MIS Supported Ecommerce for Daffodil e-stationary

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

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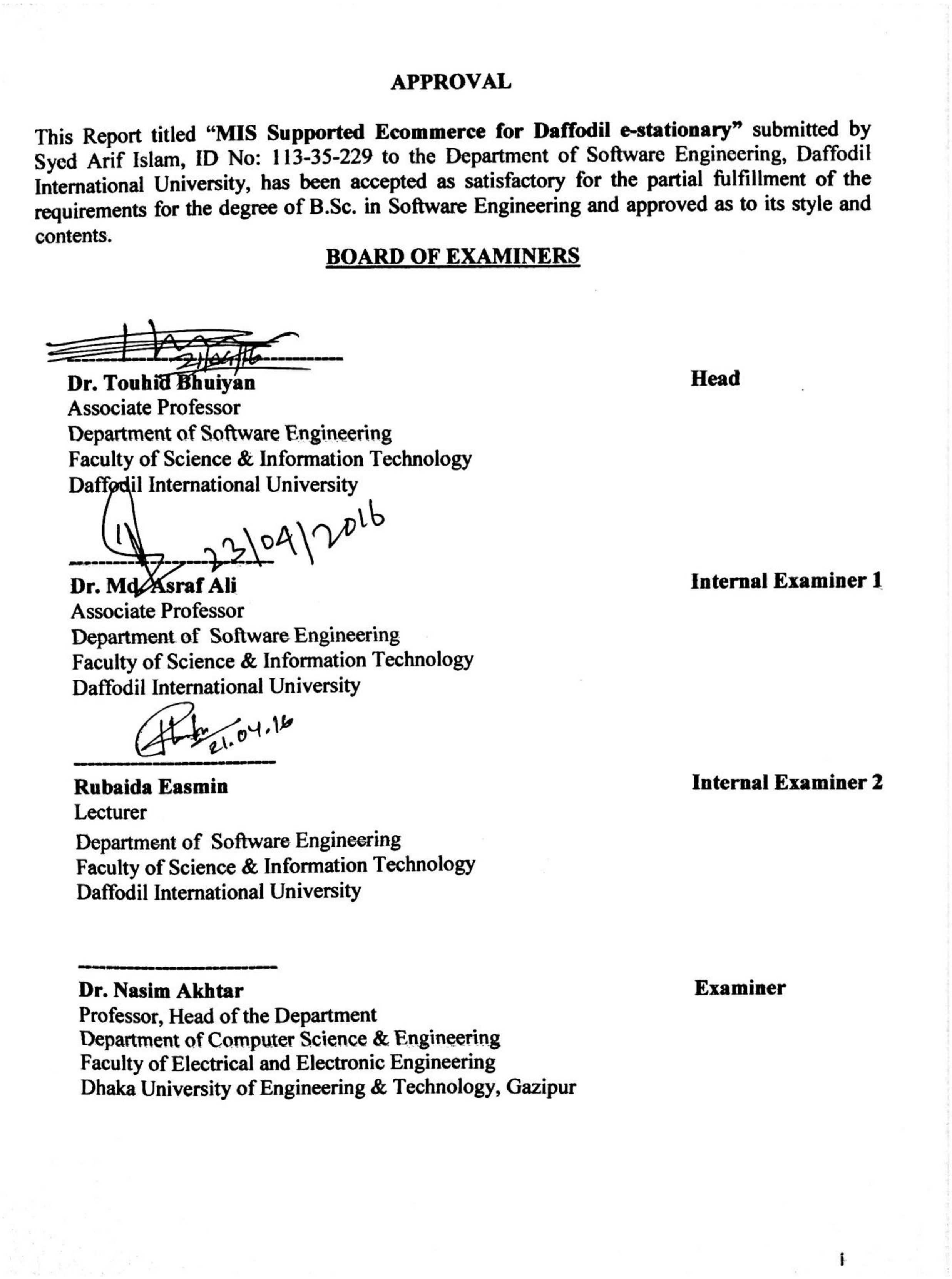

APPROVAL

This Report titled **"MIS Supported Ecommerce for Daffodil e-stationary"** submitted by Syed Arif Islam, ID No: 113-35-229 to the Department of Software Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Software Engineering and approved as to its style and contents.

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DECLARATION

I hereby declare that I have taken this thesis under the supervision of **M. Khaled Sohel, Assistant Professor, Department of Software Engineering, Daffodil International University.** I also declare that neither this project nor any part of this has been submitted elsewhere for award of any degree.

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ABSTRACT

The business-to-consumer aspect of electronic commerce (e-commerce) is the most visible business use of the World Wide Web. The primary goal of an e-commerce site is to sell goods and services online. This project deals with developing an e-commerce website for online stationary products sale. The main aim to improve the services of customers and vendors. It maintains the details of customer payments, product receipts, addition of new customers, products and also updating deletion for the same. It also stores the details of invoices generated by customer and payment made by them with all payments details like credit card. The primary features of online shopping are high accuracy, design flexibility and easy availability. It uses database tables representing entities and relationships between entities.

The system is implemented using a 2-tier approach, with a backend database, and a web browser as the front end client. In order to develop an e-commerce website, a number of Technologies must be studied and understood. These include multi-tiered architecture, server and client side scripting techniques, implementation technologies such as Framework, PHP programming language, relational databases (such as MySQL).

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CHAPTER 1

INTRODUCTION

1.1 Purpose & Scope

The e-stationary is a web based application intended for online retailers. The main objective of this application is to make it interactive and its ease of use. It would make searching, viewing and selection of a product easier. It contains a sophisticated search engine for users to search for products specific to their needs. The search engine provides an easy and convenient way to search for products where a user can search for a product interactively and the search engine would refine the products available based on the user's input. The user can then view the complete specification of each product. They can also view the product reviews and also write their own reviews. The application also provides a drag and drop feature so that a user can add a product to the shopping cart by dragging the item in to the shopping cart. The system presents an online display of an order cut off time and an associated delivery window for items selected by the customer. The system accepts the customer's submission of a purchase order for the item in response to a time of submission being before the order cut off time. In addition, available service windows are presented to the customer as a function of customer selected order and service types; and further, the order picking is assigned in accordance with a picker's preference.

The following subsections describe the scope of the system in terms of its audience, organization, and applicable documents.

- Audience: Customers, Administrators, Sellers.
- Applicable Documents: The following documents provide necessary information.
- Functionality: Since it stand alone application, one or more user may use it at a time.
- Reliability: The system is available during online time only.
- Performance: The performance depends on hardware specification.

1.2 Document Convention

As the goal is ease of use and to provide an interactive interface, extensive research has been done to gain an insight into the needs and behaviors of various users. The working of the application is made convenient and easy to use for the end user. Users can be classified into two types based on their knowledge of the products that suit their needs. They can be classified as users who know about the product that would satisfy their needs and users who have to figure out the product that would satisfy their needs. Users who know about the product should be able to find the product easy with the click of a button. Such users can search for the product by using the product name as the search term. Users who have to figure out the product that would satisfy their needs could use a search term to find a list of products and then should be able to filter the results based on various parameters like product type, manufacturer, price range, platform supported etc.The users should be able to view the complete specification of the product and various images at different Zoom levels. The user should be able to read the customer reviews for the product and the ratings provided. They should be able to write their own reviews. They should be able to print out the specifications for a product or email the product page to a friend's etc.

1.3 Intended Audience and Suggestions

- Log in Admin/User person: Is able to login to both admin and user person.
- Add user person: It will add new User for buying product. The user contains those fields which are First Name, Last Name, Phone Number, Email, Additional Info, Password and Verify Password
- Delete user person: admin can be delete user person.
- Buy Product: Customer can buy product in this website.
- Pay Bill : Customer will pay bill for the product.
- Sales Summary: Customer details, sales details and payment details.
- Discounts for Cash: Get some discount for customer products.
- Customer Details: Customer name, customer address.
- Sales Details: Amount, vat, total amount.
- Payment details: Cash and change. .
- Delivery Reports: Seller will provide the customer delivery reports.
- Product Inventory: There are many products in this inventory.

- Print Product Inventory: Print product inventory list.
- Add Product: Admin added new item of product. The product contains those fields which are Item Code, Item Description, Price, Discount and Tax.
- Search Product: Search the product from the stock which are available on not.
- Edit Product: The system have product item edit where edit field are Item Code, Item Description, Price, Discount and Tax.
- Update Product: The system have product item Update where update field are Item Code, Item Description, Price, Discount and Tax.
- Delete Product: The system have product item delete where delete field are Delete Product Information.

CHAPTER 2

PRE-ANALYSIS

2.1 Initiation

Ecommerce website provides businesses with the ability to computerize, systematize and correlate retail information. Where cash registers, including complex register systems, have limited information collection capacity, it can gather, store and return detailed reports on inventory trends and customer information. Additionally, more easily integrate with numerous sales and ordering systems, including mail or online ordering systems used in conjunction with in-person sales.

2.2 Peer Review

- Reduce costs
- Respond to trends faster
- Improve customer service
- Buy smarter
- Improve marketing
- Stock details
- Sell transaction record

CHAPTER 3

SYSTEM ANALYSIS

3.1 Requirement Analysis:

3.1.1Requirement Collection

Requirements collection is performed as part of the project definition process. Projects must be planned and executed to deliver timely, viable solutions that are both relevant and realistic. Ecommerce projects are complex projects. Requirements are typically multi-faceted, covering technical, financial, and operational elements, and are also subject to perception, bias and stakeholder interests. As such, the requirements collection process must incorporate and address all these realities - to identify requirements at all levels and perceptions. This is best achieved through standardized steps, designed for consistency, but equipped with built-in flexibility. The Ecommerce website requirements provides high-level of functional requirements. The functions of the system are discussed below.

Admin can directly login this system but the user person used to register to login this system

- Admin
- User

Admin can do all activities in this system and the user person, who buy product, Search Inventory product etc.

3.1.2 Software Requirement Specification

Elements of the ecommerce website Specification:

- Documentation (user, installation, administration) and help
- licensing and other legal concerns
- Packaging
- Standards (technical, safety, quality)
- Operational concerns (for example, how do errors get handled, or how often should backup be done?)

- Application-specific domain rules information in domains of interest (for example, what is the entire cycle of credit payment handling?)

SRS Scopes:

In recording the purchases made by customers, the following information are stored:

- A unique transaction number assigned to every transaction,
- The name of the customer
- The items purchased and their prices
- The date and time of the transaction
- Discounts applied to the transaction (if any)
- The total price of all the items bought or ordered after applying the discounts (if any).

For the database of items, the system will only store information about the items offered in the lounge. Data regarding the number of stock for each item is not covered since an inventory system is no longer in our scope. The following information are stored for each item in the database:

- The unique product identification number
- The product name
- Item type
- Category
- The price the item was bought and
- The selling price.

