SOFTWARE REQUIREMENT SPECIFICATION

FOR

CLOUDSHOP

Section -11

Group -05

Submitted By

Dip Ghosh -1410414042
Davish Krishna-1420868042
Aaqib Shahriar shuvo-1330880042

Submitted To

Dr. Rashed Mazumder

Table Of Content

<div align="center">**SOFTWARE REQUIREMENTS SPECIFICATION**</div>

Introduction

This document describes the software requirements specifications for Cloudshop. A Fast Track Shopping Software System specifically developed for ease of use. Throughout this document, Cloudshop will be sometimes referred to as "this software" or "our software system".

1.1 Purposes and Services

The purpose of the document is to collect and analyze all assorted ideas that have come up to define the system, its requirements with respect to consumers. Also, we shall predict and sort out how we hope this product will be used in order to gain a better understanding of the project, outline concepts that may be developed later, and document ideas that are being considered, but may be discarded as the product develops.

In short, the purpose of this SRS document is to provide a detailed overview of our software product, its parameters and goals. This document describes the project's target audience and its user interface, hardware and software requirements. It defines how our client, team and audience see the product and its functionality. Nonetheless, it helps any designer and developer to assist in software delivery lifecycle (SDLC) processes.

Cloudshop will be a web-based software system written in php ,HTML and css to aid customers to browse , manage, buy and sell products with regard to simplifying and speeding up the process of selection, ordering and purchasing products for customers as well as managing a database of users and a database of products through a conveniently designed Graphical User Interface which will utilize a user-friendly intuitive design approach.Cloudshop will be a web-based fast track shopping application designed in the form of an e-commerce web site.The system will be designed to be used by customers with little or no experience in using computerized systems. To aid users, documentation will be provided in the form of a user manual which will contain a detailed description of all system functions.

1.2 Project Scopes, Stakeholders

Primarily, the scope pertains to the CloudShop product features for making Marvel Electronics and Home Entertainment project live. It focuses on the company, the stakeholders and applications, which allow for online sales, distribution and marketing of electronics.

This SRS is also aimed at specifying requirements of software to be developed but it can also be applied to assist in the selection of in-house and commercial software products. The standard can be used to create software requirements specifications directly or can be used as a model for defining a organization or project specific standard. It does not identify any specific method, nomenclature or tool for preparing an SRS.

Cloudshop will be an e-commerce software system which will be designed to facilitate purchase and sell of products. The system will be therefore designed to allow a user to perform the following functions:

❖ browse as a customer

❖ browse through the database of available products

❖ add a product to a shopping cart

❖ register

❖ provide a credit card information

❖ select a shipping method

❖ select the next screen to view

❖ upload info of a product you want to sell in the subsection sellit

❖ login as administrator

❖ update or delete a product or record information about products

Stakeholders:

➢ Executives
➢ Sales
➢ Operations
➢ Customers
➢ Marketing
➢ IT
➢ Buyers
➢ Customer Care
➢ Employees

The system will have two external interfaces: for a credit card verification and for order shipping. The system will have a means of communicating with the user (customer or store owner) via dialogue boxes and will provide assistance via help screens.

The software system will accept a number of user **inputs when a user**:

1 logs on to the system either as admin. or as a customer;

2 fills out a registration form;

3 fills out an order form;

4 selects a GUI component to submit input or to navigate through the system. The GUI component can be either a search engine or a button;

5 adds a product to his or her shopping cart;

6 updates or deletes an existing product record;

User inputs will result in the following **outputs (screens)** based on a user's selection:

1 a welcome screen if the user login was successful;

2 customer registration screens and registration confirmation screens;

3 order confirmation screens;

4 screens displaying a customer's shopping cart;

  5   screens for managing the tables of products for the admin;

2.Overall Description

This section includes details about what is and is not expected of the cloudshop system in addition to which cases are intentionally unsupported and assumptions that will be used in the creation of the cloudshop system.

This document contains the problem statement that the current system is facing which is hampering the growth opportunities of the company. It further contains a list of the stakeholders and users of the proposed solution. It also illustrates the needs and wants of the stakeholders that were identified in the brainstorming exercise as part of the requirements workshop. It further lists and briefly describes the major features and a brief description of each of the proposed system.

The following SRS contains the detail product perspective from different stakeholders. It provides the detail product functions of E-Store with user characteristics permitted constraints, assumptions and dependencies and requirements subsets.

2.1 Product Features
 The software is designed for Trading.

user interface:

The user interface will consist of four main types of screens: main page or home page , product windows for displaying product details, login page and customer info page.
The **Login Screen** will consist of a user dialogue box with two text boxes and two labels to accept User Name(Login) and User Password. There will be two buttons: Submit and Cancel.

This screen will be used to authenticate the user to the system. Depending on the login values, the user will be directed to Customer Screens.
The main function of the **Customer Screens** will be to buy products. Therefore they will be designed according to the sequence of steps that a customer needs to perform to buy a product. These screens will include the following: **Home Screen**, **product Display Screen**, **Register Screen**, **CheckOut Screen**, **Credit Card Input Screen**, **Help Screen**
The **Home Screen** will be the default screen displayed upon entering the site
The **Data Display Screen** will be used for displaying a record's data.
The **Register Screen** will be used for customer registration.

The **CheckOut Screen** will be used for displaying the item's title, description and selected quantity.

The **Credit Card Input Screen** will be used to prompt the customer to input their credit card information again.
The **Help Screen** will be used for displaying a list of FAQs.
The **Goodbye Screen** will be the last screen a customer can see after logging off the system.
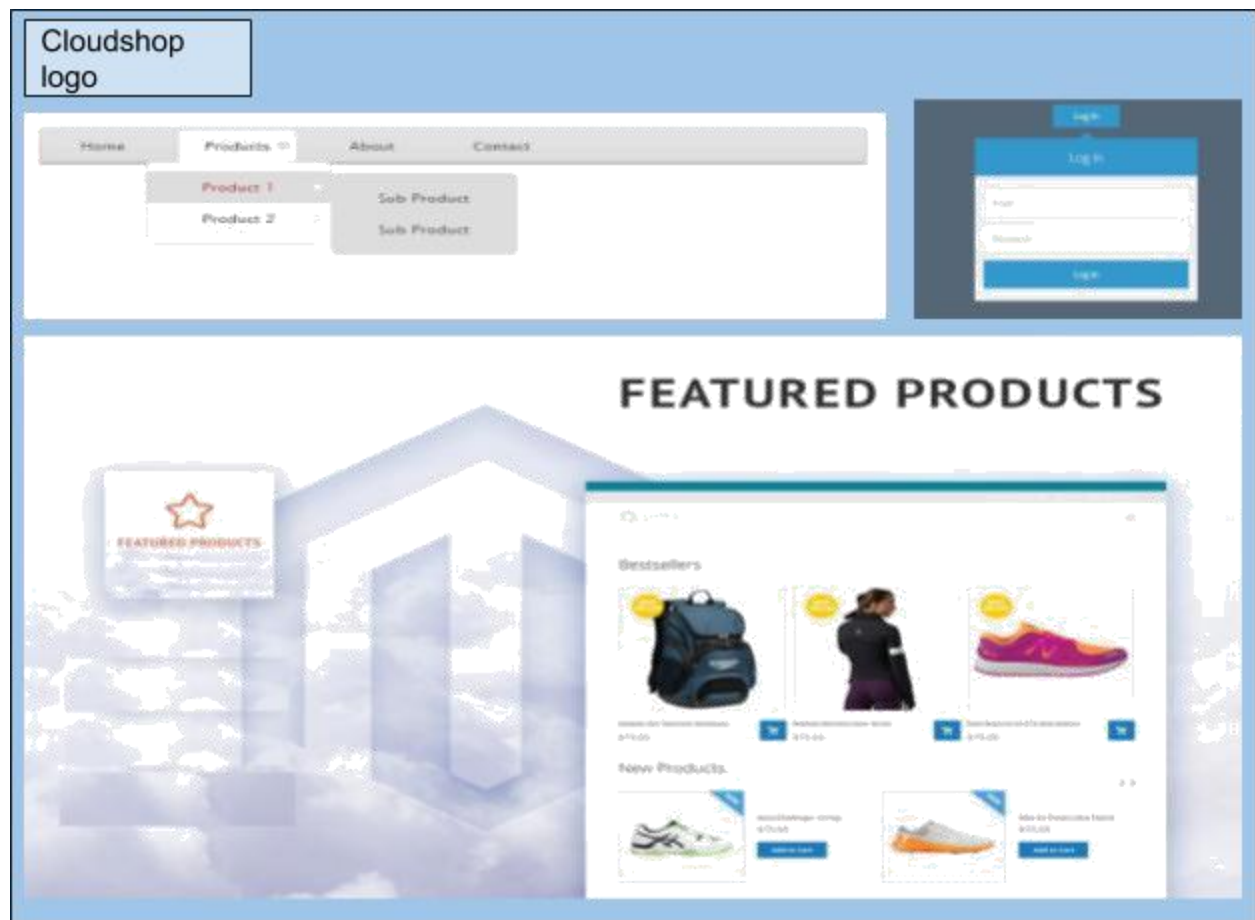
Database:

