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## **ABSTRACT**

The Internet has become an essential part of our daily life. We can't imagine ourselves now without the Internet. The Internet today is being used to Advertise, to Communicate, to Publish, to Recruit, to Inform, to Buy/Sell, to Support, to Train and to do countless things it has made possible.

One of the first companies that realised that the Internet can be a channel to reach existing and potential consumers and first made a proper attempt towards Online Shopping was the Inter Shop Communications in the year 1995. This was followed by Amazon.com and eBay in the same year. All that the customer needed was access to the Internet and a method of payment. People could sit at the convenience of their home, and order product at the click of a button.

## **CHAPTER 1:**

#### INTRODUCTION

Online shopping is the service whereby consumers directly buy goods, services etc. from a seller interactively in real-time without an intermediary service over the internet.

Online shopping is the service of buying goods and services from merchants who sell on the Internet. Since the emergence of the World Wide Web, merchants have sought to sell their products to people who surf the Internet. Shoppers can visit web stores from the comfort of their homes and shop as they sit in front of the computer. Consumers buy a variety of items from online stores. In fact, people can purchase just about anything from companies that provide their products online. Books, clothing, household appliances, toys, hardware, software, and health insurance are just some of the hundreds of products consumers can buy from an online store.

Many people choose to conduct shopping online because of the convenience. For example, when a person shops at a brick-and-mortar store, she has to drive to the store, find a parking place, and walk throughout the store until she locates the products she needs. After finding the items she wants to purchase, she may often need to stand in long lines at the cash register.

Online shopping also allows you to browse through endless possibilities, and even offers merchandise that's unavailable in stores. If you're searching for a niche product that may not be distributed locally, you're sure to find what you're looking for on the internet. What's even more useful is the ability to compare items, similar or not, online. You can search through multiple stores at the same time, comparing material quality, sizes and pricing simultaneously.

Shopping via the internet eliminates the need to sift through a store's products with potential buys like pants, shirts, belts and shoes all slung over one arm. There is no need to stand in the line waiting, for some more for a store clerk to finally check out your items. Online shopping transactions occur instantly-saving you time to get your other errands done! Additionally, unlike a store, online shopping has friendly customer service representatives available 24 hours a day, 7 days a week to assist you with locating, purchasing and shipping your merchandise.

Despite the convenience of online shopping, not everyone chooses to purchase items and services online. Some people like the idea of physically going to a store and experiencing the shopping process. They like to touch the merchandise, try on clothing, and be around other people.

Given the lack of ability to inspect merchandise before purchase, consumers are at higher risk of fraud than face-to-face transactions. Merchants also risk fraudulent purchases using stolen credit cards or fraudulent repudiation of the online purchase. Identity theft is still a concern for consumers. Secure Sockets Layer (SSL) encryption has generally solved the problem of credit card numbers being intercepted in transit between the consumer and the merchant. However, one must still trust the

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merchant (and employees) not to use the credit card information subsequently for their own purchases, and not to pass the information to others.

The lack of full cost disclosure about the product may also be problematic. While it may be easy to compare the base price of an item online, it may not be easy to see the total cost up front. Additional fees such as shipping are often not be visible until the final step in the checkout process. Some services such as the attempt to include estimates of these additional costs.

Typically, only simple pictures and/or descriptions of the item are all a customer can rely on when shopping on online stores. If the customer does not have prior exposure to the item's handling qualities, they will not have a full understanding of the item they are buying. Because of this, many consumers have begun going to real-world stores to view a product, before purchasing online, a practice known as showrooming (using the store as a showroom for the online merchant). Also, consumers check the expert reviews written in review websites and review videos uploaded on sites like YouTube by review sites and the original users of the product themselves.

Consumers have slowly started to accept Online Shopping. The plenty of advantages online shopping has and the disadvantages of online shopping being addressed only means that online shopping is going to grow exponentially in the coming years.

#### 1.1 SCOPE OF THE PROJECT

This project tries to replicate online shopping, by creating a prototype website to learn about the working of this system and also investigate potential problems faced by the companies which offer Online Shopping services. This prototype website is supported on a local host Apache server and MySQL database via XAMPP software.