SRS Assumption Dependencies:

Requirements analysis is usually the first phase of large-scale software development project. It is undertaken after a feasibility study has been performed to define the precise costs and benefits of a software system. The purpose of this phase is to identify and document the exact requirements for the system. The customer, the developer, a marketing organization or any combination of the three may perform such study. In cases where the requirements are not clear e.g., for a system that is never been defined, more interaction is required between the user and the developer. The requirements at this stage are in end-user terms.

3.1.3 Use Case Diagram

UML Use Case Diagrams can be used to describe the functionality of a system in a horizontal way. That is, rather than merely representing the details of individual features of your system, UCDs can be used to show all of its available functionality. It is important to note, though, that UCDs are fundamentally different from sequence diagrams or flow charts because they do not make any attempt to represent the order or number of times that the systems actions and sub actions should be executed.

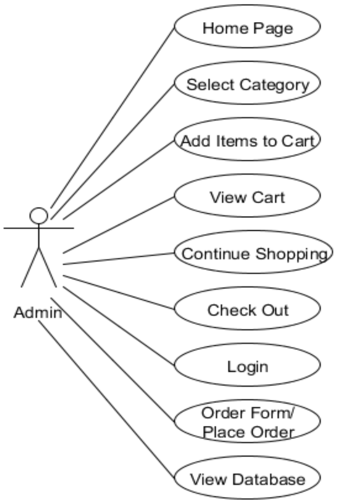


Fig.3.1 Shopping Cart System Use-Case Diagram: Admin.

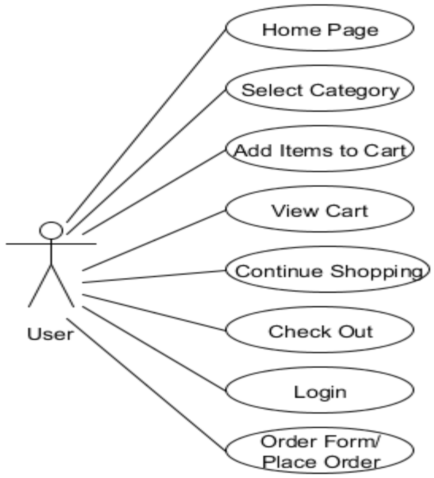


Fig.3.2Shopping-Cart Application System Use-Case Diagram: User.

3.2 Software Development Plan (SDP):

3.2.1 Project Overview

Ecommerce website has following stages

- Admin/user person login
- Add products, Sell products, Refund products
- Auto discount, Product vat

Admin/user Login: The software is able to login to both admin and user person. Admin who used to login to. Admin to manage the whole system and user persons buying the products.

Add products/ Sell products/Refund products: Admin add product, sells product and accept refund products also.

Auto discount, Product vat: Customer must pay VAT to buy products and get discounts on some products.

3.2.2 Proposed System and Its benefits

Functional Requirement:

Functional requirements are-

- Login
- Simple two step login system
- ➢ Admin Login
- ➢ User person Login
- Administrator Dashboard
- Admin can control whole system easily
- Admin can add/delete sales person, Edit, update, delete etc.
- Admin show payment option.
- Payment process
- ➢ Cash Payments
- ➢ Credit card
- ➢ Get Discounts
- Reports Module
- ➢ View Sales Reports
- ➢ View Transaction Reports
- ➢ View Refunds Reports o Daily/Weekly/Monthly/Yearly Reports
- Database

Non Functional Requirement:

- Reliability The following requirements describe the expected reliability of the Operational Interface
- The Operational Interface shall have a Mean Time Between Failures of no less than 7 days
- Availability The following requirements indicate the expected availability of the Operational Interface.

- The system shall be available 99.5% of the time
- Security The software system needs a robust security mechanism in place so that unauthorized users are not allowed access to parts of the system. All users of the system must be uniquely identified. This could be done by using a user name and associated password scheme that would authenticate and authorize the user access to the system and, if applicable, grant the user access to restricted or controlled parts of the system. If a user cannot be identified, he/she will be given "anonymous" access with read-only capabilities. In order to monitor all past access to the system, all attempts to access the system must be logged.
- All users of the system shall login using some form of unique identification (e.g., username and password)
- All login attempts shall be done so in a secure manner (e.g., encrypted passwords)
- Each user shall either be trusted or not trusted.
- Maintainability The following requirements increase the maintainability of the Operational Interface software.
- All source code and development related documents shall be controlled under a version control system
- All source code shall adhere to an agreed upon and well-defined set of coding standards for each development language used.
- A standard naming convention for classes, variables and packages shall be agreed upon and adhered to.
- Portability
- Hardware
- Operating Systems Since the software must run on several popular hardware platforms and the goal is to achieve a Reasonable level of platform independence.
- The system shall be compatible with the Microsoft Windows Operating System (Windows 7/8/10, XP or greater).
- Usability The system's user interface intuitive, easy to use and provide an overall positive user experience.

Interface Requirement:

User Interfaces:

- Login Screen
- Home Screen
- Product Inventory Details
- Add Products Page
- Refunds Product Page

Hardware Interfaces:

- Server Configuration: Minimum 2GB Hard Disk
- P-III processor or equivalent
- Ram 512 MB
- Windows with Apache preloaded.
- Client Configuration

Software Interfaces:

- Operating system = WindowsXP/2000//widows 7/ widows 10
- Language = PHP
- Database = MYSQL

Communications Interfaces:

Communications interfaces can be provided through e-mail, web browser, network server communications protocols, electronic forms, and so on. For this we can use communication standards such as FTP or HTTP to provide security using encryption algorithms and synchronization mechanisms.

3.2.3 Project Features

Analysis of Priority Check List: Priority check list have 3 levels.

- Level 1- Must be perform
- Level 2- Mid-level perform
- Level 3- Not required

No.	Requirements	Functional/ Nonfunctional	Priority	Description
1	Login	Functional	1	Must be perform
2	Add Products	Functional	1	Must be perform
3	Edit/Update/Delete Products	Functional	1	Must be perform
4	Discount	Functional	2	Mid-level features
5	Products Transaction Reports	Functional	1	Must be perform
6	Payment Process	Functional	1	Must be perform
7	Buy Products	Non-Functional	2	Mid-level features
8	Pay bill	Non-Functional	1	Must be perform
9	Security	Non-Functional	1	Must be perform
10	Database	Functional	1	Must be perform

Table 1: Analytical level of requirement

3.2.4 Process Model

A Process model is an abstract representation of a software process. Each process model represents a process from a particular perspective and thus provides only partial information about that process. Some common process model are:

- Agile model
- Evolutionary development
- Component-based software engineering
- Iterative development process
- Incremental process etc.

In this project used Agile model for better result.

3.2.5 Risk Management

The risk in the projects can be defined as an unwanted event that has negative consequence in the project, both in the development period and during the time of implementations. For the successful completion of the proposed project we need to determined and figure out some of the risks at very beginning of our project and taken the prevention for its stability and the rest of risks we will determined by the following methodology.

The risk management strategy for the proposed project consists of:

- Risk identification
- Impact evaluation
- Prioritization of risk
- Risk Analysis
- Risk planning
- Risk monitoring
- Risk identification

For identifying the risks we can categories the topic is in two different parts as physical risks and logical risks.

Physical Risk:

The people or objects,which are directly involved with the system to make this system unstable or make the project uncertain,can be considered as a physical risk.During our project work we have taken the following things in our consideration.

System Crush:

In the development time or even in the time of implementation the computer system can be crushed or out of work due to poor system configuration and this cause the whole system unstable and make loose of data.So that it has to be prevented and considered as a major risk before and while the project work.

Unethical Manpower:

It is another considerable element in the risk management for making the project worthy both for the development team and the sponsored company.

Logical Risk:

The unexpected logical events or situations that threaten the projects stability can be considered as the logical risks,which are described as follows

Virus and Hacking:

Computer viruses, vulnerabilities and hacking can maximize the project duration of complication and also be a caused to damage or losing the data.

Security Risk:

Security breach may occur when unauthorized person tap into the system and use the system as a registered member.Also server needs to be secure from virus and system crash down.

Data Integrity Risk:

Information is the vital part of any system.Any loss of information may have serious implication. It is essential that information stored in the system is accurate,reliable and timely.

Lack of Financial Condition:

During the project work financial crisis can be arises at any time,which can make the whole system stacked in such a position, which might threaten the future development as well as the previous work.

Risk Analysis:

In the part of risk analysis, all risks should be listed on basic of their priority.The risk with most importance and having more impact, should considered to be listed first in the priority list and it should be prevented first. In our proposed project work we have taken the unstable electricity and system crushed risk at the first priority risk, because these are most common risk having a big impact to make the project uncertain to submit on time.

Risk Planning:

For dealing with the risk described earlier we have prepared and categorized three strategies as :

- Avoidance strategies
- Minimizing strategies
- Contingency plan

Some of the risk that we tried to avoid to be occurred during the project work and some of the risk that we tried to minimize to get its impact on our project work and then the rest of those were dealing with the contingency strategy.

Risk Monitoring:

All the risk should be monitored and assessed regularly according its probability and seriousness. This type of monitoring make sure the project stability and smoothness for its whole life cycle.

Personal Strategies:

Using normalization method the risk of data redundancies can be reduced and be solved the problem of storage wastages.

3.2.6 Project Schedule

Software project planning goal is to establish a pragmatic strategy for controlling, tracking, and monitoring a complex technical project. The purpose of project planning is to ensure that the end result is completed on time, within budget, and exhibits quality.

Deliverables	Submission Date	Comment
Software Requirement Specification	05.08.2015	Completed
Software Development Plan	14.09.2015	Completed
Software Test Plan	03.10.2015	Completed
High Level Design	29.10.2015	Completed
Physical Design / Code	03.11.2015	Completed
Unit Test Report	09.11.2015	Completed
Software Development Completion	19.11.2015	Completed

Table 2: Schedule and Planning

In this process we are arrange our project plan.

3.3 Software Test Plan (STP)

3.3.1 Introduction

A set of test inputs, executions and expected results developed for a particular objective,such as to exercise a particular program path or to verify compliance with a specific requirement.

3.3.2 Test strategy

The test plan should be made as early as possible in project life cycle. There are several things of the software that can be tested hence it what to be tested should be defined beforehand. Testing could be done of unit, modules and system. For this project module testing is done with black box testing strategy. Hence test data is collected from the areas that are to be changed because of the implementation of the software before the test began. What is expected from result can be compared to observe whether the software that is developed fulfills the specification and the requirements.The results of the test have to be documented. Testing is about validation and verification.The documentation contains a comprehensive testing on different modules;we have conducted the black box testing for the selected modules.We have conducted the test with th valid and invalid data.

Characteristics of Testing

- Testing begins at the module level and works outward and towards the integration of the entire computer based system.
- Different testing techniques are appropriate at different level of time.

3.3.3 Test Scope

The application can be used for any Ecommerce application. It is easy to use, since it uses the GUI provided in the user dialog. User friendly screens are provided. The application is easy to use and interactive making online shopping a recreational activity for users. It has been thoroughly tested and implemented.