The product database will be created with php scripts and wamp or xamp http server.

User Class:
This software encompasses two major informational domains: Customer data and warehouse or inventory data.
Data Description

Customer - a user who can use the software system in to purchase products; interchangeably used.

Administrator - the software admin. with authority to update a database of users and products.

Product - products sold in the store.

Product Details – dynamic information related to the product

Shopping cart – placeholder to store customer selections.

Order **-** Itemized summary of products being purchased by customer.

Billing – billing and shipping information.

Data objects

Customer – user name, email, password, address

Administrator – user name, password

Product – price, description

Inventory – product ID, price,

Shopping cart – product ID, qty

Order – product ID, qty, price,

Billing – billing name, billing address, phone number, credit card number, expiration date, shipping name, shipping address, shipping method.

.

2.2.3 Relationships

Complete data model
 Data dictionary
Name: Customer
Alias: None
System Usage: Input to order subsystem
Output to login subsystem
Attributes:
Username – alphanumeric 32 max chars
Password – alphanumeric no spaces 8-12 characters
Email – alphanumeric no spaces 32 max chars
Shipping Address – street number, address 1, address 2, city, state zip code
Billing Address – street number, address 1, addresss 2, city, state, zip code
Credit Card – number, expiration date
Name: Order Summary
Alias: None
System Usage: Input to order subsystem
Attributes:
Order id – unique key identifier numeric
Customer id - foreign key to customer info numeric
Name: Order Details
Alias: None
System Usage: Input to order subsystem
Attributes:
Order id – unique key identifier numeric
Product id – product purchased numeric
Name: Product
Alias: None
System Usage: Input to order subsystem
Output to query subsystem
Attributes:
Product id – unique key identifier numeric

User Characteristics
The typical Cloudshop user is simply anyone that has access to the Internet and a web browser
in the computeror laptop. It is assumed that the user is familiar enough with a computer or
mobile to operate the browser, keyboard and mouse and is capable of browsing to, from
and within simple websites

2.3 Operating Enviroment & Atmosphere

Software Interface:

Client on Internet: Operating System (any)

Data Base Server: Database, Operating System (any)

Software used :   Net Beans , Micromedia Dream Viewer .

Hardware Interface:

Client Side/Server side

Minimum requirement

Processor – Core i5/i7

RAM -4GB

Disk Space- 1 TB

Internet Explore,Google Chrome,Mozila

3.System Features

Description & Design Documentation:

The purpose of this diagram is to demonstrate how objects will interact with Cloudshop and map out the basic functionality of the system. Below is a list of the elements that you will see in the diagram on the next page as well what is included in the use case templates that follow.

Usage scenario

This section provides a usage scenario for the software. It has organized information collected during requirements elicitation into use-cases.
User profiles:
  ➢ The profiles of all user categories are described here.
  ➢ The user profiles will be of two categories: Customer and Store Owner.
  ➢ Customer will be able to use the software to purchase goods.
  ➢ Store Owner will be able to manage the database

Use-cases

All use-cases for the software are presented.The use-cases will have the following sequence:Login or Registe .If Login as Customer:

- ❖ browse

- ❖ Select

- ❖ CheckOut

- ❖ Credit Card Information Input

- ❖ Select Shipping Method

Use case diagram:
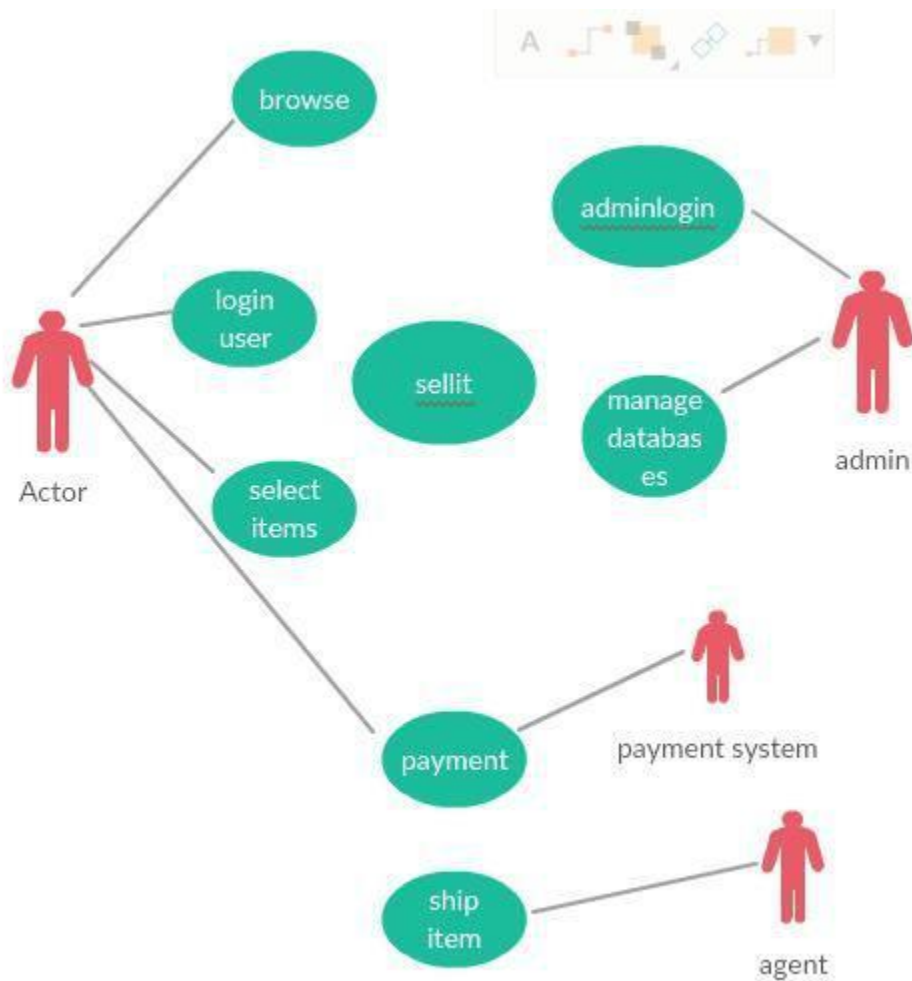
Functionality:

The functionality of this subsystem will be carried out through GUI components such as buttons, text input boxes, URL buttons, images, tables, navigation bars, labels and message boxes. **credit card authorization system:**

The credit card authorization system will be used to accept and verify a customer's credit card information.

The **Customer Screen** associated with this subsystem will be the **CheckOut Screen.** The **CheckOut Screen** will direct the user to the **Credit Card Input Screen**. The information supplied in this screen will be sent directly to a credit card verification company. The Credit Card Input Screen will be displayed repeatedly with a prompt to re-enter the information in case of a credit card rejection.

