Online Shopping Towards Technology Development

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Abstract

Online shopping has been shown a good potential market due to increase of technology. This paper implements online system for online store which will support customers from various locations to be able to purchase items from online store and make online payment for the total amount of goods purchased. This order will be submitted to online store database where system admin will be able to verify payment and prepare shipping. In this project only USD currency is accepted in the system. Also due to difficult in calculating various shipping cost in different location across the world fixed shipping cost is used. Visa card, Master card and Mpesa are acceptable in this system.

1. Introduction

A shopping cart is a piece of software that allows online shoppers to choose goods, review what they have chosen and purchase online [1]. Typically is the interface between a company's web site and its payment system. The shopping cart keeps track of and tallies the order (a record or account of items such as things bought). It keeps track of all items that a customer wants to buy, allowing the shopper to pay for the whole order at checkout.

In the "shopping cart" model, customer can select items while browsing the site that are then added to their virtual shopping carts. When customers are finished selecting items, they must proceed to check-out where the purchases are confirmed and billing and shipment information (shipping costs) are calculated and supplied or confirmed [2].

2. System design

Design is divided into three layer.

1. Interface design;
   -This contains functions in which user will interact with.
2. Code;
   -This part is implemented using PHP language where various function is implemented.
3. Database;
   - In this part various tables is designed to enable the storage of transaction details together with items details.

3. System parts.

This system has two main parts

1. Customer interface.
   - This parts gives customer with wide range of functionalities, this will be illustrated in next section of this report.

2. Admin interface.
   -this is the main part of the system with all control and management functionalities as explained in the next section.

4. Functions
The shopping cart is implemented with the following functions:

i. User/customer functions

   a. An online catalog of products listed by category, this function gives system user /customer ability to choose category of product which s/he is interested.

   b. View cart function gives customer capability to view what is contained in his/her shopping basket not only that but customer can change the quantity of Items.

   c. Purchase function, this function provide form where customer can add his/ her shipping details which will be used later in shipping and identification [3].

ii. Admin functions
   a. An online catalog of products. This function gives administrator ability to navigate to categories interface where s/he will be provided with editing capability.

   b. Add a new category gives admin capability to add new category of product to be offered by online store.

   c. Add Item function provide option for adding Items in Category.

iii. Capabilities such as edit, delete, update change password is added in the system for flexibility and performance of this system
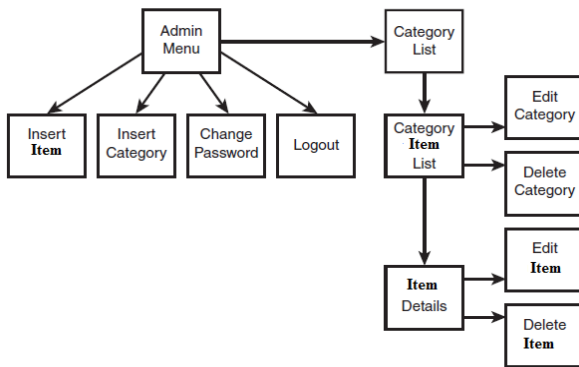
Customer activity flow chart

The chart show how the customer interacts with the system from the time s/he open the online store user page up to payment process.
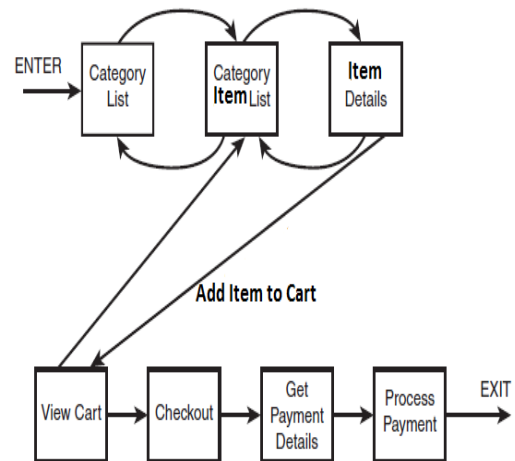
User can browse items by category, view item details, add items to their cart, and purchase them

Admin Activity flow

The administrator view of the system allows insertion, editing, and deletion of items and categories.