Compatibility with browsers like Mozilla Firefox, Internet explorer etc

- Using a layered approach in developing the application which would make the application maintainable.
- Learning new technologies like using JavaScript for drag and drop behavior and Ajax toolkit controls with little guidance. The overall idea of doing this project is to get a real time experience. Learn new technologies
- Select the modules to be tested
- Select the test data
- Determine the expected result
- Test the module using result
- Determine the actual result
- Compare expected and actual result
- Test module selection and planning sequence.

3.3.4 Features to be tested

Feature list	Test Result
Log in Admin/User person	Done
Add user person	Done
Delete user person	Done
Buy Product	Done
Sales Summary	Done
Add Product	Done
Edit Product	Done
Update Product	Done
Delete Product	Done
Add Category	Done
Add Subcategory	Done
Checkout	Done

Table 3:Fratures Testing

CHAPTER 4

SYSTEM DESIGN

4.1 High Level Design (HLD)

4.1.1 Component Diagram

A component diagram describes the organization and wiring of the physical components in a system. Component diagrams are often drawn to help model implementation details and double check that every aspect of the system's required functions is covered by planned development.

Steps to Creating a Component Diagram

- Take stock of everything needed to implement the planned system. For example-commerce system, need components that describe products, orders, and customer accounts.
- Create a visual for each of the components.
- Describe the organization and relationships between components using interfaces, ports, and dependencies.

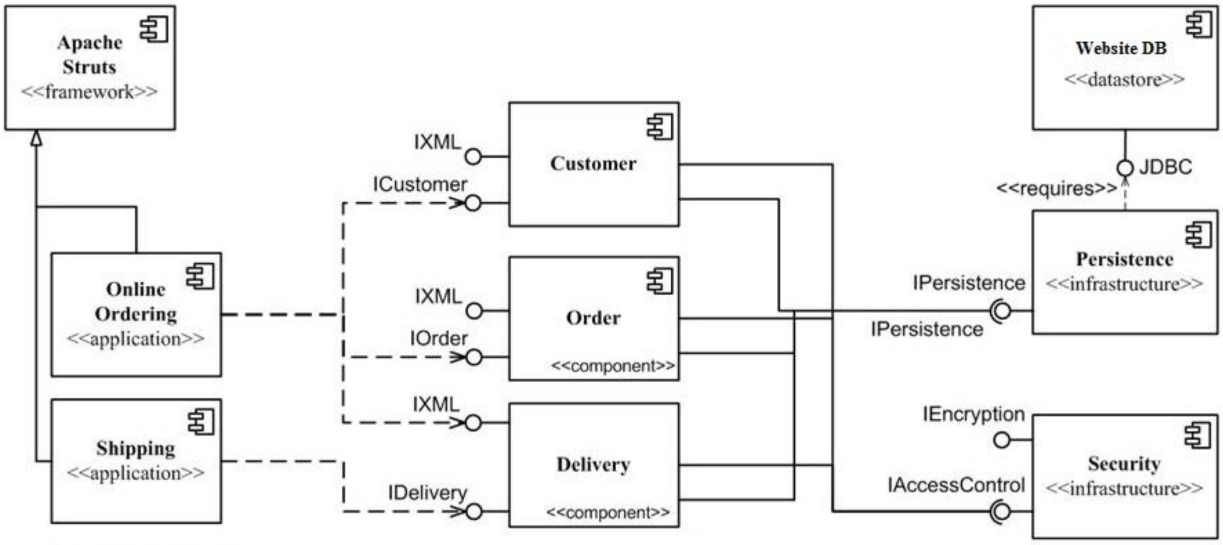


Fig.4.1 Component Diagram

4.1.2 Flow Chart

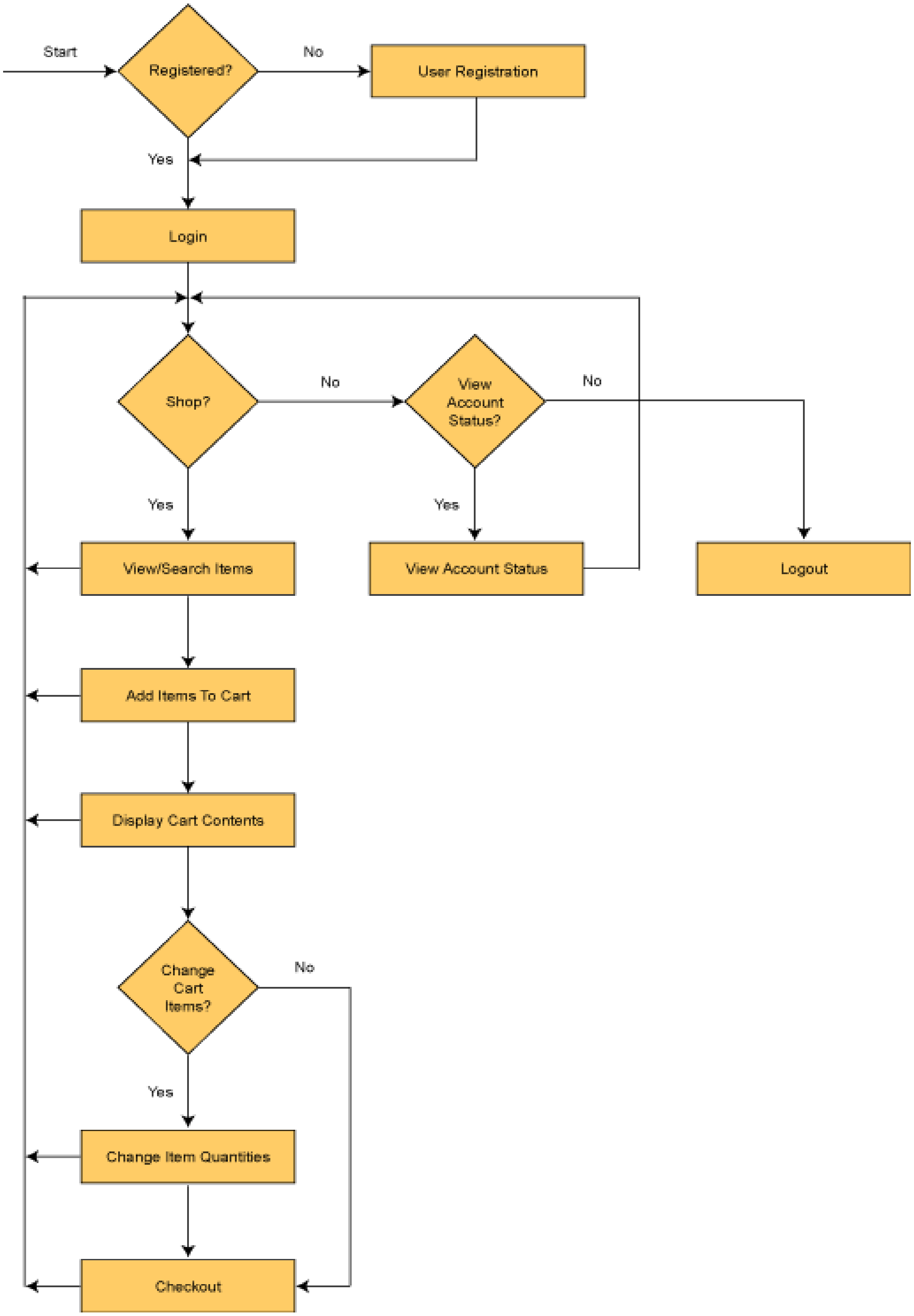


Fig.4.2 Flow Chart

4.1.3 Context diagram (Level 0 DFD):

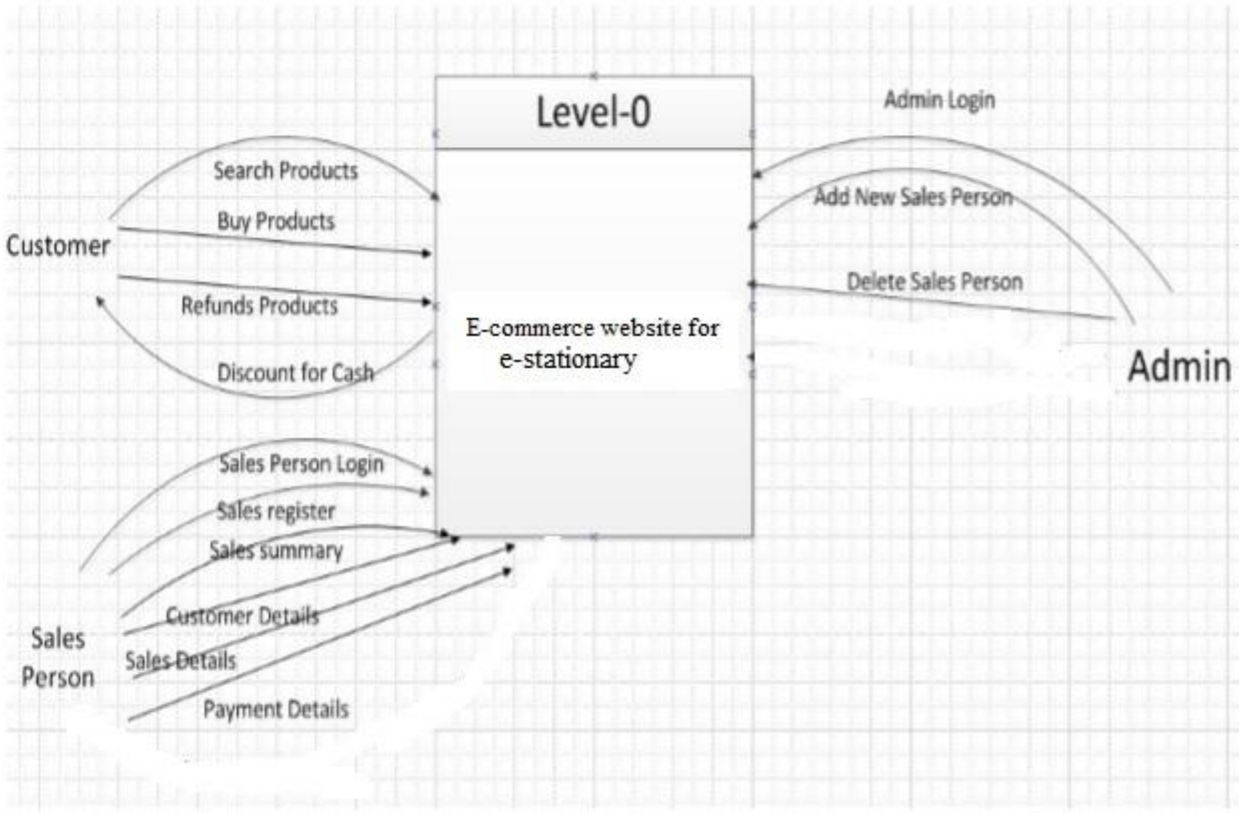


Fig.4.3 Level 0 DFD

4.2 Detail Level Design (DLD)

4.2.1 DFD (Data Flow Diagram) Level-1, Level-2

Introduction:

Before developing a system we have to design our system like how Use case of our system. Data Flow Diagram (DFD) provides a view of how the system or business flows that able to increase the efficiency and effectiveness to achieve system objectives. For native user we have Use Case Diagram thus they could easily understand about our system. How would be the database of our table? Entity Relationship Diagram (ERD) will tell us about our database. We can know our system structure when we will design it and summary elements of a project.

