sites stores information about the available current products, price, condition, owner's contact information etc. These information are given by the user (Seller) actually. Interested seller and buyer have to log-in to sell or buy a product. A database is maintained by administrator to store the information of each site.

#### 1.5 Disadvantages of Current Online Shopping Systems

Although these web sites (i.e.www.cellbazaar.com, www.clickbd.com etc.) are popular to the people of Bangladesh, these sites have some disadvantages too. In these web sites, after sign up and making some query of advertisement, a person have to browse these web sites to know the updated information about product. Specially, a buyer have to browse these web sites to find products as his requirement. So, the buyer have to have minimum a Computer and an Internet connection for this. Then it will be difficult for that person to browse the web-sites. In these cases, the web sites are unable to provide alternate service for the interested buyer. Recently www.cellbazaar.com provided an alternate service for customers, where interested customers have to call a number from mobile to listen the information of latest available products. But this is a costly service.

# 1.6 How Online Shopping Works

Many online interactions rely on common program called CGIs [6]. (Gateway interfaces) which negotiate a dialogue between the user and the web. Thing goes something like this: the users fill up information into a form on a way and submit the information to the web server. The server accepts the info processes it in some predefined fashion-adds it to a database, emails it to s(appends it to a web page. The server sends a confirmation to the user, per Acknowledgement of receipt or a page that displays the submission. Figure 1.6.

5

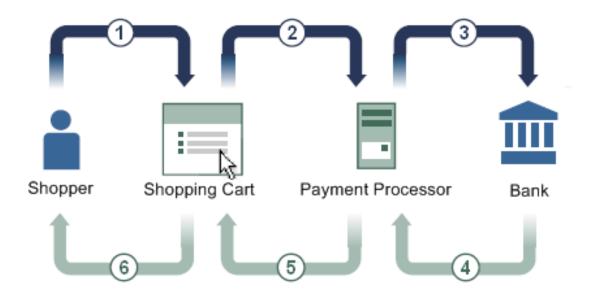


Figure 1.6: How Online Shopping Works

# 1.7 Object of the Project

This software helps customer to find different mobiles, their features, and new updates easily. It is designed such a way that one can view all the updates of the mobile from any place through online. The software will helping easy maintaining and updating products in the website for the administrator. Also quick and easy comparison of different products for the customers.

#### **CHAPTER 2**

#### FEASIBILITY STUDY

#### 2.1 Feasibility Study

Depending on the results of the initial investigation, a Online Mobile Phone Shop Beating is very important to keep information about various products which must be dynamically updated and the users would be updated about the products. Before starting my main project I generate a survey to understand what I really need in the Selling. A survey has been organized where interested buyer of an area of Dhanmondi participated to share their views and ideas with us about the system. The following sections describe the details of that survey.

#### 2.2 Feasibility of the new system

Although theoretically it is required to consider feasibilities of several candidate systems, we are limiting our scope into the new system solely due to limitations with time and capability. The new system, as proposed, aims to structurally collect, store and use all information of several products. Seller, Buyer, administration — all will have their own structure and relations between them. Once this is done, decision making can be made much easier, smoother and automated with assistance from the software.

#### 2.3 Technical Feasibility

The entity definitions, relationships and computations required for the new system are very simple when an underlying database is used. With minimal design efforts and programming, the new system can be build.

Now a day almost every person has a personal computer and Internet connection. If a web-based application is deployed countrywide using a server, it can serve the whole country and eliminate the complexities with many of the manual commercial activities. The system requires a few experts who are capable of providing technical support that can readily help adopt the new system and serve the users where necessary.

#### 2.4 Operational Feasibility

Majority, if not all, of the potential users of the new system have experience with computer applications and they are assumed to accept this new system willingly. If the system can be made efficient and easy enough to use, every person can browse this site like other site and fulfill their demand.

The new system, if adopted, will come helpful to its users. It will save many activity wasted with asking people, updated information, price of products, condition of products, products review, searching web site and related activities. From these considerations, operational feasibility of the new system can be considered more than satisfactory.