The functionality of this screen will be carried out through the following GUI components:forms, text boxes, labels, buttons and message boxes.
Shipping system:

The shipping system will be used to select a shipping method and to confirm the customer's shipping address and will be connected directly to a shipping company
The **Customer Screens** associated with this screen will be the **CheckOut Screen** where the customer will be able to select a shipping method.

The functionality of this screen will be carried out through text input boxes, labels, images, forms, and message boxe
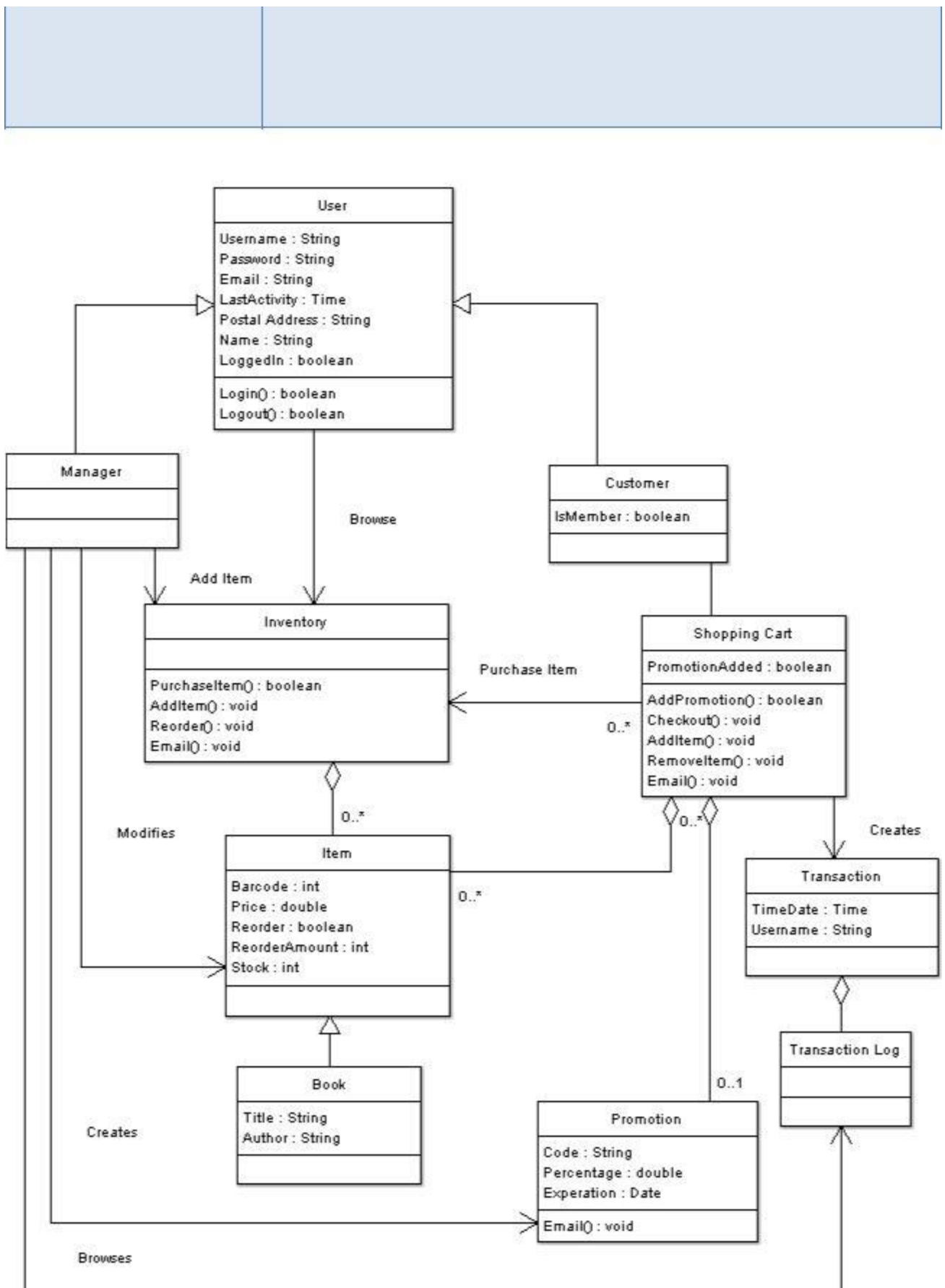
Special usage considerations

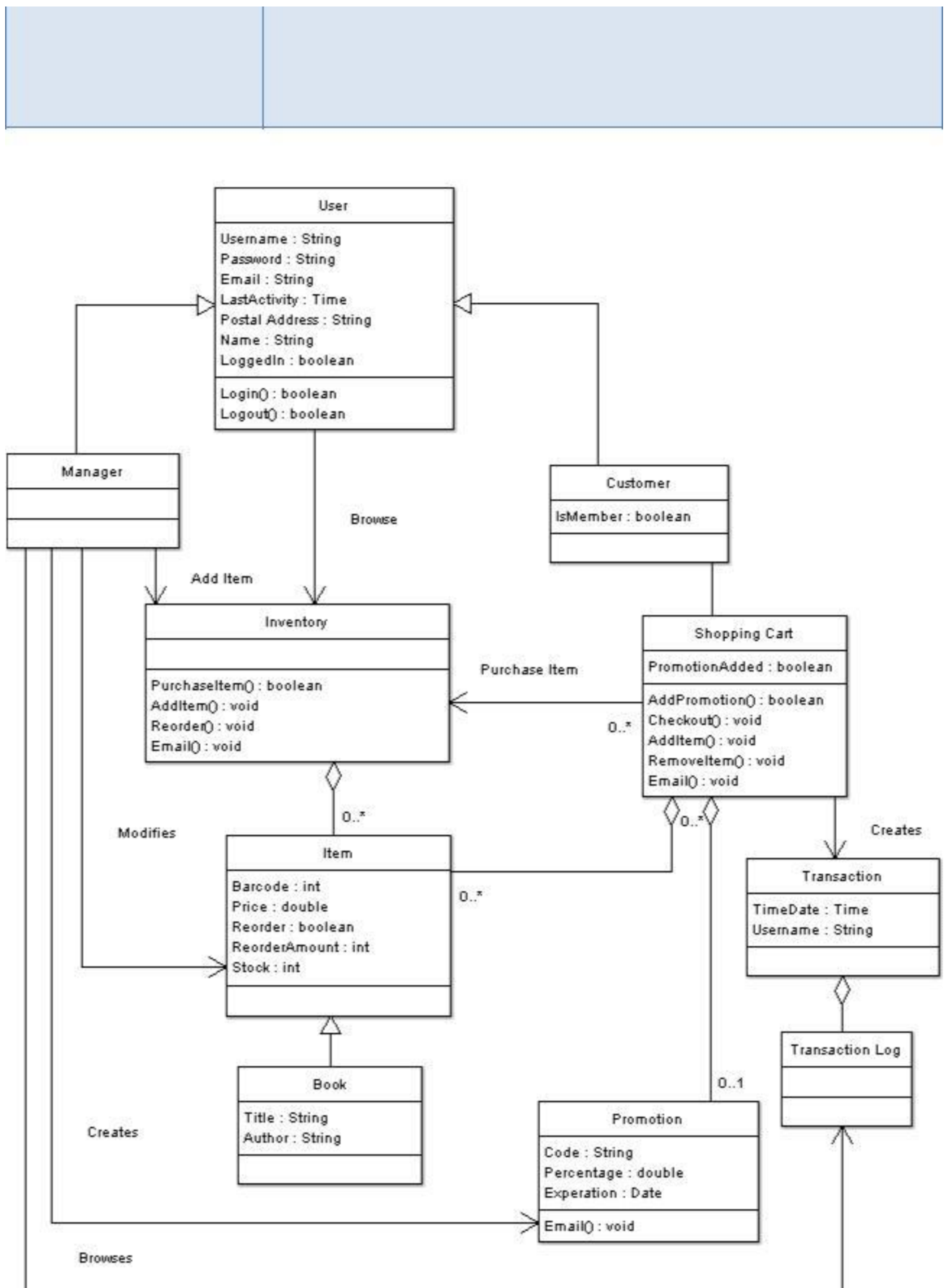Special requirements associated with the use of the software are presented.