After carefully analyzing the requirements and functionality of the web application,two important diagrams by the end of the analysis phase. They are the ER diagram and data flow diagram which were the basis for finding out entities and relationships between them, the flow of information.

Level 1 DFD:

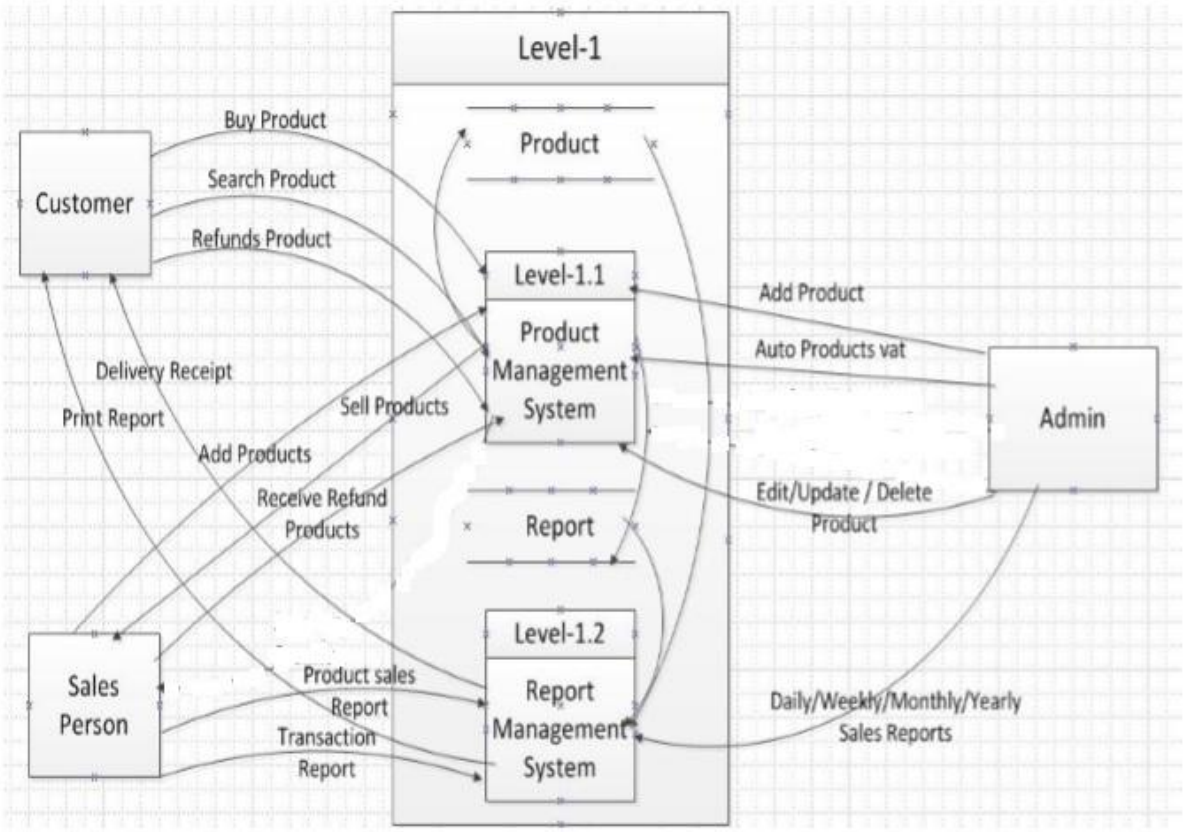


Fig.4.4 Level 1 DFD

Level 2- DFD:

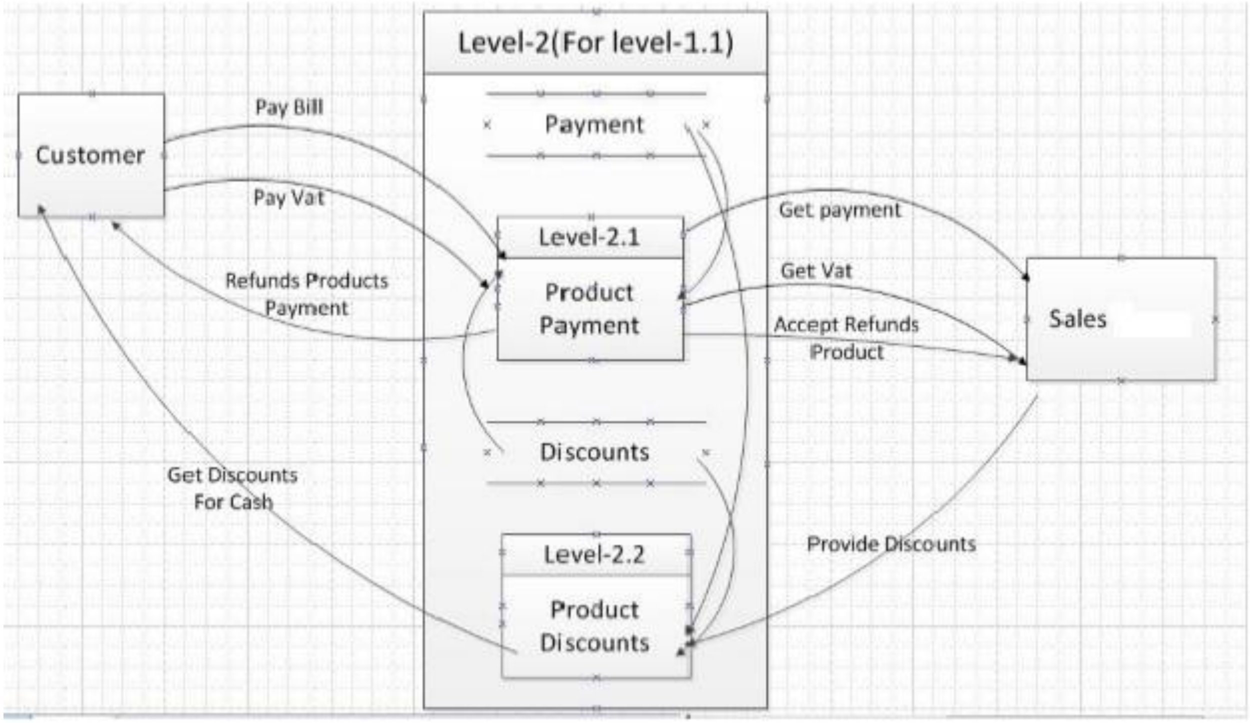


Fig.4.5 Level 2- DFD

4.2.2 Entity Relationship Diagram

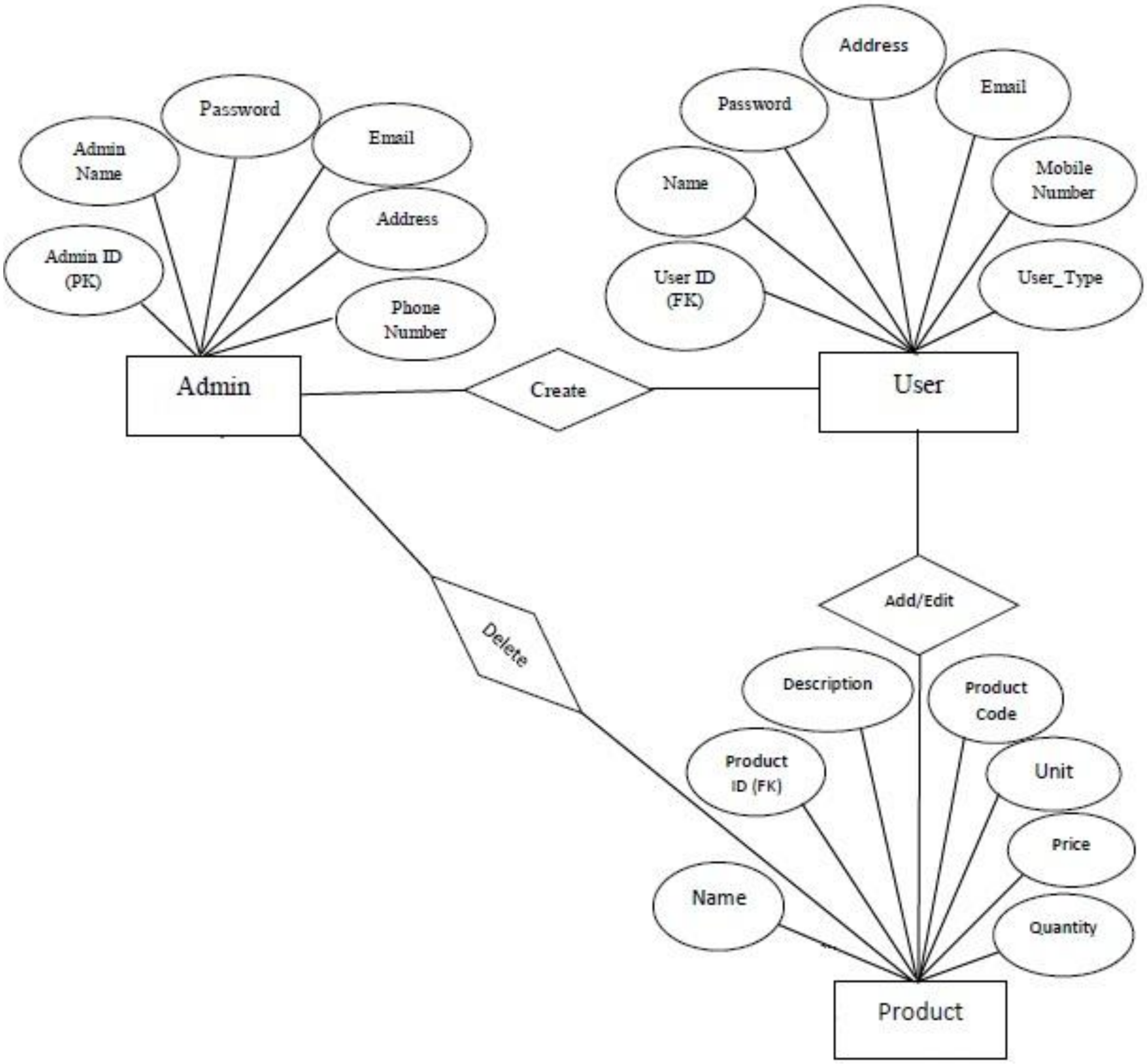


Fig.4.6 Entity Relationship Diagram

4.2.3 Class Diagram

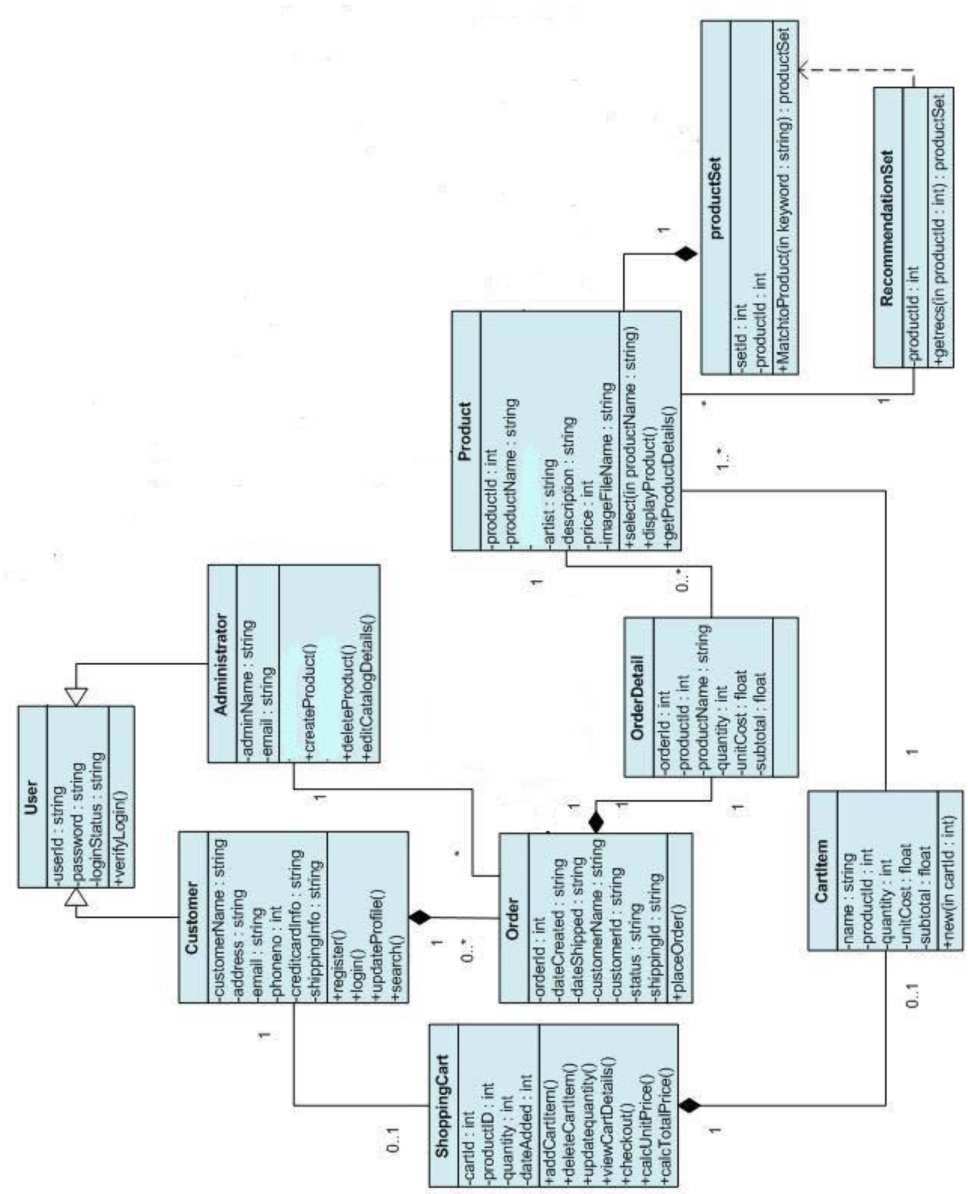


Fig. 4.7 Class Diagram

4.2.4 Sequence diagram

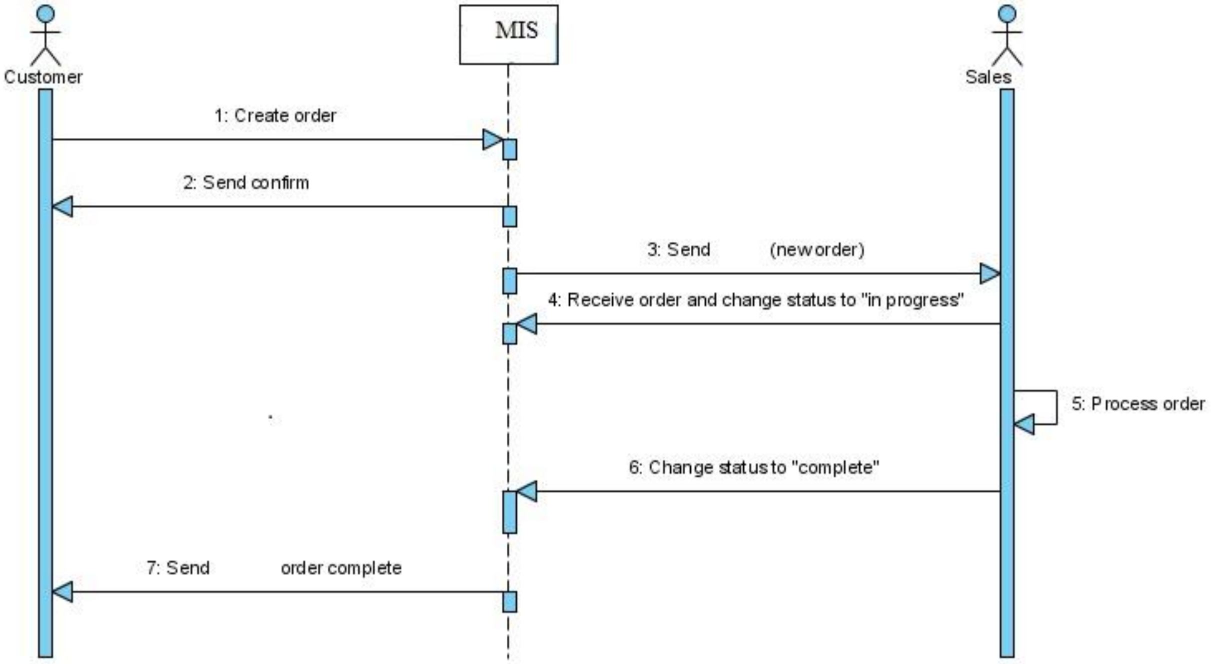


Fig.4.8 Sequence diagram

4.2.5 Basic Code Structure

View files:

- About.php
- Category.php
- Checkout.php
- Details.php
- Cp.php
- Error.php
- Home.php
- Login.php
- Register.php
- Success.php
- Subcategory.php

Database Files:

- dalCategory.php
- dalCity.php
- dalcountry.php
- dalcustomer.php
- dalproduct.php
- dalsell.php
- dalselldetails.php
- dalvat.php
- dalUom.php
- dalsubcategory.php
- db.php
- my_functions.php

User View:

- change_password.php
- logout.php
- purchase_report.php

CHAPTER 5

SYSTEM IMPLEMENTATION AND MAINTENANCE

5.1 Physical Design / Coding

Design Goals:

- The design of the web application involves the design of the forms for listing the products, search for products, display the complete specification for the product, and design a shopping cart that is easy to use.
- Design of an interactive application that enables the user to filter the products based on different parameters.
- Design of an application that has features like drag and drop etc.
- Design of application that decreases data transfers between the client and the server.

Procedural/Modular Approach:

Following are all the modules designed for the e-stationary System.

Shop Products Module:

This module starts when the user visits the home page or when a user searches for a product by entering a search term. This part of the application includes displaying all the products that are available or the products that match the search term entered by the user. The user can then filter these products based on various parameters like manufacturer, product type, operating system supported or a price range. The user browse through the products and each product would be displayed with an image and its features like operating system supported, number of user licenses and if it is a full version or an upgrade version. A user can add a product to the cart either by dragging the product and dropping it in the cart or by clicking a button. The user would be able to see the shopping cart summary.

Product Description Module:

This module starts when a user visits the product description page. A user can view various images of the product of different sizes. The user can see an enlarged image in a popup window. The user can view the complete specification of the product like its features, operating system supported, system requirements etc. A user can also view the manufacturer information and also information about rebates, exchange policies etc. A user can also view the reviews of the product. A user can also write a review for the product.

Shopping Cart Module:

This module starts when the user views the shopping cart. All the products that have been added to the shopping cart by the user are listed along with their price and the quantity. The total price of all the products added to cart is displayed. A user can edit the quantity of each product or remove the product from the shopping cart. A user can remove the product from the cart by clicking a button or by dragging the product and dropping it outside the cart. The total price changes accordingly when a user edits the quantity of a product or when a product is removed from the cart.

Technical Discussions:

The products can be filtered based on various parameters like Manufacturer, Product Type, Operating System supported etc. Initially it was decided to have the various list items predefined. But with time new manufacturers and product types could be added. So the values for the list of manufacturers and product types are loaded dynamically by retrieving from the database. Also it was decided initially to have a drop down list for price range and the user could select a price range from the ranges available. But this would limit the user's ability to filter the products based on different price ranges. Instead providing two text fields so that the user can enter their price range would give them more flexibility. A product could be added to a shopping cart by dragging it and dropping it in the cart area. Items in the cart could be removed by clicking a button. To maintain symmetry and ease of use products could be removed from the cart by dragging the product out of the cart. A product can be added to the cart by dragging it and dropping it in the cart. Initially it was decided that when a product is dropped in the cart the cart summary label could be updated on the client side without any call to the server and later the session variables (Shopping cart) could be updated. This would result in loss of information when the user loses internet connection. So when a product is dropped in the cart area a web service is called and this service updates the session variables for the shopping cart and the cart summary is recalculated and sent back to the client. This would improve the reliability of the application