#### CHAPTER 3

#### METHODOLOGY OF ONLINE SHOPPING

#### 3.1 Introduction

The scientific aspects of this project will develop over time, as experience is gained. This page discusses our present understanding of the methods and constraints that believe will yield clear, interpretable results with regard to our basic prediction of a correlation of REG behavior with identifiable states of collective consciousness. The discussion is ongoing, and some alternative proposals are under consideration as complements to the currently planned approach. A recent letter with statistical questions is an example of the value of constructive skepticism. The ability to gather and interpret scientific evidence depends fundamentally on a clear statement of the hypothesis or the question that is being asked. Using operational definitions to ensure that can extract quantitative conclusions from data, with specific relevance to question. Having used more than one defined analysis over the course of the experiment, for which the detailed recipes are provided. If followed, these will duplicate the original GCP analysis. (In some cases, extra data will have been accumulated from dial and drop eggs.) The methodology we follow consists of the following steps:

- Information gathering.
- Analysis and design.
- Determination of tools & coding.
- System implementation.
- System evaluation.

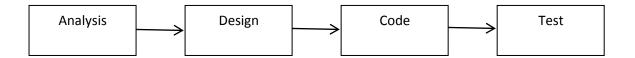


Fig 3.1: Step of System

#### 3.2 Information Gathering

Information gathering is an art and science. Before designing our project we discussed about it with many people and also with our respected teacher and followed their important guidelines to collect information which are as follows:

- Explain the purpose, use security and disposition of the response.
- ➤ Provide detailed instructions on how we want the questions completed.
- ➤ Give a time limit or a deadline for return of the questionnaire.
- ➤ The questionnaire places less pressure on subjects for intermediate responses.
- How does online shopping work?
- What can I buy online?
- How do I find what I'm looking for?
- How do I pay?
- Is it safe?
- Do I have any rights?
- The benefits
- The drawbacks
- Buying from abroad
- Something a little different

#### 3.3. Analysis and Design:

System analysis and design are keyed to the system development life cycle. The first phase of the system development life cycle is known as system analysis. Usually system work is divided into three takes.

- Study the present system.
- Identity the system objectives.
- Evaluate alternative ways of meeting the objectives.

Team design is a second phase of system development life cycle work. Four tasks are

Normally involved ins system design work. To complete a system design, a system analyst must

- Design the output and input formats.
- Define the contents and updating methods.
- Describe all manual and machine processing operations.
- Prepare equipment specification.

Here creates the ER diagram, Tables, interaction forms.

#### 3.4 Determination of Tools & Coding

For this project work that have selected following tools:

Front end: PTV (4.2.3 versions), HT/VIL.

➤ Back end: SQL (4.0 versions).

> Graphics tools: Flash 7.0.

➤ Other tools: Macromedia dream wavers, Style sheet.

#### 3.4.1 Hyper Text Markup Language (HTML)

HTML stands for Hypertext markup language, it is a page description language that Creates hypertext or hypermedia documents.HTML inserts control codas within a document at points that create link (known as hyperlink) to other parts of documents or to other documents anywhere on the www.html embeds control codes in the ASCII text of a document that designate title, heading, graphics and multimedia components, as well as hyperlinks within the document. Several programs in the top software suites automatically convert documents into HTML formats. This includes web browsers, word processing and spreadsheet programs, database managers and presentation graphics packages. These and specialized HTML editor programs provide a range of futures to design and create multimedia web pages without formal HTML programming.