The special requirements will be checking the order status, checking the inventory, canceling order and user feedback

Class Diagram

The purpose of this diagram is to show how objects within the Cloudshop system will interact with each other in order to achieve the functionality required by the Use Case diagram. Below is a list of what you will see in the diagram itself as well as the class descriptions that follow.

Classes	Rectangles in the diagram that are split into three parts. The top section is the name of the class, the middle section is the list of variables that are stored in the class and the bottom section is the list of functions in the class. These rectangles represent objects within the system.
Variables	These have a name followed by a semicolon and then a type. The type denotes what kind of data can be stored in the variable.
Functions	These have a name followed by a list of any variable that the function receives in-between the parenthesis "()". After that there is a semicolon and any variables that the function may return, if none it will be void.
Generalizations	Shown using a line from one object to the other with an unfilled triangle on one end. The object without the triangle inherits the functionality and variables from the object that has the triangle pointing towards it.
Aggregations	Lines that have an unfilled diamond on one end. This means the object with the diamond contains the object(s) without the diamond. This may have numbers on the ends (multiplicities).
Associations	Lines connecting two classes that can have a name beside it, may point in one direction, and may have numbers at the ends (multiplicities). These designate some relationship between the objects. Arrows are simply there to assist you in recognizing which direction the name of the association is read.
Multiplicities	Numbers that may be on the ends of Aggregations and Associations. They state how many of the one object can be related to the other. The first number is the minimum and the second number is the maximum. An asterisk '*' means many, so "1..*" can be read as 1 to many. If no number exists it is assumed to be 1.

User

Username : String
Password : String
Email : String
LastActivity : Time
Postal Address : String
Name : String
LoggedIn : boolean

Login() : boolean
Logout() : boolean

Manager

Customer

IsMember : boolean

Browse

Add Item

Inventory

PurchaseItem() : boolean
AddItem() : void
Reorder() : void
Email() : void

Purchase Item

0..*

Shopping Cart

PromotionAdded : boolean

AddPromotion() : boolean
Checkout() : void
AddItem() : void
RemoveItem() : void
Email() : void

0..*

Modifies

0..*

Item

Barcode : int
Price : double
Reorder : boolean
ReorderAmount : int
Stock : int

0..*

0..*

Creates

Transaction

TimeDate : Time
Username : String

Book

Title : String
Author : String

Creates

0..1

Promotion

Code : String
Percentage : double
Experation : Date

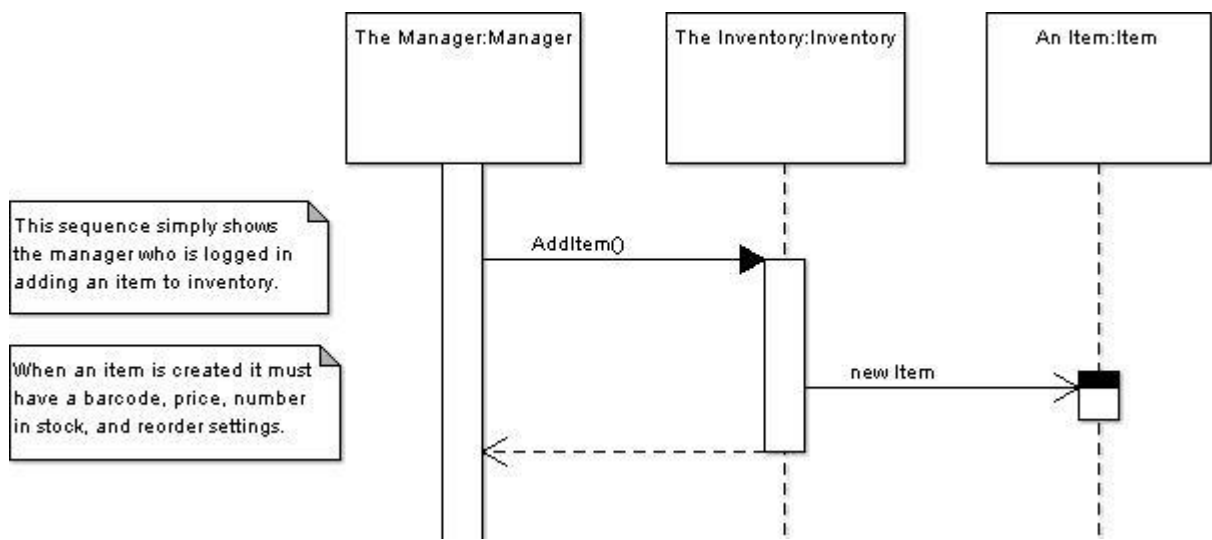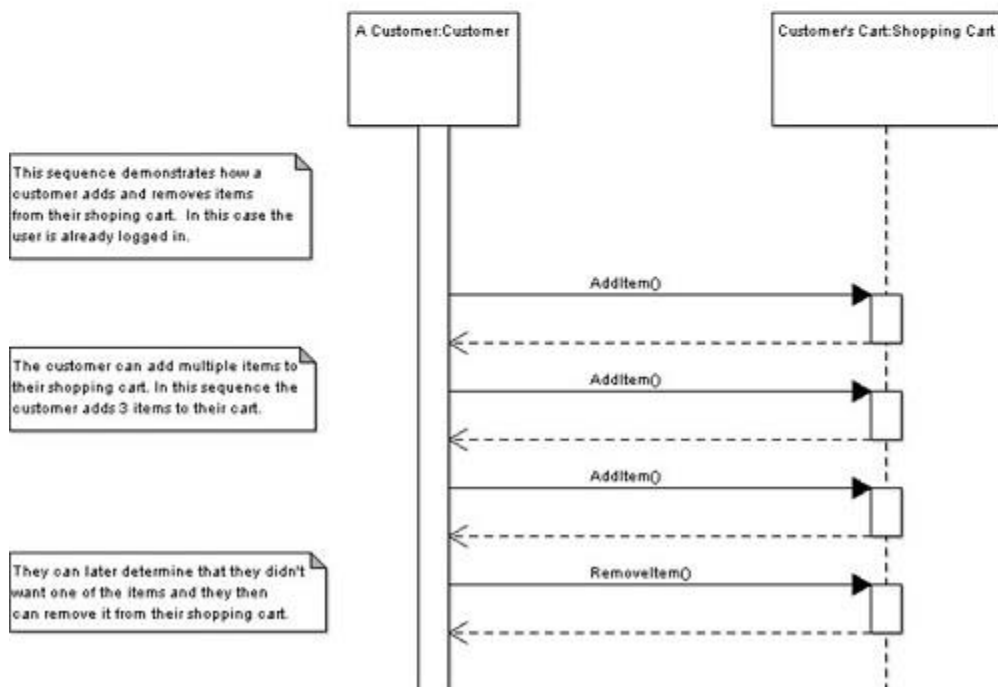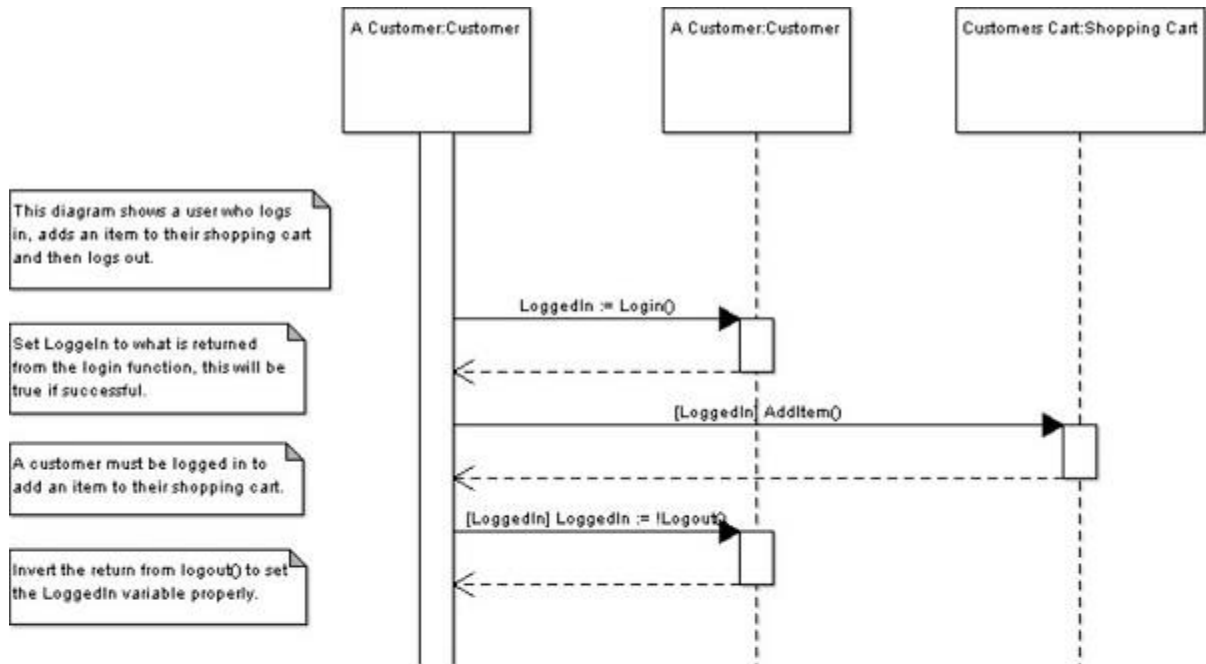Email() : void

