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Business

Requirements

Shopper's Den



<Company Name>

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Document Revisions

Date	Version	Description	Author

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Document Approval

Virtusa Corporation and <Client> have reviewed this document and agree that the contents of the document are accurate. Any changes to this document must be communicated in writing, approved and signed off by both parties.

Signature	Signature
Date:	Date:
Name:	Name:
Client:<Client>	Virtusa Corporation

Template User Notes:

Help Info is provided (in blue italics) to describe what each section should contain. Sample Text is provided in some sections to assist the author in standard wording for common documentation. Macro Buttons (in blue italics) must be replaced to match the project, e.g. <Project Name>.

Note: Help Info and Sample Text are included to provide guidance to the author and should be deleted before publishing the document.



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1 Introduction

1.1 Purpose

This document describes the requirements of the business application ‘**Shopper’s Den**’, which depicts the B2C Catalogue Management.

B2C ordinarily refers to on-line trading, where companies and consumers interact electronically or digitally in some way. For example, online stock trading markets. The ultimate goal is the conversion of shoppers into buyers as aggressively and consistently as possible.

In this project the flow of information is between the business and consumer through the medium of Internet. It refers to marketing of a company’s products through the web. It may be done either to promote the company and its products and services or to actually sell the products/services through this virtual store.

1.2 Scope

The website should provide an opportunity for the user to buy the items online.

1.3 Definitions, Acronyms, and Abbreviations

Userid:user is uniquely identified by this id

Productid:product is uniquely identified by this id





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1.4 References

www.sun.java.com
www.org.apache.com
www.w3schools.com
www.bestbuy.com
www.amazon.com
www.ebay.com
www.univercell.in

1.5 Overview

In this project, we provide an easy shop to the customers through which both the buyers and sellers get benefit of it.

Once he confirms the order, the user signs into his account using his user id and password. If the user is a new customer then he needs to register. Next he needs to enter his credit card details and shipping address. Once the transaction is over the products will be delivered to the customer on or before the delivery date.

If the users do not have a clear idea of the products that they want to buy they can use the search facility provided by the site.

If they have any particular doubts about the site they can use the effective help provided by the site.

The administrator who manages all the categories, log on to his account through his user id and password provided in the home page.





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He can add category, delete category, add items based in the category, delete items based from the category , update the cost and also he can view the stock details and transactions..

2 Project Vision

2.1 Problem Statement

To assist the public in gaining an easier and faster way of shopping. Providing them with more options and real time information

The Problem	Online shopping
Stakeholders	Users
Impact	Purchase of items is made easy.
Key Benefits	Convenient, timesaving, wide variety of products available.

2.2 Statement of Business Need

The aim of shopper's den is to reach each and every customer and provide them with detailed information of the products. It also increases the flexibility in shopping.





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2.3 Project Objectives

The project is useful for the users, who have credit cards.

One of the features is that at a single glance he can know details of the more number of items.

2.4 Success Criterion

Client has a very flexible way for maintaining the site. A login is being provided for the administrator to do the entire maintenance task. Client can have another login and buy the items on his choice.

Every user wants a flexible way of getting the work done. There is no need for a user to go through a long process to do the shopping.

Project meets the very requirement of the client to show the dynamic information to the user at any point of time.

If the user can select items so that they are added to the cart list and give his details like name, address, creditcard and confirm his order and can get his selected list to items to the shipping address, then it is measured as success.





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3 Project Scope

3.1 Project Scope and Boundary

3.1.1 Project Inclusion Statement:

- If the user do not have a clear idea of the products that he want to buy he can use search facility.
- Customer can view the items according to the category wise.
- The user can update his account information.
- Administrator can add new products, update the products.

3.1.2 Project Exclusion Statement

- This project does not deal with the third party transactions.
- User has no privileges to act as seller.

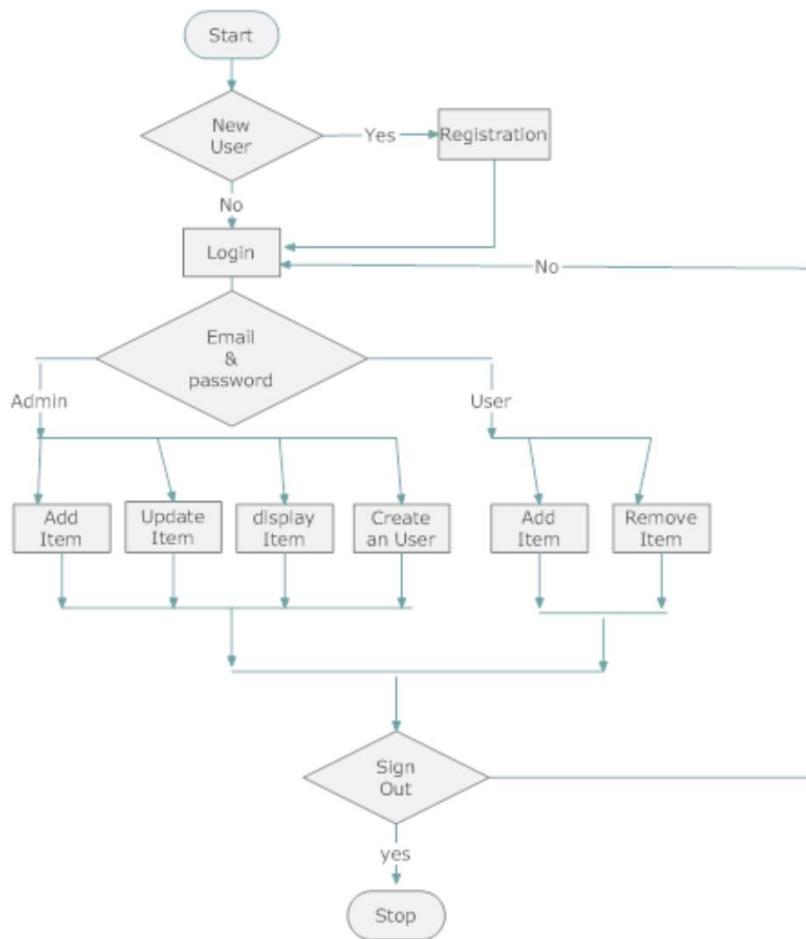




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4 Current Business Process

4.1 Current Process Flow





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4.2 Current Architecture

DATA BASE TO BE SUPPORTED	ORACLE 9i
WEB SERVER	APACHE TOMCAT 5.0

Technical requirements:

<u>Presentation Layer</u>	<u>HTML, CSS3, JSP with JSTL tags, jQuery for DOM/Form-Validation/AJAX Calls</u>
<u>Server Side</u>	<u>Spring MVC, Spring JPA (w) ORM, Spring Security(username & Token)</u>
<u>Application Server</u>	<u>Tomcat 8</u>
<u>Database</u>	<u>MySQL 8</u>
<u>IDE</u>	<u>Eclipse STS</u>
<u>JDK</u>	<u>Oracle JDK 8 64b</u>
<u>Build Management</u>	<u>Maven 3</u>
<u>Unit Testing</u>	<u>jUnit 5</u>

HTML, JSP's, SQL/PLSQL.

4.3 Limitations of the Current Process

This process is limited to the users who have credit cards only. The site provides only a specific number of services. The future enhancement of this project may be site that maintains more number of items providing more facilities.

5 Business Requirements

Requirements are gathered to fill the communication gap between the client and developer. By gathering requirements; client can specify what he actually needs which helps the developers. Gathering requirements is always not that easy, indeed SRS forms the basic of software development. It should satisfy all the parties-something very hard to achieve – and involves trade –off and persuasion. It also helps the client to understand his needs and get the best out of the developer.



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5.1 Proposed Process Flow

Process flow is shown in following flow chart.
 Primary actors for this application are

1. User
2. Admin



5.2 Business Benefits

The proposed system is far more useful than the conventional method of manual shopping. User-friendly way of shopping attracts all kinds of users. All the services provided by this site are up to date.

5.3 Detailed Business Requirements

Document the business/high-level requirements and stakeholder needs. The business requirements can be documented as business-level use cases (a template needs to be there to support the business level use cases) or as a detailed narrative of the stated requirements. The requirements can even be numbered for traceability since they will manifest at a granular level when product component requirements are derived from it.

It will be also be preferable to summarize it by providing a list of requirements. For example:

Reqt. ID#	Description	Type	Priority	Status
-----------	-------------	------	----------	--------



<Company Name>

Reqt. ID#	Description	Type	Priority	Status

Any other format can also be used to list the requirements. This will provide a basis to document the requirements and help in giving references, while discussing with the various user groups.



6 External Interface Requirements

External interface used for this application is simple web browser the user can access this application from any where from the world. Web browser like Internet Explorer can run this application effectively for windows.

7 Operating Environment Requirements

The software and hardware requirements are:

7.1 Hardware

Processor: 500MHz or above

Ram : 256Mb or above

Hard Disk: 40 GB or above

7.2 Software

Apache Tomcat 5.0

Jdk 1.48

Java Run Time Environment

Oracle 9i

Type 1 drivers



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Browser (Internet Explorer 6.0Edge/Chrome/FireFox
Latest-10)

Enterprise Architecture
 Image Reader

7.3 Network

7.4 Communication



8 Performance RequirementsQuality Attributes

A session Object is maintained for each and every user who logs in and that session is maintained until he logouts.

<u>Security</u>	<u>SSL for Transport Layer</u> <u>Username/Token(hashed) for User Security</u> <u>Role based Authorization Privileges</u> <u>Sensitive data @Session/@Request to be protected for integrity (ex Shopping Card Data, User Data, User Session etc)</u>																		
<u>User Base</u>	<table border="1"> <thead> <tr> <th colspan="3"><u>eCommerce Apps</u></th> </tr> <tr> <th><u>Total users</u></th> <th><u>Concurrent Users</u></th> <th><u>Y0Y Growth %</u></th> </tr> </thead> <tbody> <tr> <td><u>5000</u></td> <td><u>250</u></td> <td><u>15%</u></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="3"><u>Admin Apps</u></th> </tr> <tr> <th><u>Total users</u></th> <th><u>Concurrent Users</u></th> <th><u>Y0Y Growth %</u></th> </tr> </thead> <tbody> <tr> <td><u>100</u></td> <td><u>25</u></td> <td><u>20%</u></td> </tr> </tbody> </table>	<u>eCommerce Apps</u>			<u>Total users</u>	<u>Concurrent Users</u>	<u>Y0Y Growth %</u>	<u>5000</u>	<u>250</u>	<u>15%</u>	<u>Admin Apps</u>			<u>Total users</u>	<u>Concurrent Users</u>	<u>Y0Y Growth %</u>	<u>100</u>	<u>25</u>	<u>20%</u>
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<u>100</u>	<u>25</u>	<u>20%</u>																	
<u>Performance</u>	<u>Peak Load Performance (during Festival days, National holidays etc)</u> <u>eCommerce < 3 Sec</u> <u>Admin application < 2 Sec</u>																		



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	<u>Non Peak Load Performance</u> <u>eCommerce < 2 Sec</u> <u>Admin Application < 2 Sec</u>
<u>Availability</u>	<u>eCommerce – 100% Availability</u> <u>Admin Application – 99% Availability</u>
<u>Standard Features</u>	<ul style="list-style-type: none"> - Scalability - Maintainability - Usability - Availability - Failover
<u>Logging & Auditing</u>	<u>- System should support logging(app/web/db) & auditing at all levels</u>
<u>Monitoring</u>	<u>- Should be able get monitored via as-is enterprise monitoring tools</u>
<u>Cloud</u>	<u>- The Solution should be made Cloud ready, and should have minimum impact when move away to Cloud in infrastructure</u>
<u>Browser Compatible</u>	<ul style="list-style-type: none"> - IE Edge+ - Mozilla FireFox Latest – 15 - Google Chrome Latest – 20
<u>External Cache</u>	<u>- Apply and implement external cache for avoiding costly repeatable IO Calls</u>