# **3.4.2** The Structured Query Language (SQL)

The structured query language (usually called SQL) is the universal language used for programming database, and we'll introduce SQL. At this stage because it's at the heart of the ability to issue commands. If that have ever used the query by example (QBE) grid to Microsoft access then that have already been using SQL (albeit behind the

scenes). Every time to request information from an access database using the QBE grid, the query is translated into SQL and the result is returned to user as a record set. As it early mention, all SQL does it provide with a format for retrieving the information that want from the database. SQL seems to have a reputation as being a difficult language, but don't be put off by it getting the hand of it is really simple. Infarct, SQL is a declarative language. The term "declarative" means that uses SQL to tell the computer what it is wanted, and let the machine decide how best to achieve the correct result. As programmers, never need to see the details of the result. By contrast, other languages (such as visual basic, COBOL, C++ or JAVA) are procedural language. These languages are characterized by statements, which tell the computer exactly what to do in a structured step by step way.

Even more appropriately, we could use a SQL query when we are requesting data from the data store in the first place:

This statement tells the data store to select the values of the title ID and title fields for all the records in the all movies table, and to pump that data into a new record set object. In fact, this command uses two SQL keywords SELECT and FROM It will see more of this SQL syntax as we progress but as we can see, it's not too difficult to read

#### **3.4.3 PUP: Hyper Text Preprocessor (PHP)**

PHP is now officially known as PHP: hypertext preprocessor. There are some Compelling reasons to work with php4, for many projects it will find that the production process is significantly faster than it might except it is use to working with other scripting language. As an open source product, php4 is well supported by a talented production team and a committed user community. Furthermore, PHP can be run on all the major operating systems with more servers. PHP allows you to separated HTML code from scripted elements; It will notice a significant decrease in development time on this project. in many instant, It will be able to separate the coding stage of project from the design and build stage. Not only can this make life easier for it as a programmer, it also can remove obstacles that stand on the way of effective and flexible design. PHP is open source. Well minted open source project offers users additional benefit through. It benefit from and accessible and committed community who offers a wealth of experience in the subject. Chances are that any problem that encounter in coding can be answered swiftly and easily with a title research. If that fail, a question sent to a mailing list can yield an intelligent,

authoritative response it also can be sure that bugs will be addressed as are the found, and that new feathers will be made avail as the need is define

.

### 3.5 System Implementation

Management's approval to proceed with the installations of a new system triggers a number of actions. System implementation refers to the steps that are necessary to install a new system and put it into operation.

#### 3.6 System Evaluation (Test)

Once a system has been operating for some month. It performance should be Evaluated to determine whether the system is actually achieving the result that was Expected. The evaluation process, sometimes called a system audit, Should examine the degree to which each of the predicted benefits of system is being a realized. Whether the output information is produced accurately, on time and in the right format is part of the evaluation.

#### **CHAPTER 4**

#### SYSTEM ANALYSIS

#### 4.1 System Analysis

The system analysis is a detailed study of the various operations performed by the existing system and their relationships within and outside of the system. One aspect of analysis is defining the boundaries of the system and determining whether a candidate system should consider other related systems. Here we completed system analysis by the input analysis, output analysis and data analysis of existing system.

#### 4.2 Input Analysis

Inaccurate input data are the most common cause of errors in data processing. Errors entered by data entry operators can be controlled by input design. Input design is the process of converting user-originated inputs to a computer-based format. In the system design phase, the expanded data flow diagram identifies logical data flows, data stores, sources and destinations. A systems flowchart specifies master files (database), transaction files, and computer programs. Input data are collected and organized into groups of similar data. Once identified, appropriate input media are selected for processing.

#### 4.3 Input Data

The goal of designing input data is to make data entry as easy, logical, and free from errors as possible. In entering data, operators need to: know the following:

- The allocated space for each field.
- Field sequence, which must match in the source document.
- The format in which data fields are entered.