Transaction Log

Browses

Sequence Diagrams

The sequence diagrams use the class diagram and demonstrate specific sequences of actions in the system. The purpose is to ensure that the cloudshop system runs in an expected way and that the class structure is sufficient to accomplish the tasks needed. Below is a list of the items that you will see in the diagram and their definitions.

Axis's	The x-axis identifies movement between objects and the y-axis identifies time.
Comments	These are the boxes that are along the left side. These explain the actions that are occurring in the sequence and other helpful information.
Instances	Solid boxes along the top that have dotted lines that stretch vertically below them. These are specific instances of an object. The first part of the title is the name of that specific instance and the object it is an instance of follows it. (Special Note: If there are multiple instances that have the same title then they are actually the same instance and are only there to diagram calls onto themselves.)
Calls	Lines that have filled triangles at the ends. These are transitions from one instance to another and have a label above them that is a function call, a variable being set, or both. It can also have a guard statement that precedes it.
Variable being set	Have a variable name followed by either a ':=', '+=', or '-=' and then another variable name with the first being set to the

	later.
:=	means that its being set directly to the variable that follows.
+=	means that the variable that follows is being added to the current value.
-=	means that the variable that follows is being subtracted from the current value.
Guard Statements	These are located between brackets ([])and come before the function in a call. This means that the condition must be true in order to make that call.
Returns	These are represented by dotted lines with an arrow at the end. These simply represent a return from a function call.
Object Execution Time	This is shown with the solid white boxes that run vertically along the dotted lines. These simply represent the execution time for the objects. (Special Note: the first object has a solid box all the way down this is a special case and should not be there and is due to the application used to create the diagram).

A Customer:Customer   A Customer:Customer   Customers Cart:Shopping Cart

This diagram shows a user who logs in, adds an item to their shopping cart and then logs out.

LoggedIn := Login()

Set LoggeIn to what is returned from the login function, this will be true if successful.

[LoggedIn] AddItem()

A customer must be logged in to add an item to their shopping cart.

[LoggedIn] LoggedIn := !Logout()

Invert the return from logout() to set the LoggedIn variable properly.

A Customer:Customer   Customer's Cart:Shopping Cart

This sequence demonstrates how a customer adds and removes items from their shoping cart. In this case the user is already logged in.

AddItem()

The customer can add multiple items to their shopping cart. In this sequence the customer adds 3 items to their cart.

AddItem()

AddItem()

They can later determine that they didn't want one of the items and they then can remove it from their shopping cart.

RemoveItem()

Database Diagram:

database subsystem;
This subsystem will provide the backend data processing with inputs from theGraphical User
Interface. It will store a data consisting of two tables Table Customers and Table Products.
Table Customers will store the information about the users. Table Products will store the
information about products. Both tables will be linked to the GUI via a search engine which
will
provide a means of conducting a database search, a product selection, viewing a list of
available products, viewing and managing product and user records, and managing the
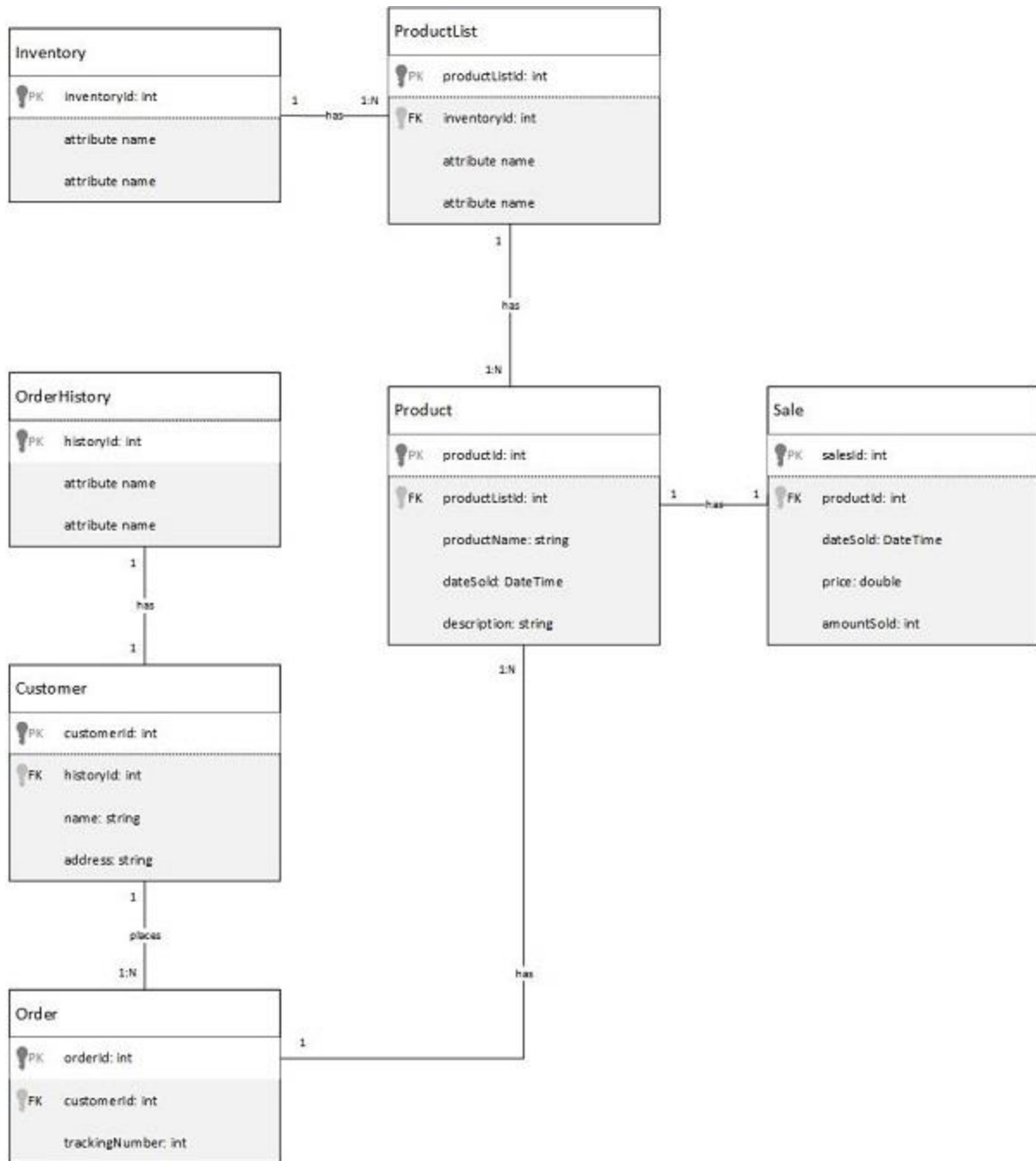inventory.
credit card authorization subsystem;
This subsystem will provide the functionality for checking the validity of a customer's credit
card
information.
user interface subsystem;
This subsystem will be the Graphical User Interface through which the user interacts with the
system.
shipping subsystem;
This subsystem will be used for processing a customer's orders and shipping.