The customer can sign-up for the service after providing necessary details like his name, phone number, his/her delivery address etc. and is given a username and a password. He can login into his account and choose his product of interest from the many products available and add it to a "cart". The cart allows the customer to accumulate multiple items and to adjust quantities, like filling a physical shopping cart or basket in a conventional store. A "checkout" process follows (just as it happens in a physical-store) in which payment and delivery information is collected. In this project too, just as in many online stores, consumers need to sign up for a permanent online account so that some or all of this information only needs to be entered once. Once the customer checks out, the online shopping process is completed.

## **CHAPTER 2:**

## HARDWARE & SOFTWARE REQUIREMENTS

## **Hardware Requirements:**

- A computer with compatible processor.
- Computer with RAM of 512 MB or greater.
- Computer with a connection to the Internet.

## Software Requirements:

- A computer with a Windows 7 operating system.
- A browser installed on the computer.
- XAMPP software with Apache and MySQL modules (phpMyAdmin)
- NetBeans IDE

## **CHAPTER 3:**

#### SYSTEM ANALYSIS

System Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is- what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

During analysis, data collected on the various files, decision points and transactions handled by the present system. The commonly used tools in the system are Data Flow Diagram, interviews, etc. Training, experience and common sense are required for collection of relevant information needed to develop the system. The success of the system depends largely on how clearly the problem is defined, thoroughly investigated and properly carried out through the choice of solution. A good analysis model should provide not only the mechanisms of problem understanding but also the frame work of the solution. Thus it should be studied thoroughly by collecting data about the system. Then the proposed system should be analysed thoroughly in accordance with the needs.

System analysis can be categorized into three parts:

- System planning and initial investigation
- Information Gathering
- Feasibility study

#### System planning & initial investigation:

The objective of Online Shopping project is to provide customer to order the products at the convenience of their home, with a click of a button. We plan by listing all the products which we want to make available to the customers. These products are stored in the database along with the required details.

#### Information Gathering:

All the products need to be listed in the database along with the many details attached to each the product. Information attached to each product in the database should be gathered. Some of the information we need to gather for each of the product is product id, product name, current quantity available with the online shopping service provider, product name, category the product belongs to, features of the product, status of the availability of the product (whether the product is currently available with the online shopping service provider or not), the mode of delivery as requested by the customer.

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#### Feasibility Study

A feasibility study could be used to test a new working system, which could be used because:

- The current system may no longer suit its purpose.
- Technological advancement may have rendered the current system redundant.
- The business is expanding, allowing it to cope with extra work load.
- Customers are complaining about the speed and quality of work the business provides.
- Competitors are now winning a big enough market share due to an effective integration of a computerized system.

**Economic Feasibility Study:** This involves questions such as whether the firm can afford to build the system, whether its benefits should substantially exceed its costs, and whether the project has higher priority and profits than other projects that might use the same resources. This also includes whether the project is in the condition to fulfil all the eligibility criteria and the responsibility of both sides in case there are two parties involved in performing any project.

**Technical Feasibility Study:** This involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the firm has enough experience using that technology. The assessment is based on an outline design of system requirements in terms of Input, Output, Fields, Programs, and Procedures. This can be qualified in terms of volumes of data, trends, frequency of updating, etc. in order to give an introduction to the technical system.

**Operational Feasibility Study:** This involves questions such as whether the system has enough support to be implemented successfully, whether it brings an excessive amount of change, and whether the organization is changing too rapidly to absorb it.

**Schedule Feasibility:** The duration of time required for the project has been planned appropriately and it is the same as the duration of time expected by the client. Therefore the website can be delivered to the client within the expected time duration, satisfying the client. Hence the project is feasible in scheduling.

## **CHAPTER 4:**

#### SYSTEM DESIGN

Design is a multi-step process that focuses on, software architecture, data structure, procedural details and interfaces between the modules. The design process also translates the requirement into the representation of the software that can be assessed for quality before coding begins.

Software design methodology changes continually as new methods; better analysis and broader understanding evolve. Software design is at relatively early stage in its evolution. Therefore, software design methodology lacks the depth, flexibility, and quantitative nature that is normally associated with more classical engineering disciplines. However, techniques for software design leads the three technical activities Design, Code, Testing that are required to build and verify software. Each activity transforms information in a manner that results in validation of the computer software.