When we approach Input data design, the source documents that capture the data then select the media used to enter them into the computer. Let us elaborate on each step:

#### 4.4 Data Analysis

In the data analysis the data has been selected from input analysis according to the requirements of the system. The following data are included by the data analysis. In the other existing websites (i.e www.cel 11-m7aar rim valve clickbd.com etc.), all

14

Product related information are kept in the database by the seller and the interested buyer have to browse the sites manually to know about the available product update. The buyer have to search for the appropriate product information, cost, condition of the product etc. by himself in the existing websites. It is a lengthy process to sell a product. So according to the requirement analysis the various data has been included in this system and the interested buyer will be notified by a SMS alert to his mobile if any product information is matched with his requirement. Now it is not necessary to spend valuable time for collect product information by browsing various sites. An user just have to browse the site, make a query to database as his/her requirement and easily get SMS alert with information of matched related product.

### 4.5 The System Development Life Cycle

To understand system development, we need to recognize that a candidate system has a life cycle, just living or a new product. Systems analysis and design are keyed to the system life cycle. The stages are shown in figure 4.5. The analyst must progress from one stage to another methodically, answering key questions and achieving results in each stage [8]

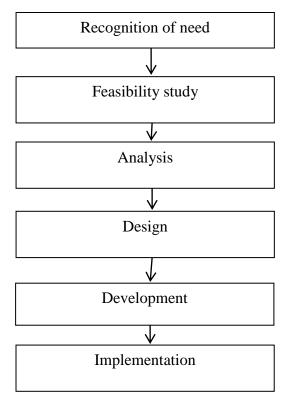


Figure 4.5: System Development Life Cycle.

#### 4.6 Database Oriented System Approach

In computer science, a database is a structured collection of records or data that is stored in a computer system so that a computer program or person using a query language can consult it to answer queries. The records retrieved in answer to queries are information that can be used to make decisions. The computer program used to manage and query a database is known as a database management system (DBMS). The properties and design of database systems are included in the study of information science [8].

Databases are used in many applications in different ways. Some application utilize database for storing massive amount of growing data for better manageability and searching capabilities. Again, some applications utilize databases for storing, processing and making decisions based on data. This project deals with Selling and buying system. So therefore, using a database will definitely make it efficient to reach the goals of this project with properly designed database schema and the use of powerful database queries in conjunction with logics and algorithms targeted to the problems [8].

**4.6.1 Reduced Data Redundancy and Increased Consistency:** Since the whole data resides in one central database, the various programs in the application can access data in different data files. Hence data present in one file need not be duplicated in another. This reduces data redundancy. However, this does not mean all redundancy can be eliminated. There could be business or technical reasons for having some amount of redundancy. Any such redundancy should be carefully controlled and the DBMS should be aware of it. Reduced data redundancy leads to better data consistency [9].

#### 4.6.2 Sharing Of Data between Applications

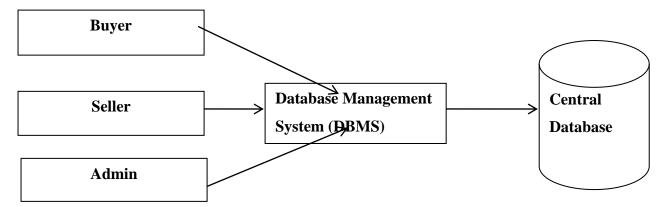


Figure 4.6.2: Sharing of Data between Multiple Applications.

Since related data is stored in one single database, enforcing data integrity is much easier. Moreover, the functions in the DBMS can be used to enforce the integrity rules with minimum programming in the application programs. Related data can be shared across programs since the data is stored in a centralized manner (figure 4.6.2). Even new applications can be developed to operate against the same data.

#### 4.6.3 Multilevel Security

Most implementations of popular database management systems provide out-of-box support for multiple levels of authentication for databases and tables. Multiple user access privileges on database objects can be limited to some or all of add, remove, edit and read operations (figure 4.6.3).

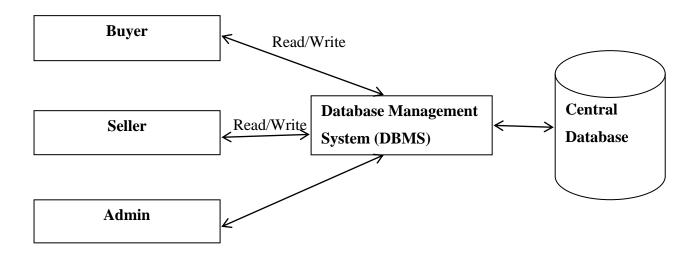


Figure 4.6.3: Multiple Level of Database User Privilege.