Inventory

PK	inventoryId: int

attribute name

attribute name

ProductList

PK	productListId: int

| FK | inventoryId: int |

attribute name

attribute name

1 — has — 1:N

1

has

1:N

OrderHistory

PK	historyId: int

attribute name

attribute name

1

has

1

Product

PK	productId: int

| FK | productListId: int |

productName: string

dateSold: DateTime

description: string

Sale

PK	salesId: int

| FK | productId: int |

dateSold: DateTime

price: double

amountSold: int

1 — has — 1

1:N

has

Customer

PK	customerId: int

| FK | historyId: int |

name: string

address: string

1

places

1:N

Order

PK	orderId: int

| FK | customerId: int |

trackingNumber: int

1

Sell Configured to Ordered Products.

23

The system shall display all the products that can be configured.

The system shall allow user to select the product to configure.

The system shall display all the available components of the product to configure

The system shall enable user to add one or more component to the configuration.

The system shall notify the user about any conflict in the current configuration.

The system shall allow user to update the configuration to resolve conflict in the current configuration.

The system shall allow user to confirm the completion of current configuration

Provide comprehensive product details.

The system shall display detailed information of the selected products.

The system shall provide browsing options to see product details.

Detailed product Categorizations

The system shall display detailed product categorization to the user.

Provide Search facility.

The system shall enable user to enter the search text on the screen.

The system shall enable user to select multiple options on the screen to search.

The system shall display all the matching products based on the search

The system shall display only 10 matching result on the current screen.

The system shall enable user to navigate between the search results.

The system shall notify the user when no matching product is found on the search.

Maintain customer profile.

The system shall allow user to create profile and set his credential.

The system shall authenticate user credentials to view the profile.

The system shall allow user to update the profile information.

Provide personalized profile

.

The system shall display both the active and completed order history in the customer profile.

The system shall allow user to select the order from the order history.

The system shall display the detailed information about the selected order.

The system shall display the most frequently searched items by the user in the profile.

The system shall allow user to register for newsletters and surveys in the profile.

Provide Customer Support.

The system shall provide online help, FAQ's customer support, and sitemap options for customer support.

The system shall allow user to select the support type he wants.

The system shall allow user to enter the customer and product information for the support.

The system shall display the customer support contact numbers on the screen.

The system shall allow user to enter the contact number for support personnel to call.

The system shall display the online help upon request.

The system shall display the FAQ's upon request.

Email confirmation.

The system shall maintain customer email information as a required part of customer profile.

The system shall send an order confirmation to the user through email.

Detailed invoice for customer.

The system shall display detailed invoice for current order once it is confirmed.

The system shall optionally allow user to print the invoice.

Provide shopping cart facility.

The system shall provide shopping cart during online purchase.

The system shall allow user to add/remove products in the shopping cart.

Provide multiple shipping methods.

The system shall display different shipping options provided by shipping department.

The system shall enable user to select the shipping method during payment process.

The system shall display the shipping charges.

The system shall display tentative duration for shipping.

Online tracking of shipments

The system shall allow user to enter the order information for tracking.

The system shall display the current tracking information about the order.

Provide online Tax Calculations

The system shall calculate tax for the order.

The system shall display tax information for the order.

Allow multiple payment methods.

.

The system shall display available payment methods for payment.

The system shall allow user to select the payment method for order.

Allow online change or cancellation of order.

The system shall display the orders that are eligible to change.

The system shall allow user to select the order to be changed.

The system shall allow user to cancel the order

The system shall allow user to change shipping, payment method.

The system shall notify the user about any changes made to the order.

1.1.1 Allow Online Product reviews and ratings

The system shall display the reviews and ratings of each product, when it is selected.

The system shall enable the user to enter their reviews and ratings.

Offer financing options.

The system shall display all the available financing options.

The system shall allow user to select the financing option.

The system shall notify the use about the financing request.

Provide detailed sitemap.

The system shall allow user to view detailed sitemap.

Offer online promotions and rewards.

The system shall display all the available promotions to the user.

The system shall allow user to select available promotion.

Online Purchase of products.

The system shall allow user to confirm the purchase.

The system shall enable user to enter the payment information.

4 Non Functional requirements:
Dependencies:

USERS:

- The users will not be able to addto cart to complete transaction on any product without logging in.

- The users will also not be able to use sellit without logging in.

ADMIN:

- The admin can only modify and administer database if he is logged in as admin. This will only be done on the backend of the software from phpmyadmin software.

Dependency diagram:
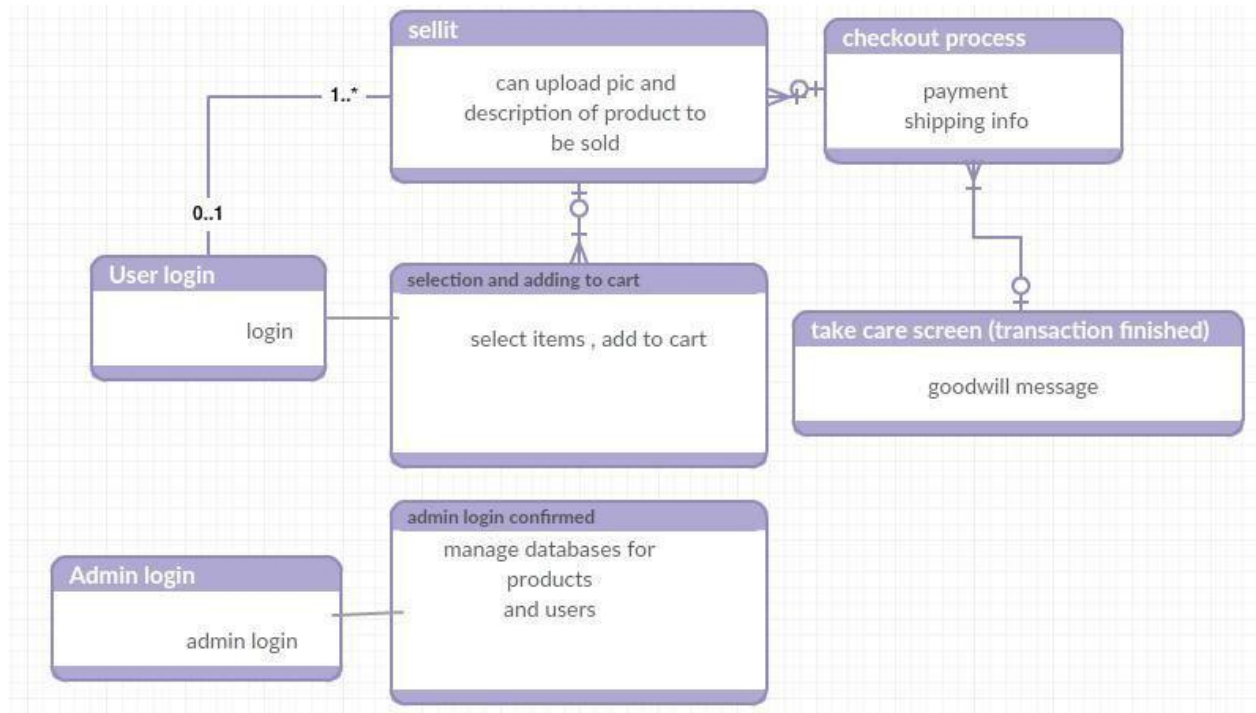
If Login as admin:
Manage Database

Performance

The product shall be based on web and has to be run from a web server.