9 Standards Requirements

9.1 User Interface



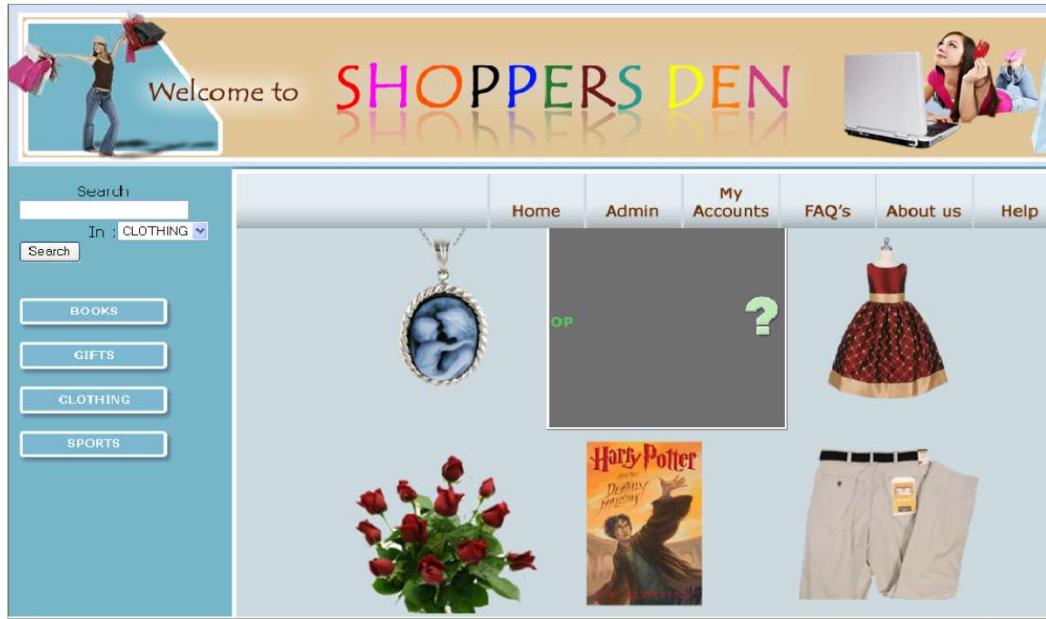
<Company Name>



Home page

Virtusa®

<Company Name>



Registration



<Company Name>

Welcome to **SHOPPERS DEN**

Search In : **CLOTHING**

BOOKS **GIFTS** **CLOTHING** **SPORTS**

Registration Form

* Enter Name :	<input type="text"/>
* E-mail :	<input type="text"/>
Mobile number :	<input type="text"/>
* Address 1:	<input type="text"/>
Address 2:	<input type="text"/>

Home Admin My Accounts FAQ's About us Help

Welcome to **SHOPPERS DEN**

Search In : **CLOTHING**

BOOKS **GIFTS** **CLOTHING** **SPORTS**

Registration Form

* Choose your User Id :	<input type="text"/>
* Choose Password :	<input type="text"/> (Minimum of 6 Characters)
* Confirm your Password :	<input type="text"/>
* Secret Question :	<input type="button" value="Select your Question"/>
* Answer :	<input type="text"/>

Home Admin My Accounts FAQ's About us Help



<Company Name>

Login

Welcome to **SHOPPERS DEN**

Search
In : **CLOTHING**
Search

BOOKS
GIFTS
CLOTHING
SPORTS

New Users Register [Click Here](#)

Member Sign In

* UserId:
* Password:

[Forgot Password??](#)



<Company Name>

Display List

The screenshot shows a web page for a shopping site. At the top, there's a banner with a woman holding shopping bags on the left and a person using a laptop on the right. The main title "SHOPPERS DEN" is displayed in large, colorful, stylized letters. Below the banner, a navigation bar includes links for Home, Admin, My Accounts, FAQ's, About us, and Help. On the left side, there's a sidebar with a search bar set to "CLOTHING", and buttons for BOOKS, GIFTS, CLOTHING, and SPORTS. The main content area displays three product images: a boy in a yellow t-shirt, a girl in a green floral top, and a baby in white flannel wear. Below each image, the product name and price are listed.

Product	Name	Price
1	T-shirt	255.0
2	printed T-shirts	200.0
3	Flannel wear	200.0



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Billing Address

Welcome to **SHOPPERS DEN**

Search In : CLOTHING

BOOKS
GIFTS
CLOTHING
SPORTS

Home Admin My Accounts FAQ's About us Help

Billing Information

Name: jvankgn
Address: asdadasdfdasd
Mobile: 1232323332
E-Mail: fgdfg@dsfdfg.com
Total Amount: \$150.0

Shipping Information

Add new shipping address

Default(same as billing)
 Shipment Address



<Company Name>

Payment information

Welcome to **SHOPPERS DEN**

Search In : **CLOTHING**

BOOKS **GIFTS** **CLOTHING** **SPORTS**

Enter Credit-Card Details

* Name: (as on the credit card)

* Card Type:

* Card Number:

* Expiry Date:

* Card Verification Number: (3 digit number)



<Company Name>

Admin Login Page

Welcome to **SHOPPERS DEN**

Search : In : **CLOTHING**

BOOKS

GIFTS

CLOTHING

SPORTS

Home Admin My Accounts FAQ's About us Help

Administrator Login

User Name : Password :