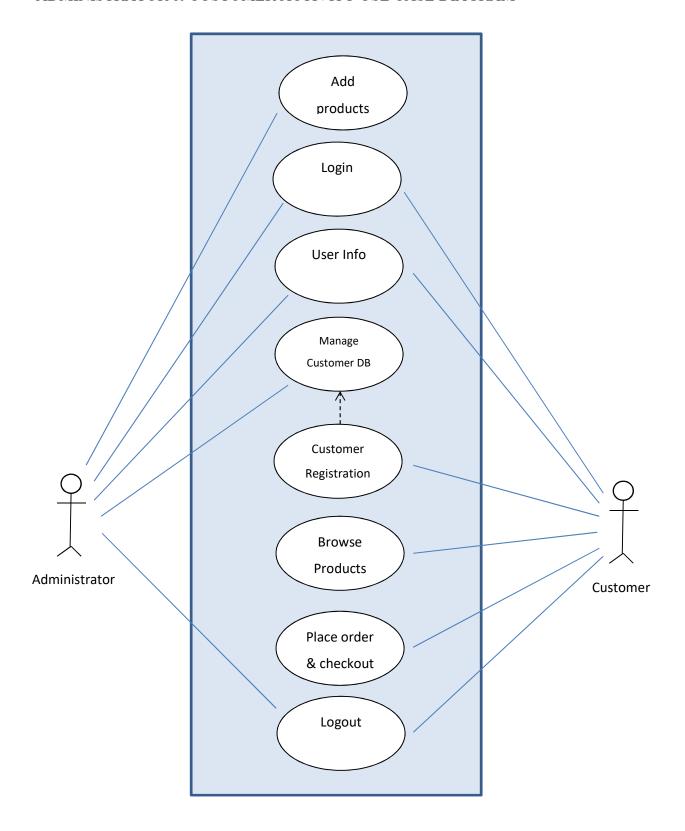
It is necessary to know prior methodologies which have been used in the design aspects and their drawbacks in order to implement an efficient, bug free product. Comparing various strategies and using the best practices to design the architecture to obtain better sustainability and quality.

#### **USE CASE DIAGRAM**

A use case diagram in the Unified Modelling Language (UML) is a type of behavioural diagram defined by and created from a Use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases.

The use case diagram represents the functionality provided to the actors in the system. The administrator of the system has the highest rights to alter the online shopping system. He can suspend, alter the in any way he chooses. The customer is only allowed to login and order products from the online shopping system.

## ADMINISTRATOR & CUSTOMER ACTIVITY USE CASE DIAGRAM



The system has following five phases:

- 1. Product entry phase
- 2. User Registration phase
- 3. Login phase
- 4. Product browsing phase
- 5. Billing & logout phase

## **Product Entry phase:**

The items which will be sold by the online retailer will have to be first entered uploaded onto the database along with the details of the product such as product id, product name, current quantity available with the online shopping service provider, product name, category the product belongs to (subcategory of the product, if needed), features of the product, status of the availability of the product (whether the product is currently available with the online shopping service provider or not) etc. All this work is done by the Administrator in the Product Master phase and the price of the respective products (identified by their product id) is entered in the Price Master. No other user can make changes.

#### User- Registration phase:

In the user-registration phase, the user before using the online shopping service must register with the service provider. He can do this by providing the details requested by the system like Name, Address, Phone number, email address etc. If any customer is already is registered with a similar user-name, then the customer must be notified the same and the new consumer must be asked to choose a new username.

### Login phase:

The new customer is provided with a new username and password for his/her exclusive use which he can use for browsing the products available on the online store. However, if one user tries to access another user's account and fails to provide the correct set of username & password, then the access to that account his denied. The customer is allowed to see the products only after he has logged in.

#### Part of PHP code for the login phase is as follows:

```
</div>
 <div id="mainContent">
   <div id="mainContent1">
   <div id="middletxtheadermain">
    <div id="middletxtheader">Login Page</div>
    <div id="middletxt1">
      Please enter the Login details.
    </div>
    </div>
    <div id="middletxt">
      <form action="" method="post" name="frm login" id="frm login"</pre>
enctype="multipart/form-data">
       <+r>
          <div align="right"><font
color="#FF0000">*</font><span class="style3"> Required &nbsp; </span></div>
          <t.r>
             <div align="right"><strong><font
color="#FF0000">*</font>User Name : </strong></div></rr>
             <input type="textbox" name="txt username"
id="txt username" maxlength="20" style="width:176px;"
onChange="document.getElementById('txt username').value=trim(this.value);"/>
                           <div class="example">(Only Lower case
Allowed.)</div>
          <t.r>
             <div align="right"><strong><font
color="#FF0000">*</font>Password : </strong></div>
             <input type="password" name="txt password"
id="txt password" maxlength="20" style="width:176px;"
onChange="document.getElementById('txt password').value=trim(this.value);"/>
          \langle t.r \rangle
             <td colspan="3"
align="center">          
             <input type="submit" id="submitMain" name="submitMain"</pre>
value="Login" Onclick="return check(this.form);" />
                  
             </form>
```