The product shall take initial load time depending on internet connection strength which also depends on the media from which the product is run.

The performance shall depend upon hardware components of the client/customer.

Usability

1.2.1 Graphical User Interface

The system shall provide a uniform look and feel between all the web pages.

The system shall provide a digital image for each product in the product catalog.

The system shall provide use of icons and toolbars.

1.2.2 Accessibility

The system shall provide handicap access.

The system shall provide multi language support.

Reliability & Availability

Back-end Internal Computers

The system shall provide storage of all databases on redundant computers with automatic switchover.

The system shall provide for replication of databases to off-site storage locations.

The system shall provide RAID V Disk Stripping on all database storage disks.

Internet Service Provider

The system shall provide a contractual agreement with an internet service provider for T3 access with 99.9999% availability.

The system shall provide a contractual agreement with an internet service provider who can provide 99.999% availability through their network facilities onto the internet.

3.1.4 Major constraints

Product Constraints

The software needs to be designed in a user-friendly manner to ensure its competitiveness and effectiveness. Since this will be a website where transaction takes place, security measures have to be taken to stop code injection and malicious applets.

Time Constraints

There is only a limited amount of time. The software will have to be delivered by the 2nd week of april. So, it will require regular coding as per scrum based code and fix and gradual completion of modules.

Hard drive space and memory usage:

It will be a website base software so hard drive space and memory usage will be minimum. However a wired connection is preferable since there is server side scripting and transaction modules.

4.2 Security

4.2.1 Data Transfer

The system shall use secure sockets in all transactions that include any confidential customer information.

The system shall automatically log out all customers after a period of inactivity.

The system shall confirm all transactions with the customer's web browser.

The system shall not leave any cookies on the customer's computer containing the user's password.

The system shall not leave any cookies on the customer's computer containing any of the user's confidential information.

4.2.2 *Data Storage*

The customer's web browser shall never display a customer's password. It shall always be echoed with special characters representing typed characters.

The customer's web browser shall never display a customer's credit card number after retrieving from the database. It shall always be shown with just the last 4 digits of the credit card number.

The system's back-end servers shall never display a customer's password. The customer's password may be reset but never shown.The system's back-end servers shall only be accessible to authenticated administrators.The system's back-end databases shall be encrypted.

- The most important security concern is the sound operation of the payment system. SSL will be used to ensure this.
- The system will be PCI compliant

- PHP is a server side scripting language. That means it is invisible on the to the client side.

- Data encryption will be done so that there is not phishing or code injection to intercepted data.

- Less records will be kept on CVV2 [card verification value].

- The website will be handle user info. With utmost confidentiality.

- Data will not be sold to third parties for commercial reasons

4.Testing Phase

The approach to software validation is described.

4.1 Tests

Function:

1. Log In

    a. Member – enter Name and Password

    b. Join – click to open new account

    c. Guest – click to view sight as guest

2. Browse – click category, sub category, est.… until at desired level of goods criteria

3. Search

    a. Title – enter title of desired Product

    b. Brand – enter Brand of desired Product

    c. Keyword – enter a keyword describing subject of desired Product

    d. Code – enter Code of desired Product

4. Select – click desired Product

5. Purchase – click Purchase button on selected Product

6. Check Out – click Check Out button

7. Credit card Validation – click to submit credit information

8. Log Out – click Log Out button

4.2 Expected software response

1. Log In
    aMember – all information stored about user is loaded
    b. Join – directed to registration form
    c. Guest – sight is entered with all customer default values
2. Browse – chain of commands are followed till desired Products are listed
3. Search
    d. Title – displays Product of specified title
    e. Brand – displays product of specified Brand
    f. Keyword – displays Products with specified keyword in their keyword bank
    g. Code – displays Product of specified ISBN
4. Select – brings up all existing information on that particular Product
5. Purchase – adds Product to shopping cart
6. Check out – asks for payment and delivery information
7. Credit card Validation – information sent to bank and verified
8. Log Out – clears registry of all user information and returns to home page

4.3 Performance bounds

Internet connection speed

- ➠ **Directly upload the code to check it is validate or not in W3C Validation Services**
- ➠ **Load Impact – how much time it takes.**

Features Implementation:

Ease of Use

This comes from the old K.I.S.S. adage about keeping it simple. Simplicity should be a goal in good design and you don't have to sacrifice elegance to achieve it. As a matter of fact, studies show that 76% of consumers say the most important characteristic of a website is ease of use.

The objective is to help shoppers get to what they want, faster and without running into unnecessary complexity that can clog up the path to purchase.

Online sellers have minutes, if not seconds, to make a sale. Focus on the user experience by providing shopping categories, filters, and comparison capabilities. Consider easy-to-find customer reviews and FAQ information to help buyers make decisions more quickly.

E-commerce sites should be a competitive advantage instead of a troublesome experience.

High-Resolution Photos and Video

Gone are the days of posting one photo with a few bullet points and a price tag. Shoppers want to see multiple angles and people using the product in different environments. They want to be able to zoom in and get a feel for the product.

Technical considerations for images are crucial. Images that don't load or take too long to load will see a consumer drop-off rate of 39%, according to Adobe.

Images sell, not text. E-commerce websites should display multiple photos per product. The photos need to be high-resolution and optimized for page load.

1.2 Mobile-Friendly Website

Google declared it, so it must be done. All websites are required to have a mobile-friendly version by 2017 or suffer the SEO consequences. If this isn't reason enough, one in three online purchases is completed on a smartphone.

With a responsive website, content intuitively adapts to whatever device is accessing it to provide the most user-friendly experience. Shockingly, many sites still have not adopted a responsive or mobile version.

User-Generated Reviews

Shoppers read reviews. About 92% of them, in fact. The [star rating on a product is the number one factor](#) used by consumers.

You might think that having negative reviews is a sale killer. The opposite is actually true. Having negative reviews can often be a positive. It's shown that products without negative reviews are seen as censored and, in turn, shoppers will assume the positive reviews are fake.

Depending on website functionality, e-commerce sites can use plugins from the most popular review platforms including Yelp, Foursquare, and Facebook.

Forward-thinking e-commerce sites, like Paiwen paddleboards, are using reviews as user-generated content to drive social proof and build raving fans.

Special Offers

Most e-commerce sites are using special offers in their standard marketing practices via email, social, text, etc. Next-level e-commerce sites take advantage of the prime real estate in the header section to promote special offers.

When shoppers realize they're getting a special deal, it motivates them to buy more and spend more time searching the site.

If e-commerce sites are using ongoing promotions, providing a unique webpage that lists the offers will not only drive more sales but also improve SEO. Consider the shopper searching "zip code + toyota special offers" and the value of that organic search result.

Wish Lists

Oh, how I love wish lists. One for fashion, one for books to read, one for holiday gift ideas. Shop, save, and share!

E-commerce sites that aren't using wish lists are leaving revenue on the virtual desktop table. What's better than having customers bookmark items they want and will most likely buy in the future? That's just gold in the pocket. And a remarketing campaign dream.

It's also an opportunity to share a brand with new buyers. When shoppers share their wish lists with family and friends, it sends FREE traffic with built-in social proof to a website.

Find-in-Store

Not all e-commerce sites have brick and mortar stores. However, those that do must have a find-in-store feature. Sometimes you don't want to wait for an item to ship. Instant gratification.

Shoppers are going online just to research and then complete the purchase in person. This is especially true for millennials, as 72% of young shoppers research online before purchasing in a store.

This makes it incredibly helpful to see which local stores have products in stock.

Related Items

Simply seeing the phrase, *"you might like this"* causes a serotonin release signaling curiosity and excitement. A related items feature on an e-commerce site creates the desirable stickiness effect that so many marketers strive to achieve.

It happens like this. You saved the AeroPress coffee maker to your shopping cart. A section emerges that says, "you might like this". Would you like some freshly roasted, fair trade whole coffee beans? Maybe a digital scale to measure the exact amount of coffee grounds to achieve the perfect cup of coffee? You get the picture.