<Company Name>

Admin Home Page

Welcome to **SHOPPERS DEN**

Manage category

Add Category

Delete Category

Manage Items

Add Item

Delete Item

Update Item

View

View Stock

View Transactions

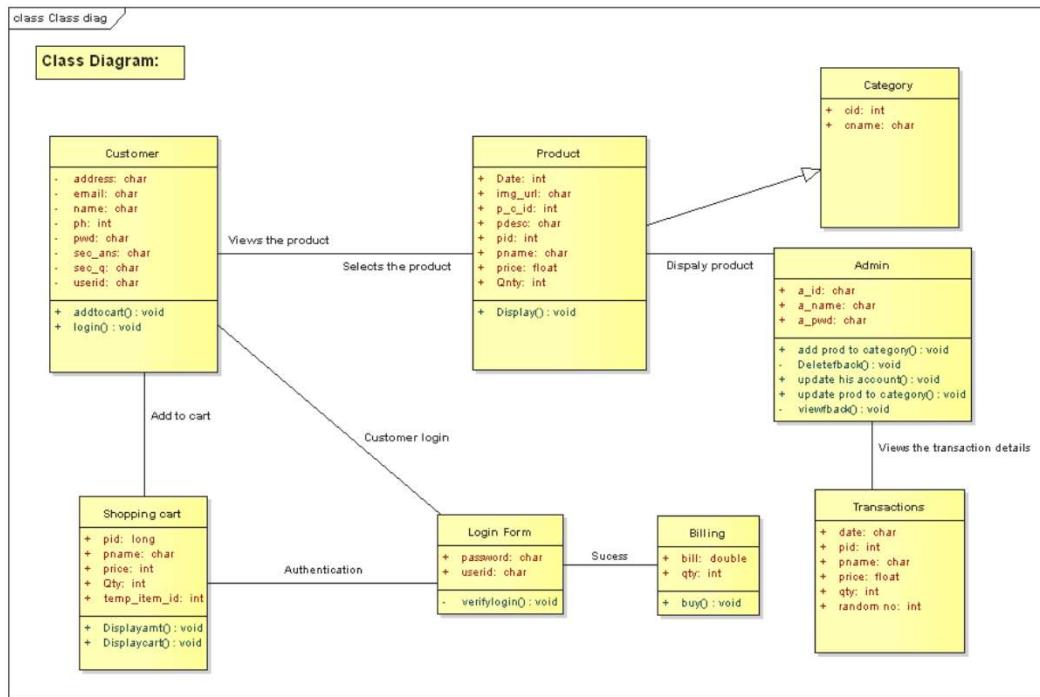
DELETE

9.2 Detailed Design

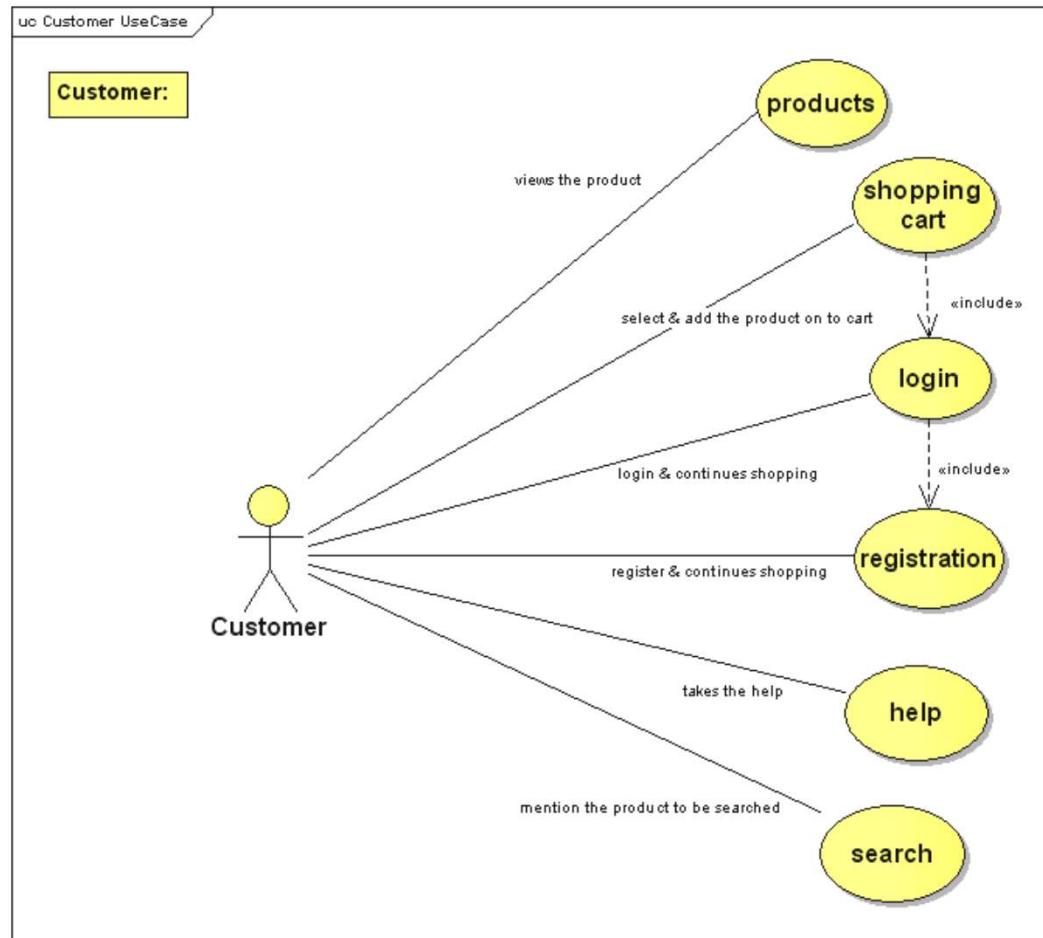


<Company Name>

Class Diagram:



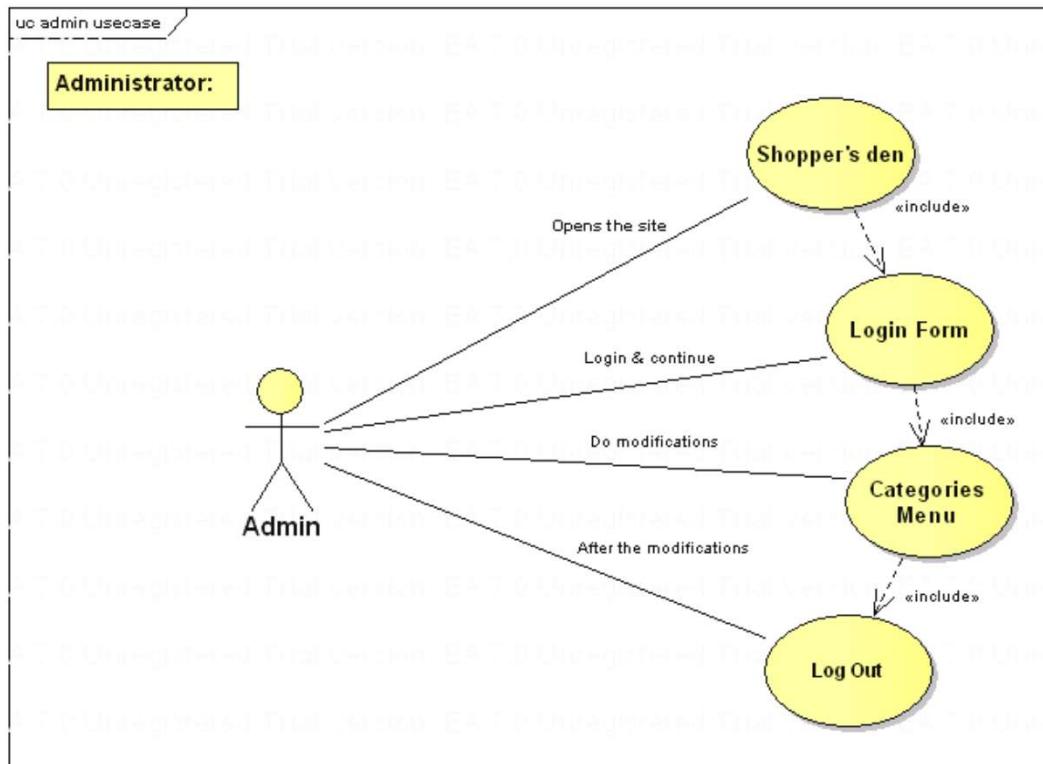
Use case diagram for user:



Use case diagram for administrator:



<Company Name>



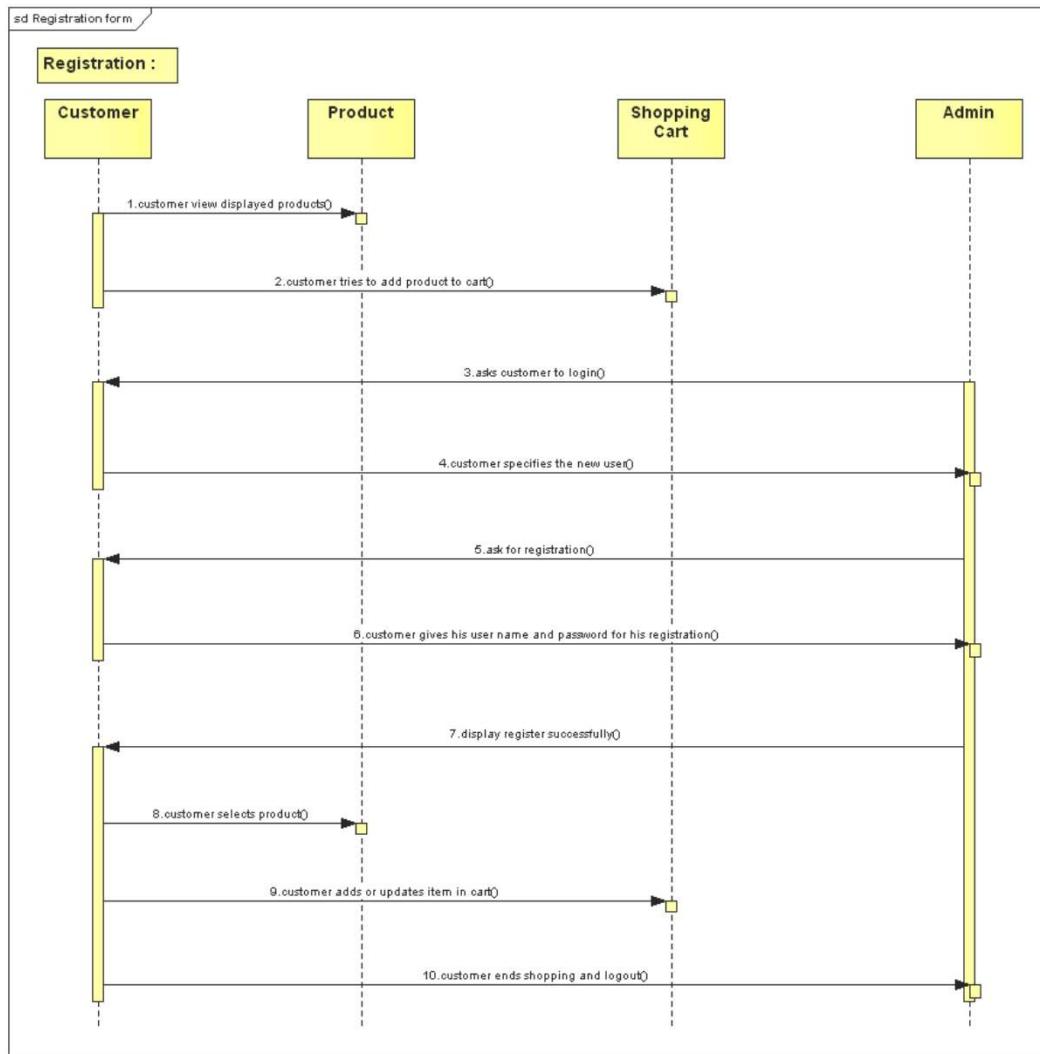
Sequence diagram for Registration:

Copyright © 2004 Virtusa Corporation
 Business Requirements for <Project Name> 23
 CLIENT CONFIDENTIAL