#### **Product Browsing phase:**

The customer, after he has logged in, can browse the products available in the online store. The product ID, the product name, category and the subcategory the product belongs to, the price of the product, the colours it is available in, status of the product (whether the product is in stock or not) etc. If the customer is interested in buying the product, he can specify the quantity he wants to buy, and add the same to his cart.

### Billing & Logout Phase:

Once the customer has added all the available products he wishes to buy to cart, the last step left is to checkout (similar as in a physical store). All the products bought along with the number of each product's cost are calculated and the total cost is calculated. After the confirmation of the products' purchase, the users can logout.

# **CHAPTER 5:**

## **SYSTEM IMPLEMENTATION**

The following tables are implemented in the backend which is supported by a MySQL server. These are tables in which all the data are stored and retrieved from. The attributes in each of the tables are as follows:

Table 1: t\_admin\_mst

#	Column Name	Data type	Length	Unique	Null	Default
						value
1	adm_username	varchar	30	Yes	No	None
2	adm_password	varchar	10		No	None

Table 2: t\_cart\_temp

#	Column Name	Data type	Length	Unique	Null	Default
						value
1	s_id	int	11		No	None
2	username	varchar	30	Yes	No	None
3	prd_id	int	11	Yes	No	None
4	cart_name	varchar	30		No	None
5	cart_img	mediumblob			No	None
6	cart_qty	int	11		No	None
7	cart_qtyavb	int	11		No	None
8	cart_qtyordered	int	11		No	None
9	cart_act	int	11		No	None
10	cart_dis	varchar	30		No	None
11	cart_price	varchar	30		No	None

Table 3: t\_category\_mst

#	Column Name	Data type	Length	Unique	Null	Default
						value
1	cat_category	varchar	30		No	None
2	cat_description	text			No	None

Table 4: t\_custreg\_mst

#	Column Name	Data type	Length	Unique	Null	Default
			_	_		value
1	username	varchar	30	Yes	No	None
2	log_password	varchar	30		No	None
3	log_fname	varchar	30		No	None
4	log_lname	varchar	30		No	None
5	log_gender	varchar	30		No	None
6	log_email	varchar	30		No	None
7	log_address	text			No	None
8	log_mobile	int	13		No	None
9	log_regdate	date			No	None

Table 5: t\_orders\_trn

#	Column Name	Data type	Length	Unique	Null	Default
						value
1	ord_fname	varchar	20		No	None
2	ord_qty	int	11		No	None
3	ord_price	decimal	10,0		No	None
4	ord_baddress	text			No	None
5	ord_saddress	text			No	None
6	ord_mobile	varchar	11		No	None

Table 6: t\_price\_mst

#	Column Name	Data type	Length	Unique	Null	Default
						value
1	price_actual	decimal	10,0		No	None
2	price_discount	varchar	10		No	None
3	price_discount_type	varchar	30		No	None
4	prd_id	int	11		No	None

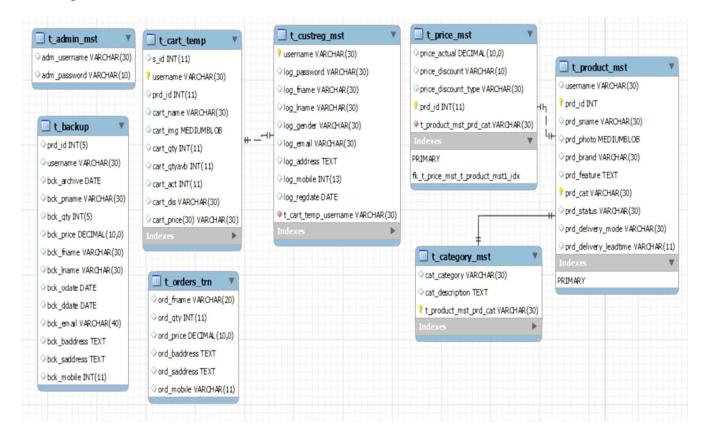
Table 7: t\_product\_mst

#	Column Name	Data type	Length	Unique	Null	Default value
1	username	varchar	30		No	None
2	prd id	int	11	Yes	No	None
3	prd_sname	varchar	30		No	None
4	prd_photo	mediumblob			No	None
5	prd_qty	int	11		No	None
6	prd_color	varchar	30		No	None
7	prd_brand	varchar	30		No	None
8	prd_feature	text			No	None
9	prd_cat	varchar	30		No	None
10	prd_status	varchar	30		No	None
11	prd_delivery_mode	varchar	30		No	None
12	prd_delivery_leadtime	varchar	11		No	None