Coding Index:

```
<?php
        session_start();
        date_default_timezone_set("Asia/Dhaka");
        require_once("dal/my_functions.php");
        require_once("dal/db.php");
        require_once("dal/dalCountry.php");
        require_once("dal/dalCategory.php");
  require_once("dal/dalVat.php");
  require_once("dal/dalUom.php");
        require_once("dal/dalCity.php");
  require_once("dal/dalsubcategory.php");
        require_once("dal/dalProduct.php");
        require_once("dal/dalCustomer.php");
        require_once("dal/dalSell.php");
        require_once("dal/dalSellDetails.php");

        $cus_type = "";
        $cus_name = "";
        $cus_password = "";
```

```
if(!isset($_COOKIE['mylogin'])) {
	if(isset($_SESSION['myide'])) {
		Redirect("index.php?u=logout");
	}
}

setcookie("mylogin", 123, time()+600);

if(isset($_SESSION['myide'])) {
	$cus = new Customer();
	$cus->Id = $_SESSION['myide'];
	$r = $cus->SelectById();
	$cus_type = $r[8];
	$cus_name = $r[1];
	$cus_password = $r[3];
}

//Product add to cart
//unset($_SESSION['pdtid']);
//unset($_SESSION['qty']);
if(isset($_GET['cart']) && $_GET['cart'] == "ok") {
	if(isset($_SESSION['pdtid'])) {
		$c = 0;
		for($i = 0; $i < count($_SESSION['pdtid']); $i++){
			if($_SESSION['pdtid'][$i] == $_GET['id']) {
				$c++;
```

```
                    break;
                }
            }
            if($c == 0) {
                $_SESSION['pdtid'][] = $_GET['id'];
                $_SESSION['qty'][] = 1;
            }
        }else{
            $_SESSION['pdtid'][] = $_GET['id'];
            $_SESSION['qty'][] = 1;
        }
        print_r($_SESSION['pdtid']);
    }

    //Product Quantity Update
    $updStatus = "";
    if(isset($_POST['chkupd'])) {
        for($i = 0; $i < count($_SESSION['pdtid']); $i++){
            if(isset($_POST["pd" . $_SESSION['pdtid'][$i]])){
                $p = new Product();
                $p->Id = $_SESSION['pdtid'][$i];
                $rrrttt = $p->SelectById();
                $sd = new SellDetails();
                $sd->ProductId = $p->Id;

                if(($rrrttt[3] - $sd->SelectSum()) >= $_POST["pd" .
$_SESSION['pdtid'][$i]]) {
```

```
                    $_SESSION['qty'][$i] = $_POST["pd" . $_SESSION['pdtid'][$i]];
                }else{
                    $updStatus = "Not enough stock";
                }
                break;
            }
        }
    }

    //Remove Product
    if(isset($_GET['pppid'])) {
        for($i = 0; $i < count($_SESSION['pdtid']); $i++){
            if($_GET['pppid'] == $_SESSION['pdtid'][$i]){
                for($j = $i; $j < count($_SESSION['pdtid']) - 1; $j++){
                    $_SESSION['pdtid'][$j] = $_SESSION['pdtid'][$j+1];
                    $_SESSION['qty'][$j] = $_SESSION['qty'][$j+1];
                }
                unset($_SESSION['pdtid'][$j]);
                unset($_SESSION['qty'][$j]);
                break;
            }
        }
    }

    //Total amount Calculation
    $total_price = 0;
    if(isset($_SESSION['pdtid'])) {
        for($i = 0; $i < count($_SESSION['pdtid']); $i++){
            $p = new Product();
            $p->Id = $_SESSION['pdtid'][$i];
            $r = $p->SelectById();
            $total_price = $total_price + ($r[2] * $_SESSION['qty'][$i]);
        }
    }

?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html lang="en-US" xmlns="http://www.w3.org/1999/xhtml" dir="ltr">
<head>
    <title>Educational Stationery</title>
    <meta http-equiv="Content-type" content="text/html; charset=utf-8"/>
    <link rel="shortcut icon" href="css/images/favicon.ico" />
    <link rel="stylesheet" href="css/style.css" type="text/css" media="all"/>
 <script src="http://ajax.googleapis.com/ajax/libs/jquery/1.11.1/jquery.min.js"></script>
</head>
<body>
    <!-- Wrapper -->
    <div id="wrapper">
        <!-- Header -->
        <div id="top">
            <!-- Shell -->
            <div class="shell">
```

```
     <!-- Menu Start -->


      <div class="menu">

         <ul>

            <li><a href="index.php">Home</a></li>

         <?php

                                        $c = new Category();

                                        $cat = $c->Select();

                                        for($i = 0; $i < count($cat); $i++) {

                              ?>

            <li><a href="index.php?v=category&id=<?php echo $cat[$i][0]; ?>"><?php echo
$cat[$i][1]; ?></a>

            <?php

                                                  $sc = new SubCategory();

                                                  $sc->categoryid = $cat[$i][0];

                                                  $scat = $sc->Select();

                                                  if($scat) {

                                        ?>

                    <ul>

               <?php

                                                            for($j = 0; $j < count($scat); $j++) {

                                                  ?>

                  <li><a href="index.php?v=subcategory&id=<?php echo $scat[$j][0]; ?>"><?php
echo $scat[$j][1]; ?></a></li>

               <?php

                                                            }
```

```
                           ?>
      </ul>
      <?php } ?>
    </li>
   <?php
                     }
               ?>
  <?php
                     if($cus_type == 'a' || $cus_type == 'o') {
               ?>
    <li><a href="index.php">Management</a>
         <ul>
         <li><a href="index.php?o=country">Country</a></li>
        <li><a href="index.php?o=city">City</a></li>
        <li><a href="index.php?o=category">Category</a></li>
        <li><a href="index.php?o=subcategory">Sub Category</a></li>
        <li><a href="index.php?o=vat">Vat</a></li>
        <li><a href="index.php?o=uom">UOM</a></li>
        <li><a href="index.php?o=product">Product</a></li>
        <li><a href="index.php?o=productview">Product View</a></li>
      </ul>
    </li>
   <?php } ?>
  </ul>
 </div>
<!-- Menu End -->
```

```
             <div id="search">
            <?php
                        if(isset($_SESSION['pdtid'])) {
                            echo "Total Item: " .
count($_SESSION['pdtid']);
                            echo " Price: " . $total_price;
                            echo " <a
href='index.php?v=checkout'>Checkout</a>";
                        }
                    ?>
                <div>
                <div class="cl">&nbsp;</div>
            </div>
            <!-- End Shell -->
        </div>
        <!-- End Top -->
        <!-- Main -->
  <div id="main">
            <!-- Shell -->
            <div class="shell">
    <!-- Header -->
                <div id="header">
                    <h1 id="logo"><a href="#" class="notext"
title="Educational Stationery">Educational Stationery</a></h1>
                    <div id="navigation">
                        <ul>
       <?php
```

```
}

                                                                        if(isset($_SESSION['myide'])) {

                                                                ?>

                <li>Welcome <?php echo $cus_name; ?></li>

                <li><a href="index.php?u=purchase_report" title="Change Password"
class="active"><span>PR</span></a></li>

                <li><a href="index.php?u=change_password" title="Change Password"
class="active"><span>CP</span></a></li>

                <li><a href="index.php?u=logout" title="Logout"
class="active"><span>Logout</span></a></li>

                <?php }else{ ?>

                                                                          <li><a href="index.php?v=register"
title="Registration"><span>Register</span></a></li>

                                                                          <li><a href="index.php?v=login" title="Login"
class="active"><span>Login</span></a></li>

                <?php } ?>

                                                                        </ul>

                                                              </div>

                                                              <div class="cl">&nbsp;</div>

                                                    </div>

                                                    <!-- End Header -->

            <hr /><br />

<?php

if(isset($_GET['v']))     {

          if(file_exists("view/" . $_GET['v'] . ".php")) {

                    require_once("view/" . $_GET['v'] . ".php");

          }else{

                    require_once("view/error.php");

          }
```

```
}
else if(isset($_GET['u']) && ($cus_type == 'a' || $cus_type == 'o' || $cus_type == 'u'))      {
        if(file_exists("user/" . $_GET['u'] . ".php")) {
                require_once("user/" . $_GET['u'] . ".php");
        }else{
                require_once("view/error.php");
        }
}
else if(isset($_GET['o']) && ($cus_type == 'a' || $cus_type == 'o'))  {
        if(file_exists("operator/" . $_GET['o'] . ".php")) {
                require_once("operator/" . $_GET['o'] . ".php");
        }else{
                require_once("view/error.php");
        }
}
else if(isset($_GET['a']) && $cus_type == 'a'){
        if(file_exists("admin/" . $_GET['a'] . ".php")) {
                require_once("admin/" . $_GET['a'] . ".php");
        }else{
                require_once("view/error.php");
        }
}
else{
        require_once("view/home.php");
}
?>
```

```
        </div>
    </div>
                <!-- End Main -->
                <div id="footer-push" class="cl">&nbsp;</div>
        </div>
        <!-- End Wrapper -->
        <!-- Footer -->
        <div id="footer">
                <!-- Shell -->
                <div class="shell">
                        <!-- Cols -->
                        <div class="cols">
                                <ul>
                                   <li class="col">
                                        <h4>About eplanet</h4>
                                        <p>Here all kind of educational stationery products are available.<a href="#" title="Duis autem">continue reading</a>#</p>
                                        <a href="#" class="more-link" title="Read More">Read More >></a>
                                   </li>
                                   <li class="col social">
                                        <h4>get social</h4>
                                        <ul>
                                          <li><a href="#" class="fb-link" title="Facebook">facebook</a></li>
                                          <li><a href="#" class="twitter-link" title="Twitter">twitter</a></li>
```

```
              <li><a href="#" class="behance-link"
title="Behance">behance</a></li>
              <li><a href="#" class="blogger-link"
title="Blogger">blogger</a></li>
              <li><a href="#" class="digg-link"
title="Digg">digg</a></li>
            </ul>
        </li>
        <li class="col partners">
            <h4>partners</h4>
            <ul>
              <li><a href="#">Kangaro Punch</a></li>
              <li><a href="#">Faber Castell </a></li>
              <li><a href="#">Claro </a></li>
              <li><a href="#">Casio</a></li>
              <li><a href="#">Cello </a></li>
            </ul>
        </li>
        <li class="col contact">
            <h4>newsletter</h4>
            <p>Submit Query</p>
            <form action="" method="post">
                <div class="field-wrapper">
                    <input type="text" class="field" value=""
placeholder="Name" title="Name" />
                </div>
                <div class="field-wrapper">
```

```
                            <input type="text" class="field" value="" placeholder="Email" title="Email" />
                        </div>
                        <input type="submit" value="Submit" class="submit-btn" title="Submit" />
                        <div class="cl">&nbsp;</div>
                    </form>
                 </li>
                </ul>
                <div class="cl">&nbsp;</div>
            </div>
            <!-- End Cols -->
            <p class="copy">&copy; 2015 Design & Developed by <a target="_blank" href="#">Syed Antor</a></p>

            <div class="cl">&nbsp;</div>
        </div>
        <!-- End Shell -->
    </div>
</body>
</html>
```

5.2 Unit Test Case (UTC)

Preparing the Unit Test Cases document which is complete with every possible test case, is an important task in Unit Testing activity. It gives an assurance of defect-free Unit at the end of Unit Testing stage. Below are some useful:
Input values: Write test cases for each of the identified inputs (positive & negative) accepted by the Unit.
Expected Functionality: Cover each functionality that is expected to be in the Unit.

Output values: Write test cases which will produce all types of output values that are expected from the module / unit.

Path coverage: If the Unit have conditional processing that results in various paths, then write test cases to cover each of these paths.

Abnormal terminations: Behavior of the Unit in case of abnormal termination should be tested.

Error messages: Check error messages / warnings. These should be short, precise and self-explanatory. They should be properly phrased and free of grammatical mistakes.