Template ID: TMP-RQ-BR-5-001
 < Date >



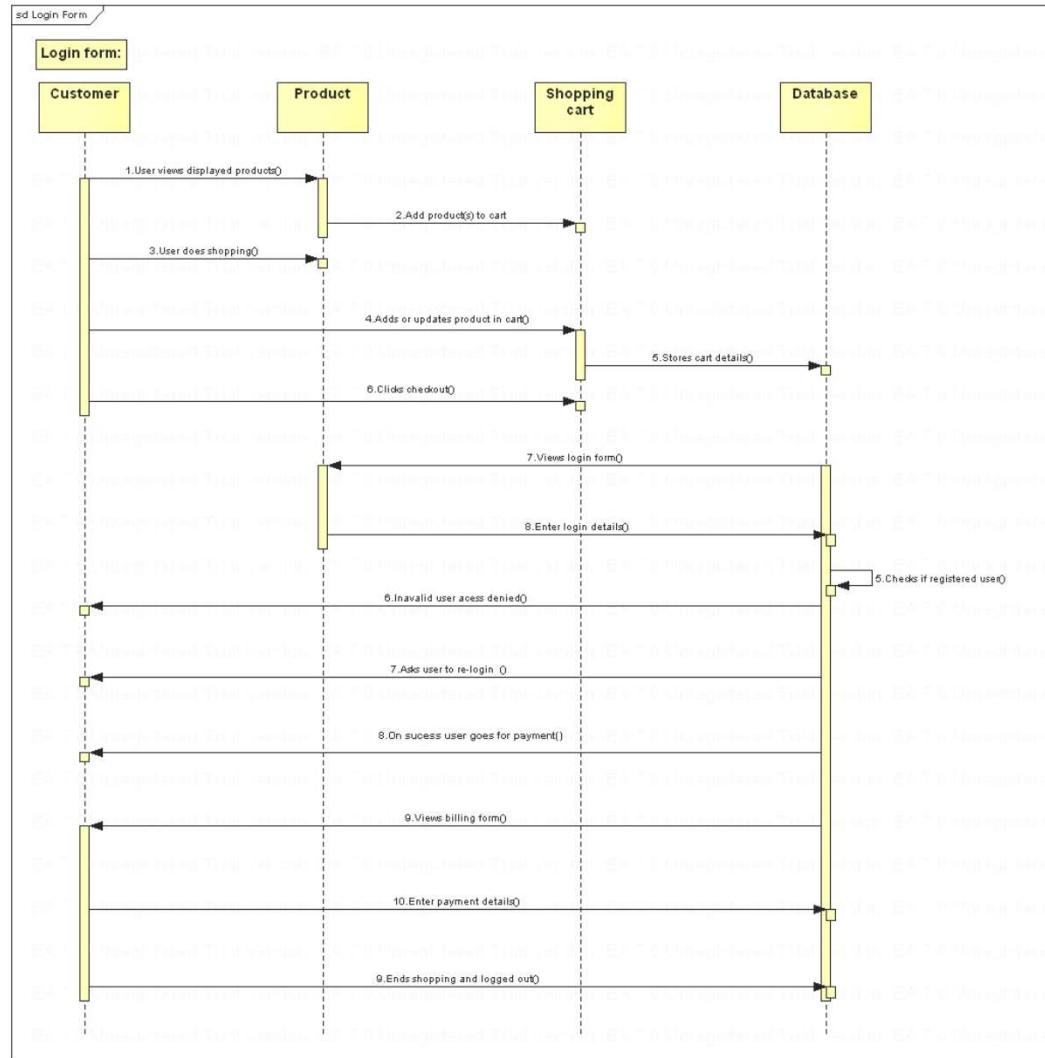
<Company Name>



Sequence diagram for Customer Login form:



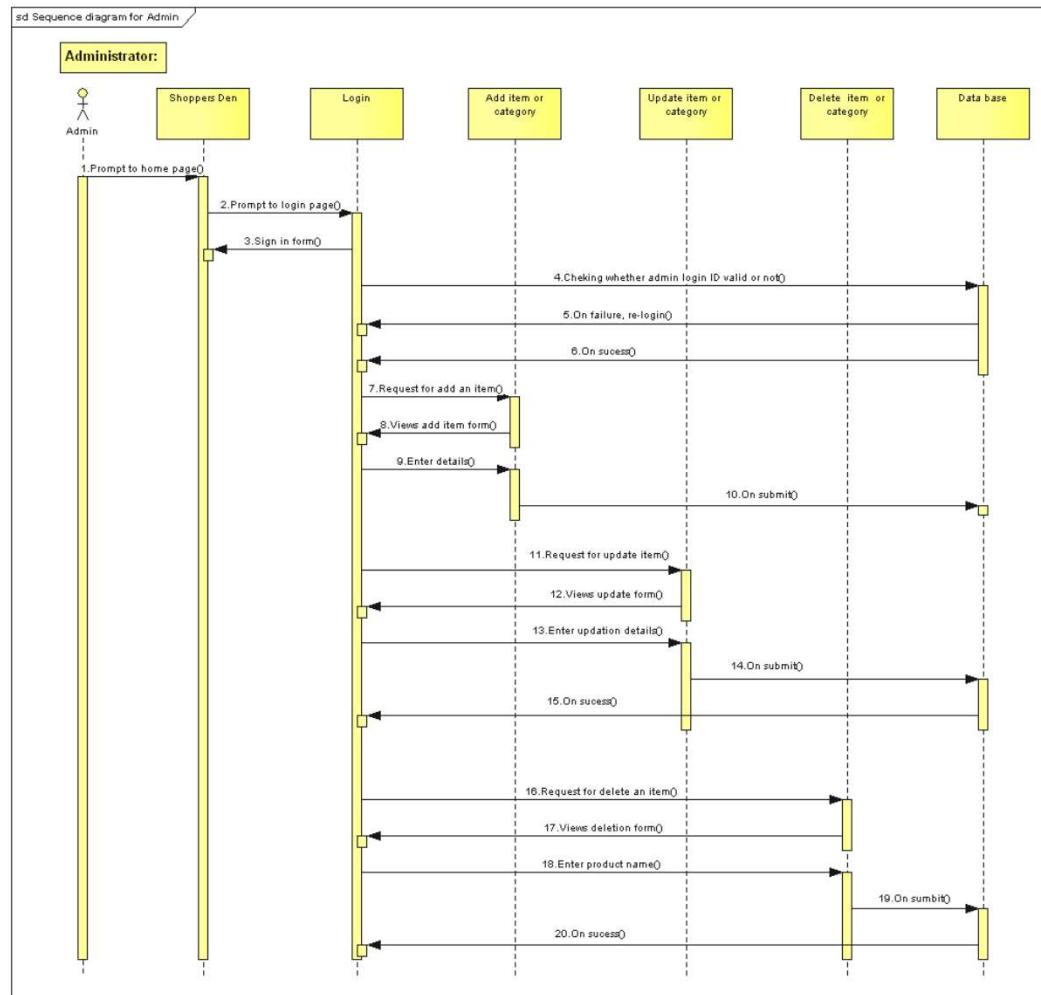
<Company Name>



Sequence diagram for admin:



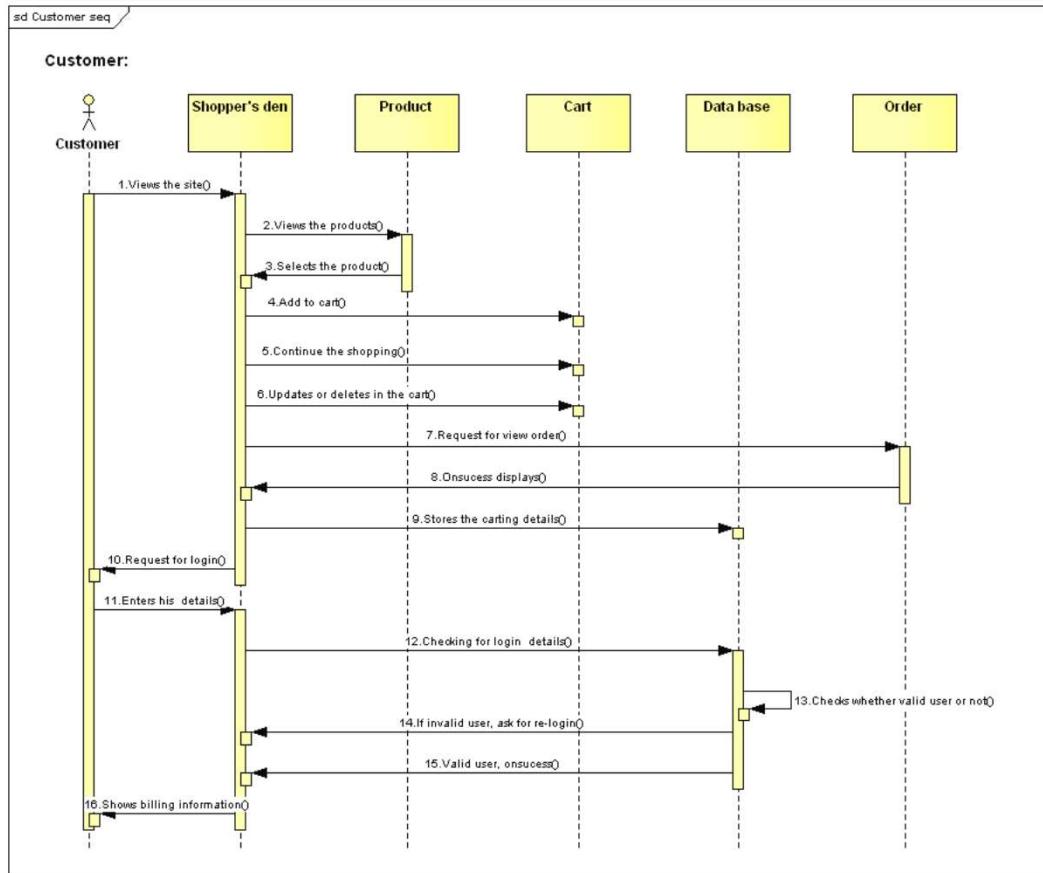
<Company Name>



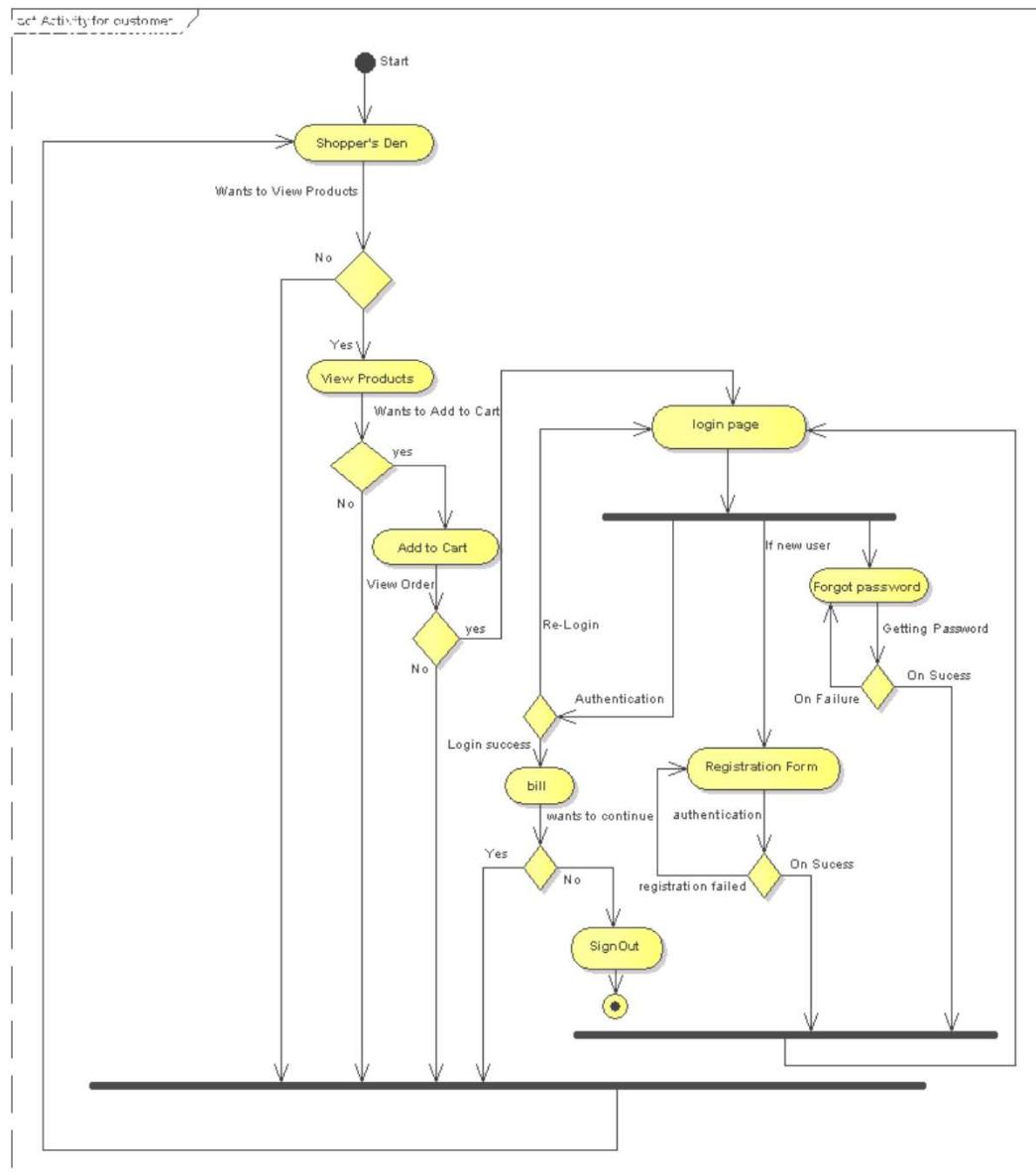
Sequence diagram for user:



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Activity diagram for user:



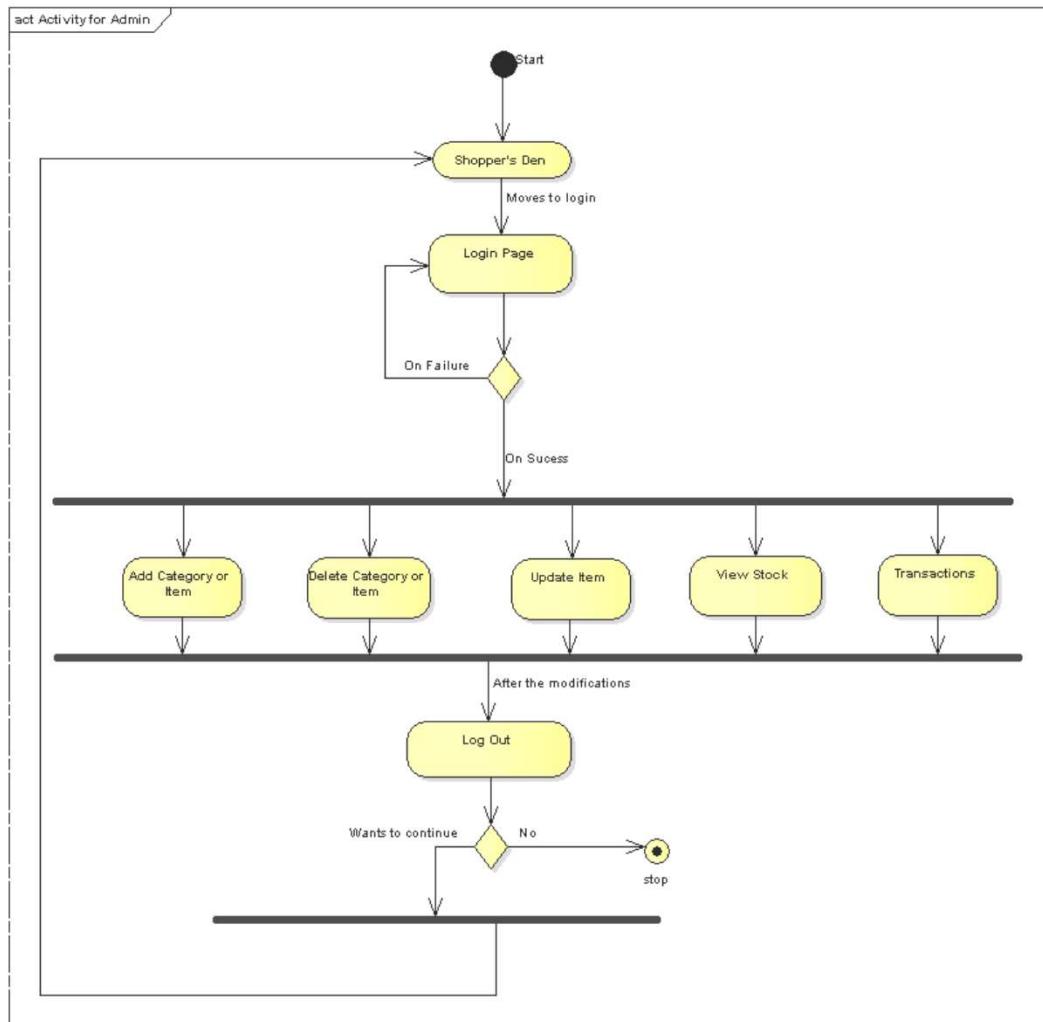
Activity diagram for administrator:

Copyright © 2004 Virtusa Corporation
 Business Requirements for <Project Name> 28
 CLIENT CONFIDENTIAL

Template ID: TMP-RQ-BR-5-001
 < Date >



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10 Stakeholder and User Descriptions

*There are different users who use this application.
Users may be employees, students, children etc*

10.1 Stakeholder Profiles

10.1.1 <Student>

Representative	student
Description	Student can buy the items online.
Type	user know how to use this application and have credit card can buy the items.
Responsibilities	User want to buy the items with less effort
Success Criteria	User can add his selected items to cart ,provide his details, confirm his order and get the items to his shipping address is defined as success
Involvement	User use the application
Deliverables	Under development he don't have any usage of system
Comments and Issues	User can put any issues after using this application

10.2 User Profiles

10.2.1 <Employee>

Representative	employee
Description	Employee has the basic knowledge regarding the application.
Type	Employee having credit card can buy the items.



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Responsibilities	<i>User want to buy the items with less effort</i>
Success Criteria	<i>User can add his selected items to cart ,provide his details, confirm his order and get the items to his shipping address is defined as success</i>
Involvement	<i>User use the application</i>
Deliverables	<i>no</i>
Comments and Issues	<i>User can put any issues after using this application</i>

10.3 User Environment

Team of 7 people involved to complete this application. Each and every module is subdivided and developed by all the team members. Complete 15 days were allotted for these modules. The basic idea regarding this project is catalogue management. Advanced technology can be used to implement future enhancements.

11 Assumptions and Constraints

Appendix



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