Table 8: t\_backup

#	Column Name	Data type	Length	Unique	Null	Default
						value
1	prd_id	int	5		No	None
2	username	varchar	30	Yes	No	None
3	bck_archive	date			No	None
4	bck_archive_pname	varchar	30		No	None
5	bck_qty	int	5		No	None
6	bck_price	decimal	10,0		No	None
7	bck_fname	varchar	30		No	None
8	bck_lname	varchar	30		No	None
9	bck_odate	date			No	None
10	bck_ddate	date			No	None
11	bck_email	varchar	40		No	None
12	bck_baddress	Text			No	None
13	bck_saddress	Text			No	None
14	bck_mobile	int	11		No	None

#### ER Diagram:



### **CONCLUSION & FUTURE ENHANCEMENTS**

The online shopping project can be extended with more features as the popularity and the demand of the online service provider increases. As customer increases, we need to handle databases better and more efficiently in order to provide quicker services to the customers.

The project made here is just to ensure that this product could be valid in today real challenging world. Here all the facilities are made and tested.

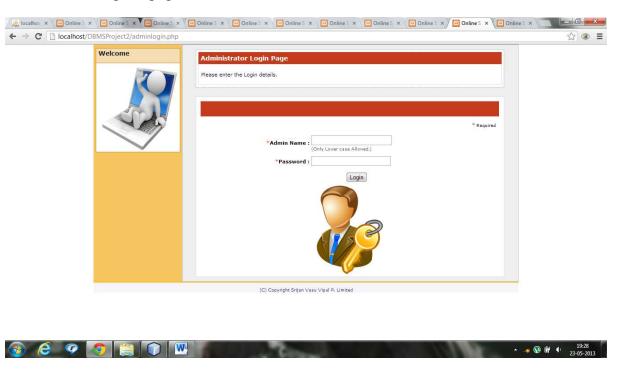
Currently the system works for limited number of administrators to work. In near future it will be extended for many types of insurance policies so that efficiency can be improved.

### **APPENDIX**

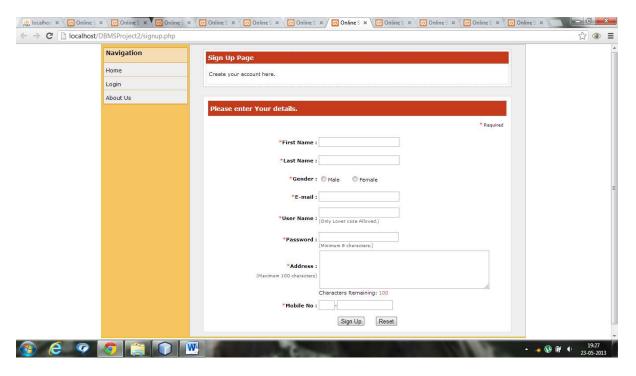
## Home page:



## Administrator Sign-in page:



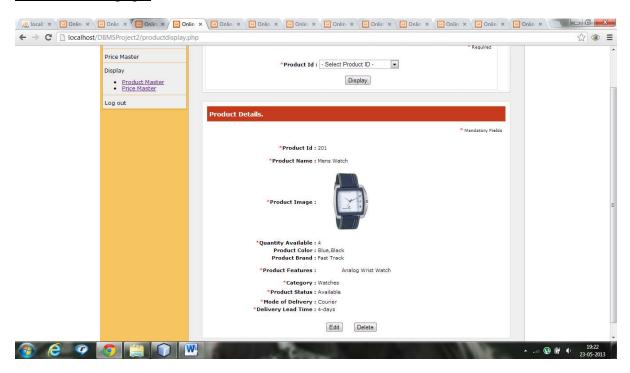
## Customer-signup page:



### Customer (sign-in page):



## Product-details page:



#### Customer Account page:



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