#### 4.6.4 Flexible User Interface

Web browsers, the client side applications serving the program interfaces of web based applications, do not impose any limit on the height or screen size of a page in most cases. This results the freedom to offer varying quantity of information in different pages rather than restricting to a specific size like typical desktop applications. In manual processes, it is often required to present huge amount of data in a single view [9].

#### **CHAPTER 5**

#### SYSTEM DESIGN

#### 5.1 System Design

All entities of the system have been modeled as objects in order from to separate their logic on presentational code and to isolate the database queries. Isolating the database queries makes it possible to make quick changes in the structures of entities and to ease the replacement of underlying database platform which is currently MySQL. With this approach of development, new entities and activities can be added to the system when needed. Thus, the system becomes highly extendable and modular.

#### **5.2 DFD (Data Flow Diagram)**

The DFD was first developed by Larry Constantine as way of expressing system requirements in graphical form. This led to a modular design. A DFD also known as "bubble chart" has the purpose of clarifying system requirements and identifying major transformations that will become programs in systems. So, it is the starting point of the design phase that functionally decomposes the requirements specifications down to the lowest level of detail. A DFD consists of a series of bubbles join by lines. The bubbles represent beta transformations and the lines represent data flow in the system. A DFD describes what data flow (logical) rather than how they are processed, so it does not depend on hardware, software, data structure or file organization. The key question that we are trying to answer is: What major transformations must occur for input to be correctly transformed into output?

#### 5.2.1 DFD Symbols

In the DFD, there are four symbols, as shown in figure 5.2.1. The descriptions of each symbol are given below:

- A square defines a source (originator) or destination of system data
- An Arrow identifies data flow data in motion. It is a pipeline through which information follows.
- A circle or "bubble" (an oval bubble used by somewhere) represents a process that transforms incoming data flows into outgoing data flows.
- An open rectangle is a data store —data at rest, or temporary repository of data.

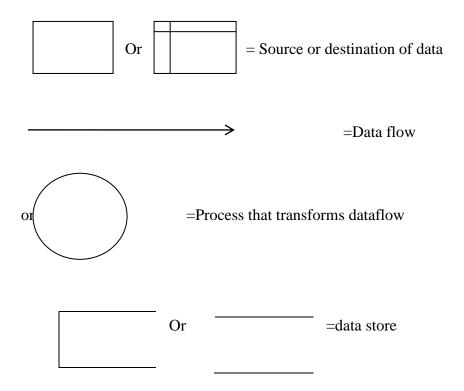


Figure 5.2.1: DFD-Basic Symbols.

# 5.2.2 Data Flow Diagram of the System

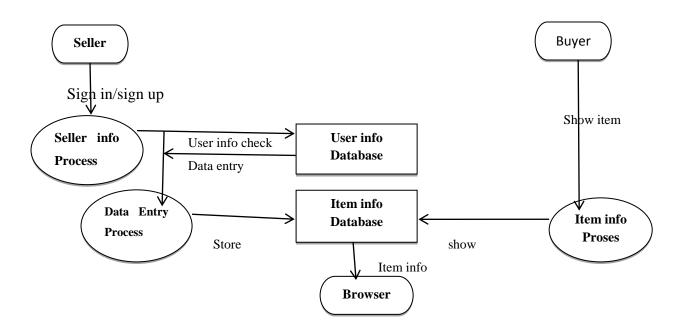


Figure 5.2.2: Data Flow Diagram

#### **5.3 Entity Relationship Diagram (ERD)**

The Entity-Relationship model is a data model for high-level descriptions of conceptual data models, and it provides a graphical notation for representing such data models in the form of entity-relationship diagrams. Such data models are typically used in the first stage of information-system design; they are used, for example, to describe information needs and/or the type of information that is to be stored in the database during the requirements analysis. The modeling technique, however, can be used to describe any ontology (i.e. an overview and classification of used terms and their relationships) for a certain universe of discourse (i.e. area of interest). In the case of the design of an information system that is based on a database, the conceptual data model is, at a later stage (usually called logical design), mapped to a logical data model, such as the relational model; this in turn is mapped to physical model during physical design. Sometimes, both of these phases are referred