Screen Layout: Web page or screen layout must be tested against the requirements. Ensure that pages and screens are consistent and as per requirements.

If you are testing database application, it is important to make sure that transactions are properly designed and no way inconsistent data gets saved in the database.

Also, please note that the format of the unit test case document can be similar to the format of normal functional test cases. The fields can be:

- Test Case Id
- Test Case Purpose
- Procedure / steps to be performed
- Input Value / Test Data
- Expected Result
- Actual Result

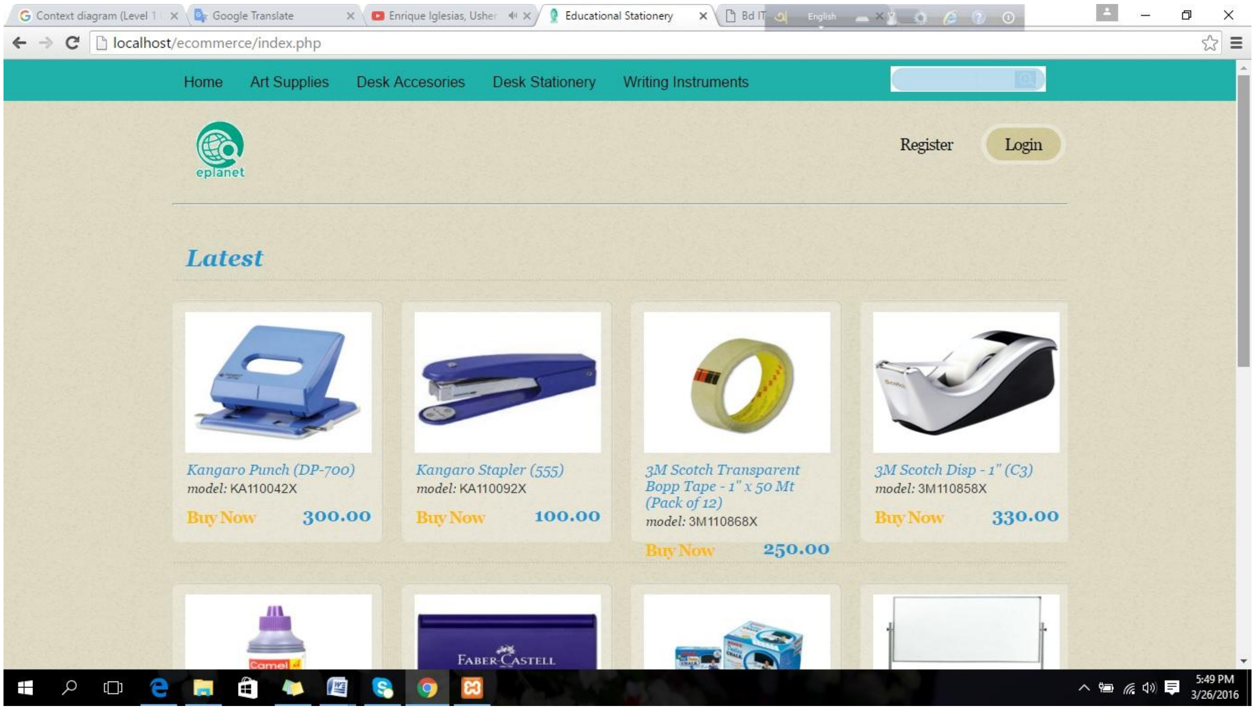
5.3 Unit Test Report (UTR)

Test Number	Test Description	Test Data	Expected Result	Actual Result	Corrective Action
1	User Registration(with valid Data)	User Type: Admin Username: Syed Antor Password:Desh123	The system will show the main menu of the system	Processed	Successful
2	User Registration(with invalid Data)	User Type: New Username: Lift blank Password: grahman	It will give an error message	Not Processed	Successful
3	User Registration(with invalid Data)	User Type: New Username: Salman kabir Password: Lift Blank	It will give an error message	Not Processed	Successful
4	Sales From	Invalid data	It will give an error message	Not Processed	Successful
5	Vendor From	Valid data	The system will store data into Database	Processed	Successful
6	Stock Item	Double time entry of a data	It will give an error message	Not Processed	Successful

Table 4: Unit Test Report

Web page Design:

Home page: It’s our home page.



Kangaro Punch (DP-700)
model: KA110042X
Buy Now 300.00

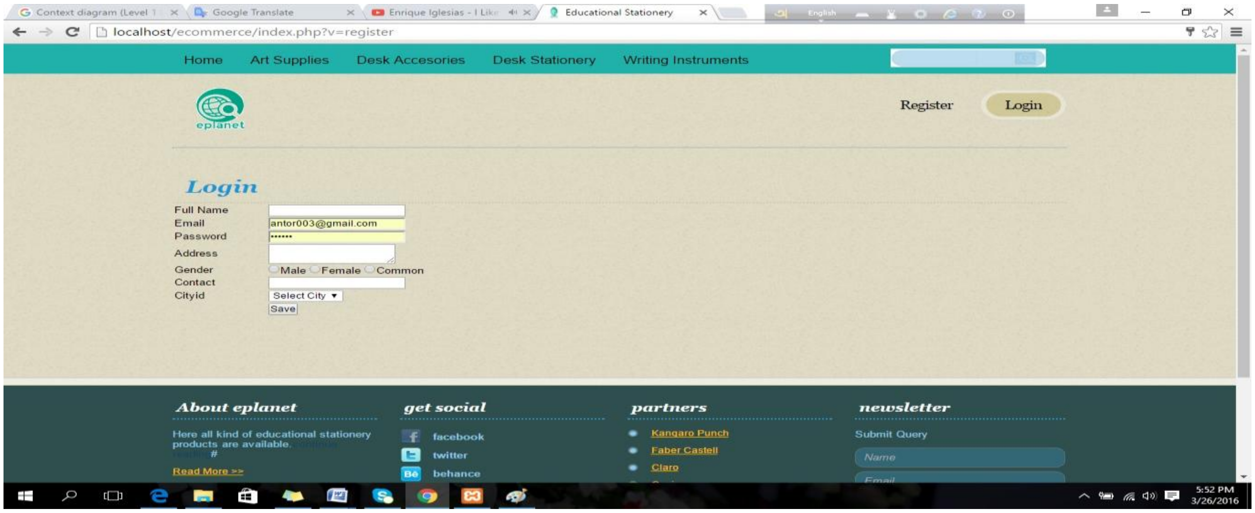
Kangaro Stapler (555)
model: KA110092X
Buy Now 100.00

3M Scotch Transparent Bopp Tape - 1" x 50 Mt (Pack of 12)
model: 3M110868X
Buy Now 250.00

3M Scotch Disp - 1" (C3)
model: 3M110858X
Buy Now 330.00

Fig.5.1 Home page

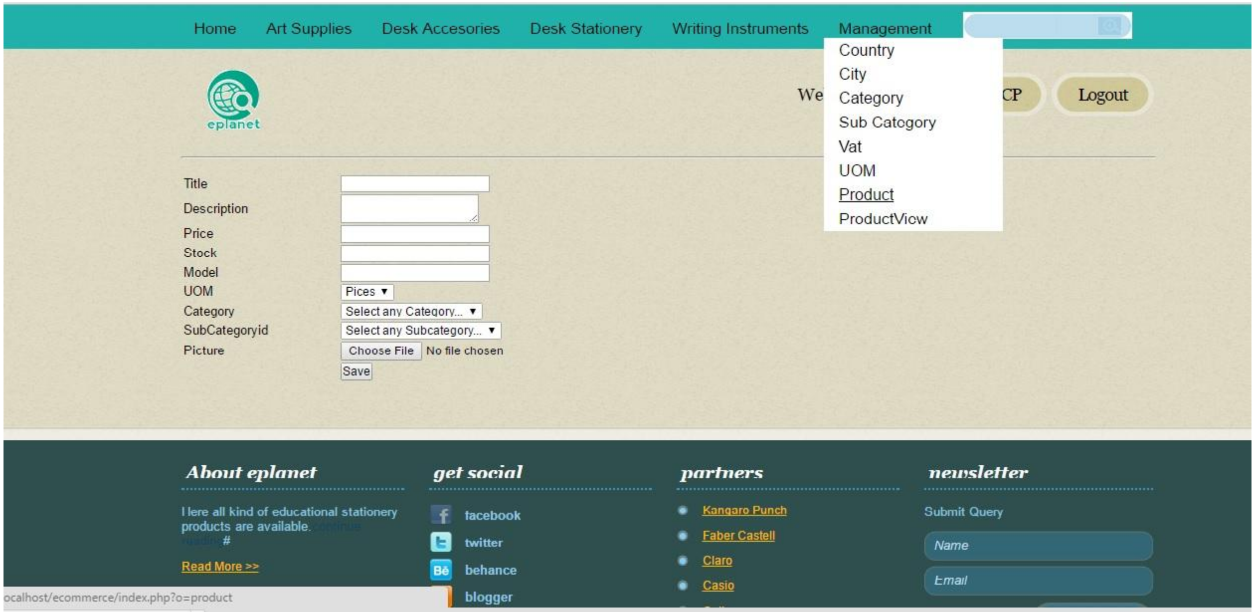
Register & Login Page: This is our login page. Admin and users used their user name and password to login this system.



Full Name	
Email	antor003@gmail.com
Password	••••••
Address	
Gender	○ Male ○ Female ○ Common
Contact	
Cityid	Select City ▾
	Save

Fig.5.2 Register & Login Page

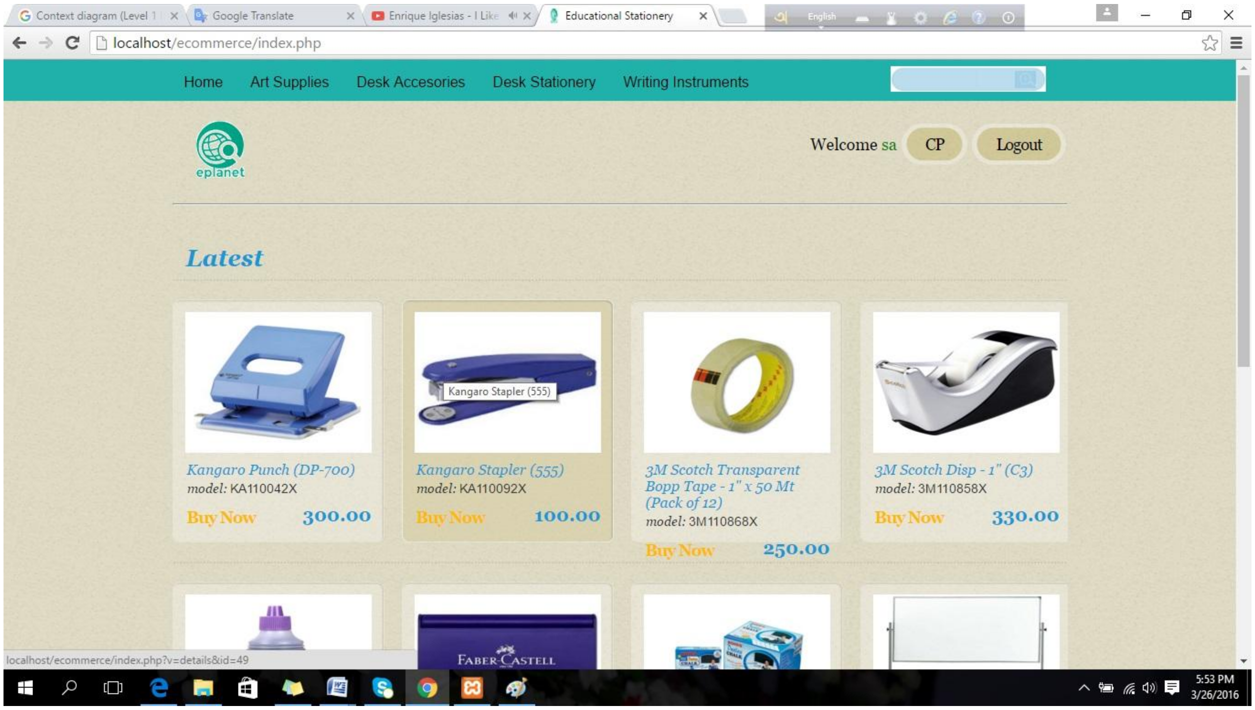
Add products: This is our product adding page.