5.   Implementation

The three main code modules for this application are as follows:

- Catalog. Three catalog scripts are in this application: the main page, the category page, and the item details page. The front page of the site is produced by the script called index.php. Catalog script order item through category list keeps track to items within a particular category through use of foreign key from category [4].

- Shopping cart and order processing (We've bundled these together because they are strongly related. Session variable is main Idea used to keep user order records. Since in this system there is no registration for user details and orders, to make the system portable and fast enough and avoiding temporary keeping large number of users records who are online in particular time while other may decide to discontinue with checkout, we have implemented the session variable to keep

track of user order on his/her browser before payment to reduce load in accessing database when new item is added in the cart [5].

- Administration. This part is coded according to the functionalities as explained in functional requirement. Admin have login page which have PHP form with username and password. There is functions for admin to manage his account and do various management activities.

Database implementation

We have implemented a Mysql Database "ittem_sc" with six tables namely:

- "admin"   to keep administrator identity.

- "categories" to keep categories of products.

- "customers" to keep track of our customer information.

- "ittems" to keep records of available item(s).

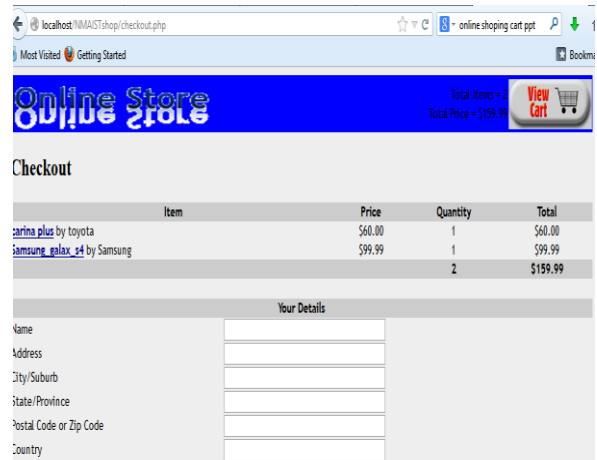- "orders" to keep records of transaction orders.

"order_items"   to keep records of transaction items.
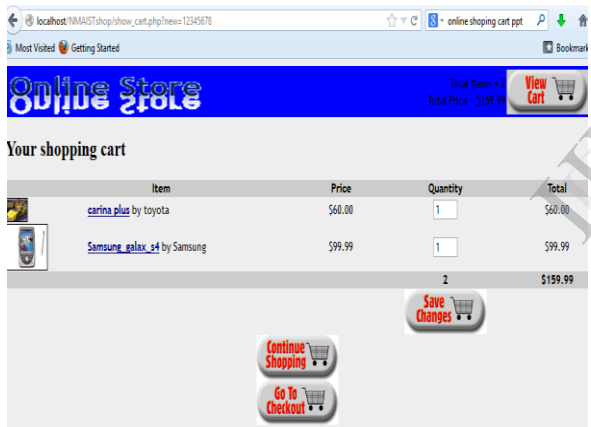
6. Output.

User catalog Main page
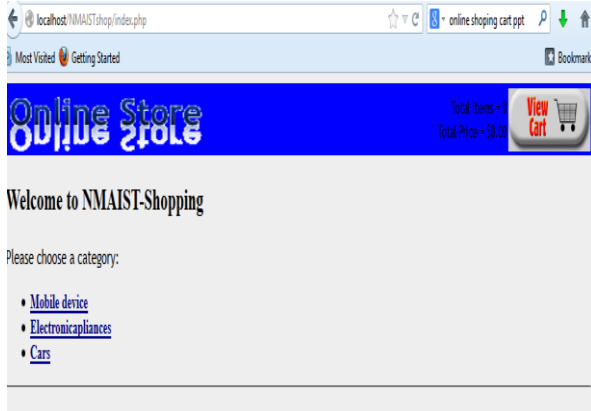
User Catalog list

User purchase form

Admin main page

Admin log in page

Admin add category page.

Admin add item

7. Conclusion:

Online shopping has become extremely popular these days. Utilized mostly by the "Net- Generation", this service is extremely convenient. Although online shopping can be very convenient and beneficial there are also some potential problems that can arise. In the future, we can expect online stores to improve their technology tremendously, allowing for an easier and a more realistic shopping experience online. The technology of online shopping websites will continue to grow and, as a result, will expand the online shopping market and benefiting thousands of consumers over the world.

Reference

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