# **5.4 Page Preview**

**5.4.1 Product Tab**: This is product table. It contains any information of products. Here Id is primary key.

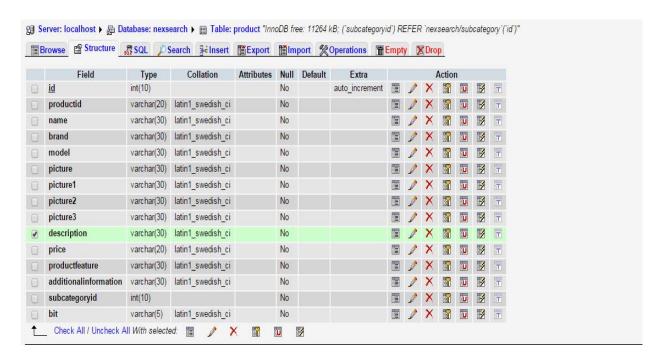


Fig 5.4.1: Physical Data table product.

**5.4.2 Home page:** Shows our website home page which known as default page. It contains mobile phone list, details, etc.

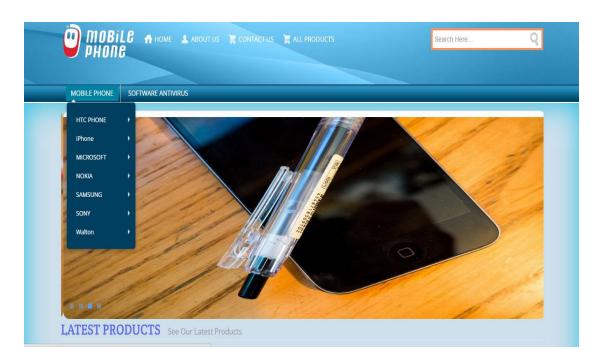


Fig 5.4.2: page preview of Home page.

**5.4.3 Latest Products:** Shows our website's latest product which can see the popular product, brand, model etc.

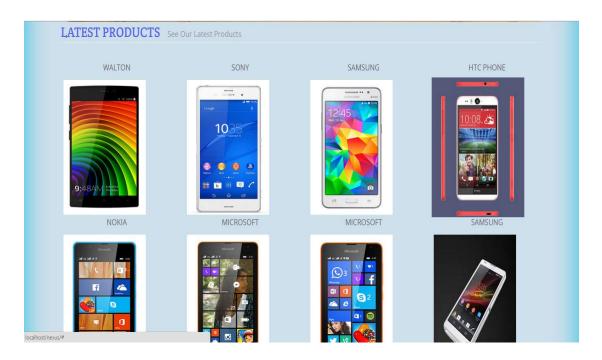
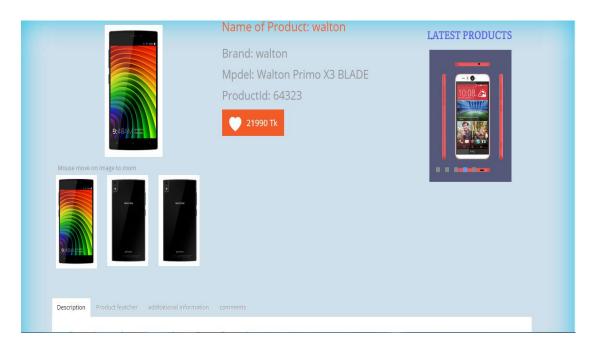


Fig 5.4.3: page preview of Latest product.