Title
Description
Price
Stock
Model
UOM: Pices
Category: Select any Category...
SubCategoryid: Select any Subcategory...
Picture: Choose File No file chosen
Save

Fig.5.3 Add products

Product Page: There are many products that can be seen on this page



Kangaro Punch (DP-700)
model: KA110042X
Buy Now 300.00

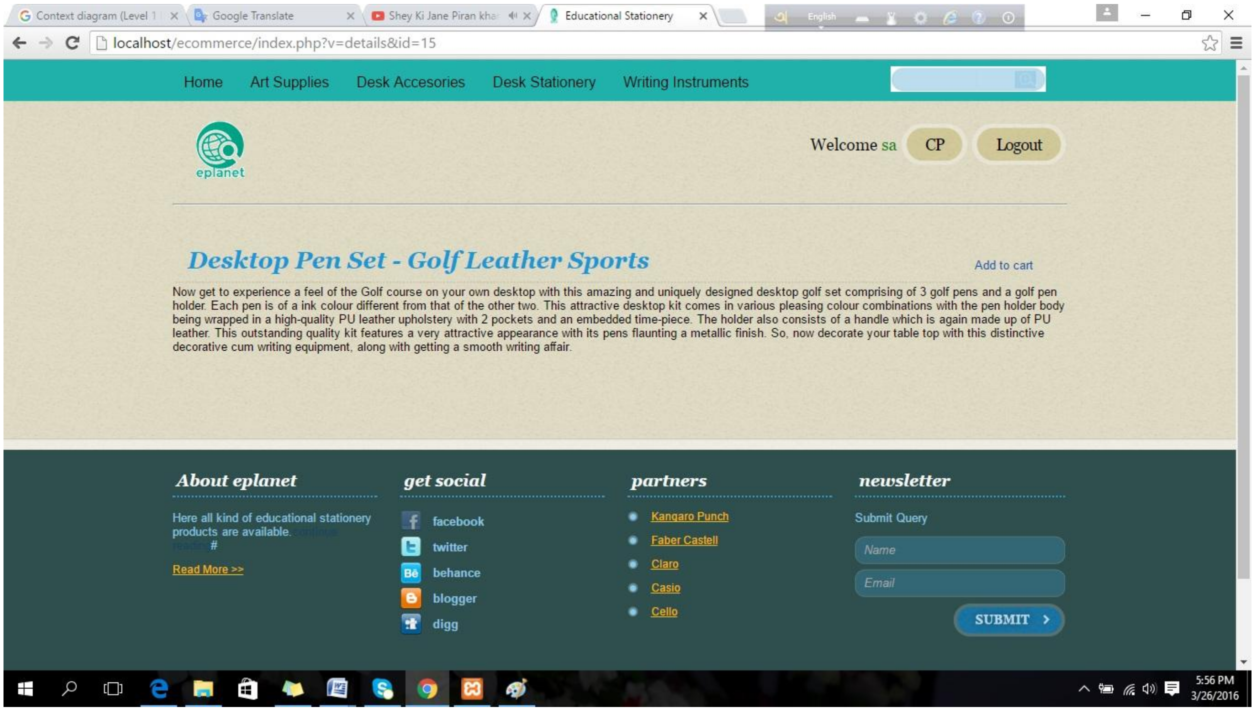
Kangaro Stapler (555)
model: KA110092X
Buy Now 100.00

3M Scotch Transparent Bopp Tape - 1" x 50 Mt (Pack of 12)
model: 3M110868X
Buy Now 250.00

3M Scotch Disp - 1" (C3)
model: 3M110858X
Buy Now 330.00

Fig.5.4 Product Page

Add to cart: User can buying products by add to cart



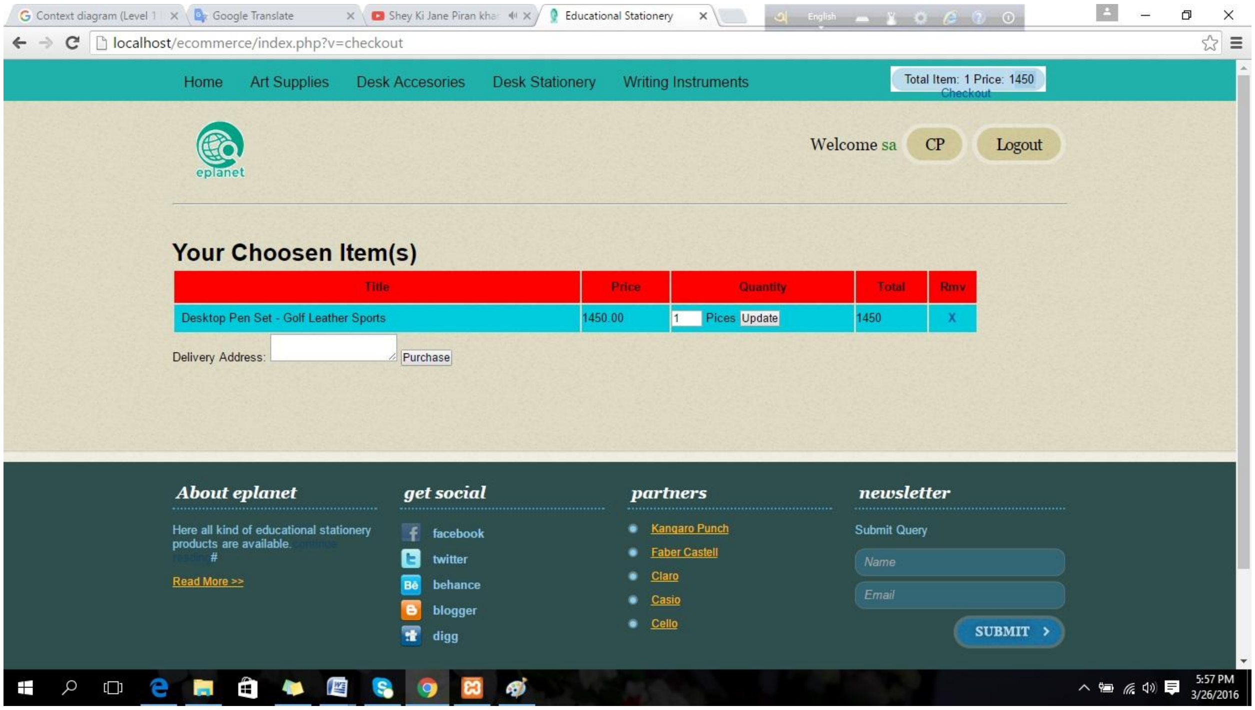
Desktop Pen Set - Golf Leather Sports

Now get to experience a feel of the Golf course on your own desktop with this amazing and uniquely designed desktop golf set comprising of 3 golf pens and a golf pen holder. Each pen is of a ink colour different from that of the other two. This attractive desktop kit comes in various pleasing colour combinations with the pen holder body being wrapped in a high-quality PU leather upholstery with 2 pockets and an embedded time-piece. The holder also consists of a handle which is again made up of PU leather. This outstanding quality kit features a very attractive appearance with its pens flaunting a metallic finish. So, now decorate your table top with this distinctive decorative cum writing equipment, along with getting a smooth writing affair.

Here all kind of educational stationery products are available. #

Read More >>

Fig5.5 Add to cart



Your Choosen Item(s)

Title	Price	Quantity	Total	Rmv
Desktop Pen Set - Golf Leather Sports	1450.00	1 Pices Update	1450	X

Delivery Address: Purchase

Here all kind of educational stationery products are available. #

Read More >>

Fig.5.6 checkout

CHAPTER 6

SYSTEM TEST AND COMPLETION

6.1 System Test Report

Software testing is a criterion of software quality assurance and represents the ultimate review of specified designing and coding.

- System testing reveals the presence of errors in the software developed.
- Testing is the process of executing a program with the intent of finding an error.
- A good test is one that has a high probability for finding a yet undiscovered error.
- A successful test is one that uncovers the hidden errors.

Every test of a single component or the integrated system is documented in a test report. Test reports include the following data:

- Name and email address of the tester
- Date and time when the test was performed
- Scope of test, e. g. for component API testing the name and version of the service component and the part of the API that has been tested
- Test environment including operating system and type of test client, e. g. programming language and XML-RPC library used for component API testing, or Web browser used for GUI testing
- Test plan, i. e. the list of test cases giving method/use case and input parameters used
- Test log listing the outcome of the test case executions (manual testing or automated testing via scripts)
- Summary of test results
- Recommendation for action when errors had been encountered

Where detailed test plans or test logs were too substantial to be included in this report, an excerpt and the location of the complete data is given.

6.2 Software Development Completion Report

In future customers will be able to view shipping prices for their purchased products on the website. Shipping will be according to zip code address of the customers. After payment paid by the customers, admin will be able to ship the products to the customers. Website will be integrated to the shipping gateway provided by the Client. Admin will be able to manage this section from the backend.Also the website will be integrated with various social networking websites like facebook, Twitter etc. Customers can only share the link of the website on these social networking sites.

CHAPTER 7

CONCLUSION

The e-stationary is designed to provide a web based application that would make searching, viewing and selection of a product easier. The search engine provides an easy and convenient way to search for products where a user can search for a product interactively and the search engine would refine the products available based on the user's input. The user can then view the complete specification of each product. They can also view the product reviews and also write their own reviews. Use of Ajax components would make the application interactive and prevents annoying post backs. Its features would make it easy to use.

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