**5.4.4 Details page:** Shows our website's details page. It contains product model, configuration, price etc.



5.4.4 Page preview of details page.

#### **CHAPTER 6**

#### **CONCLUSION**

#### 6.1 Conclusion:

The developed system has been successfully deployed on a web-site. After connected to the system through the Internet, some feedbacks are found. This system's workflow of the front-end is user friendly and efficient enough to work with. Users (Sellers) can publish advertisements of selling Mobiles with detail information in the simplest way. Buyers can view the available products easily. And Buyers also get reply along with SMS from the database, after making requests form personal mobile. In this system, Sellers and Buyers both will be benefited.

The system developed with future development possibilities in consideration. The object oriented approach of this system permits addition of new entities and methods, which will be helpful to interact with existing ones and to extend the functionalities. The developers of this system wishes to continue their involvement and contribution to this system for further development operation. Some new features will be added soon in this system. The developers of this system wish to add a Forum facility in this web-site, where all the registered users (both Sellers and Buyers) will be able to upload or download essential Mobile Phone Tools, Software, Firmware, Wallpaper, Ring tone, Manuals, Review etc.

#### **6.2 Limitation:**

- The main limitation of online mobile shop is that there is no instant gratification. Because the item must be shipped to you, you will have to wait a few hours or a days.
- People who are not familiar with computers can't use this software.
- Now only services in Dhaka city.

#### **6.3 Future Scopes:**

- Online payment system will be added
- Our service will be extended across the country.
- All electronic products will be added.

# **Chapter 7**

#### References

- [1] J. Strauss, A. E1-Answer, R. Frost, E-Marketing, Chapter-6(ast visit: 20.01.2015)
- [2] B/C E-Commerce: http://en.wikipedia.org/wiki/Business-to-cossumer-electronic-commerce. (Last visit: 24.01.2015)
- [3] Benefit of E-Commerce: http://www.businessestore.com/WhyeCommerce.aspx.(Last visit: 13.02.2015)
- [4]OnlineShopping:http://www.microsoft.com/windows/ie/ie6/using/article/shopping. mspx.(Last visit: 2.03.2015)
- [5] Jarvenpaa, S. L, & Toda, P. A., Consumer reactions to electronic shopping on the World Wide Web, 1, 59-88, International Journal of Electronic Commerce 1997. (Last visit: 5.05.2015)
- [6] www.uscg.mil/hg/g-o/-g-o-cgis/CGIs(last visit: 7.05.2015)
- [7] Falk, Louis K., Sockel, Hy; Chan, Kuanchin, E-Commerce and Consumer's Expectations: What Makes a Website Work, Journal of Website Promotion. (Last visit: 01-04-2015)
- [8] I. Hawryszkiewycz, "Introduction to system Analysis and Design", Chapter 4, 5, 9, 11, Fourth Edition, patience –Hall of India Private Limited. (Last visit: 12-05-2015)
- [9] Database Management System: http://elearning.tvm.tcd.co.in/dbms/dbms/1\_2.htm. (Lastvisit: 02-05-2015)

# **Appendix**

#### **Dalproduct.php:**

```
<?php
                                class Product extends DB{
                                  public $Id;
                                  public $ProductId;
                                  public $Name;
                                  public $Brand;
                                  public $Model;
                                  public $Picture;
                                  public $Picture1;
                                  public $Picture2;
                                  public $Picture3;
                                  public $Description;
                                  public $Price;
                                  public $ProductFeature;
                                  public $Additionalinformation;
                                  public $SubCategoryId;
                                  public $CategoryId;
                                  public $Bit;
                                  public function Insert() {
                                  $this->Connect();
$sql = "insert into product (productid, name,brand,model, picture, picture1,
picture2,
picture3,description,price,productfeature,additionalinformation,subcategoryid,b
it)
values(
```

```
"".MS($this->ProductId)."",
               '''.MS($this->Name).''',
".MS($this->Brand).",
'''.MS($this->Model).''',
".MS($this->Picture).",
".MS($this->Picture1).",
'''.MS($this->Picture2).''',
".MS($this->Picture3).",
".MS($this->Description).",
".MS($this->Price).",
".MS($this->ProductFeature).",
".MS($this->Additionalinformation).",
"".MS($this->SubCategoryId)."",
'''.MS($this->Bit).''')'';
 if(mysql_query($sql)) {
        return true;
      }
  $this->Err = mysql_error();
```

```
return false;
                                    }
                                    public function Update() {
                                    $this->Connect();
$sql = "update product set
productid = '''.MS($this->ProductId).''',
name = '''.MS($this->Name).''',
brand = '''.MS($this->Brand).''',
model = '''.MS($this->Model).''',
picture = '''.MS($this->Picture).''',
picture1 = '''.MS($this->Picture1).''',
picture2 = '''.MS($this->Picture2).''',
picture3 = '''.MS($this->Picture3).''',
description = "".MS($this->Description)."",
price = '''.MS($this->Price).''',
productfeature = "".MS($this->ProductFeature)."",
additionalinformation = "".MS($this->Additionalinformation)."",
subcategoryid = "".MS($this->SubCategoryId)."",
bit = '''.MS($this->Bit).'''
where
id = '''.MS($this->Id).'''';
                                   if(mysql_query($sql)) {
                                           return true;
                                         }
```

```
$this->Err = mysql_error();
                                    return false;
                                    }
                                    public function Delete() {
                                    $this->Connect();
                                    $sql = "delete from product
                                                         where
                                  id = '''.MS($this->Id).'''';
                                   if(mysql_query($sql)) {
                                           return true;
                                         }
                                    $this->Err = mysql_error();
                                    return false;
                                    }
                                    public function SelectById() {
                                    $this->Connect();
$sql = "select * from product whereid = ".MS($this->Id)."";
                                    $sql = mysql_query($sql);
                                    while($d = mysql_fetch_row($sql)) {
                                           timesty $this-> ProductId = d[1];
                                           this->Name = d[2];
                                           times this -> Brand = d[3];
                                           $this->Model = $d[4];
                                           $this->Picture = $d[5];
                                           $this->Picture1 = $d[6];
```

```
$this->Picture2 = $d[7];
                                         $this->Picture3 = $d[8];
                                         $this->Description = $d[9];
                                         $this->Price = $d[10];
                                         $this->ProductFeature = $d[11];
                                  $this->Additionalinformation = $d[12];
                                         $this->SubCategoryId = $d[13];
                                         this->Bit = d[14];
                                         }
                                  }
                                  public function Select()
                                  {
$sql = "select p.id, p.productid, p.name, p.brand, p.model, p.price,
sc.name,p.productfeature, p.description, p.additionalinformation,
p.picture, p.picture1, p.picture2, p.picture3,p.bit from product as p,
subcategory as sc
where
                                p.subcategoryid = sc.id";
                                  if($this->SubCategoryId != ""){
$sql .= " and p.subcategoryid = ".MS($this->SubCategoryId)."";
                                      }
                                  if($this->Name != ''''){
$sql .= " and p.name = "".MS($this->Name)."";
                                       }
                                  $sql .= " ORDER BY p.id DESC";
```

```
return $this->ExecuteSelectQuery($sql);
                                   }
                                 }
?>
DBConnect.php:
<?php
class DB{
                                 public $Err;
                                 public function Connect(){
                                   mysql_connect("localhost", "root", "");
                                  mysql_select_db("nexsearch");
                                 }
                                 public function ExecuteSelectQuery($query){
                                   $this->Connect();
                                   $a = "";
                                   $sql = mysql_query($query);
                                   while(d = mysql_fetch_array(sql))
                                   a[] = d;
                                   }
                                   return $a;
                                 }}
?>
```