When an online seller uses a related items feature to sell more, it's actually signaling to the buyer that "they get me".

International Search Summit Boston | October 30, 2018
Discover insights for increasing ROI from your global SEO and PPC.
REGISTER NOW

Related items can also include similar product categories to comparison shop, "people who bought this item also searched for", and so on.

Frequently Asked Questions (FAQ)

Complex purchases require confidence with a seller and detailed information when buying products online versus face-to-face.

At Forthea Interactive, our client, Fine Watch Bank, sells expertly crafted high-end watches. The company's buyers need confirmation of watch authenticity and detailed product information to feel comfortable when making a purchase. An additional information section details frequently asked information, which establishes credibility and builds confidence with the buyer.

FWB
Fine Watch Bank

From a private collection. A very rare and exceptio
From the Cartier fine watchmaking collection, the
XXL 18ct rose gold tortoise-inspired case, it is held
gold folding clasp. The watch is fitted with a mech
movement. Perpetual calendar functions showing
silver with grey guilloche sunburst effect and trans
and the watch is fitted with a sapphire crystal glas

IN STOCK

Interested in this product?

Tell us where you're shipping to:

$50,000.00

DESCRIPTION	ADDITIONAL INFORMATION	REVIEWS (0)	CONTACT US

Model	W1580045
Bezel Type	18ct Rose Gold
Bracelet Material	Genuine Brown Alligator
Case Material	18ct Rose Gold
Case Size	XXL
Dial Type	Silvered Open-Work Guilloche Roman Dial
Discontinued	Discontinued
Gender	Gentleman's
Grading Style	AAA – Exceptional
Movement	Automatic Self-winding
Range	Men's Fine Watchmaking
Sealed	No
Water Resistance	30 Meters

FAQ sections also provide a self-help area to address common customer problems. Buyers often ask about product support, returns, lost account passwords, etc.

Social Proof

Brands and online sellers that connect with their buyers on an emotional level create brand trust and advocacy. Social connection is undeniable and the opportunity to bond with an audience is easier now than ever. Linking social profiles and user-generated content with an e-commerce site are must-have features that will give online sellers brand character.

Shoppers are inundated with a constant flow of "buy now" and "get this". It's those brands that engage with customers socially that create customers for life. They are offering products that help others and that people care about.

Social media allows e-commerce brands to show authenticity and associate an emotional connection with their products. Look at Nike's Pinterest account to see how incorporating products with motivational images makes a huge impact. See how Ikea uses user-generated content to share design ideas and inspiration for how to use its products. Check out how Lowe's produces how-to videos that teach people how to use its products.

Security Features

Online transactions are an integral part of our lives. As such, e-commerce websites can be a lucrative target for cybercriminals. It's crucial that online sellers protect customer information and take steps to ensure privacy.

It all starts with a secure e-commerce platform. With their sophisticated security features, it's no wonder that Magento and WordPress paired with Woo Commerce are the top two platforms for online sellers.

Other must-have e-commerce security features to consider are:

- SSL certificate: establishes secure connectivity between a user and the website. Look for HTTPS and a green lock in the address bar before trusting an online store with your information. Select an SSL certificate vendor with name recognition. The enterprise e-commerce giants almost always use Symantec.

- Two-factor authentication: adds an extra layer of security by requiring username/password and a system-generated code sent via email or text.

- Use a firewall: provides a gateway or wall between two networks and permits authorized traffic and blocking malicious traffic.

- Privacy policy link in footer: addresses the website's privacy policies and promises customer data is not shared with third parties.

Advanced Payment Options

In the world of Apple Pay and PayPal, advanced payment options are a must-have feature for an e-commerce site. Just consider the ease of use associated with Amazon one-click shopping. Shoppers with registered accounts can literally buy with the click of a button.

There are many [popular online payment options](). The key is understanding who the buyer is and implementing the most effective solutions. If a website is limiting payment options, make sure to explain why.

For example, an e-commerce site may not offer Bitcoin as a payment option after determining its value isn't reliable. If buyers are technology-savvy individuals who tend toward this payment method, it's important to be transparent as to why it isn't an option. This transparency establishes that the brand understands its buyers and builds trust.

Detailed Shipping Information

Alarmingly, unexpected shipping costs are the number one reason for shopping cart abandonment. It's critical that e-commerce websites include shipping information early in the checkout process, including a zip code calculator showing cost. It's also helpful to include delivery time and options for faster delivery. Sites should list countries that are outside normal shipping zones.

Interestingly, shoppers spend 30% more per order when free shipping is included. Be sure to present codes for free shipping on all pages of the site through the header navigation, if applicable.
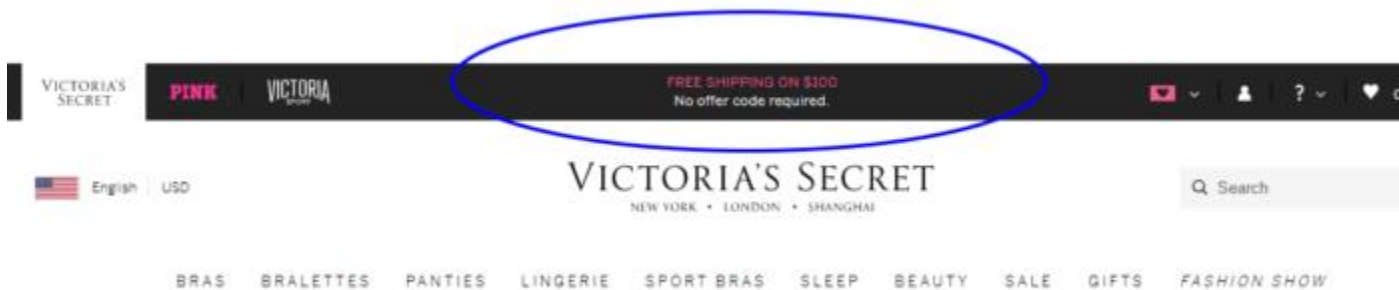
Multi-Touchpoint Contact Page

When it comes to running an e-commerce site where most business takes place online, nothing builds trust more than an overly obvious and well-presented "contact us" feature. This is especially true when selling high-end merchandise or technical products.

Never make it hard for a buyer to get in touch or request support. Consider the contact page a feature of the website. Include multiple ways to reach out, including phone, email, and an online form. Some companies with brick and mortar stores offer online appointment setting via their contact page. Be sure to add customer service social links and Google maps for locations.

Return Policy

Return policies are an essential feature of any e-commerce website. The stats below really speak for themselves, but a return policy should be clearly visible and well-written or illustrated. This is another trust-building feature of online selling. It reassures buyers that if they are unhappy or just need a different size, the brand is there for them.

A 2016 infographic and survey by Invesp shows:

- At least 30% of all products ordered online are returned.

- 92% of consumers will buy again if product return process is easy.

- 67% of shoppers check the returns page before making a purchase.

These must-have e-commerce site features could be grouped into categories like Duh, DOH! and Ahhh. Marketers and web designers might say "duh" when it comes to incorporating ease of use, high-resolution photos, security features, and contact information. As they are best practices and trademarks of good design.

There are others who would say "DOH!" when considering elements like special offers, user-generated reviews, and social sharing. They know they should be using these features but just haven't gotten around to implementing them. It's never too late!

Finally, the "ahhh" moment when you get excited about planning for robust related items, shareable wish lists, and find-in-store features.

No matter what category you're in, e-commerce sites have an incredible opportunity to use tried-and-true features blended with innovative new elements to create fantastic shopping experiences.

User Manual and GuideLine:

E-commerce has, for the most part, evolved far beyond the late 1990's cliches of hair-wrenching, sanity-shattering slogs through yet another "clever" designer's take on how shopping on the web should be. Standards prevailed, usability won out, and we're now free to spend our collective $107 billion (Census.gov e-commerce stats) per annum.
That said... It can still get better. Online shopping is in, if not infancy, at least a toddler stage. The advances that brought us here have made the process simpler and easier than ever, but some sites still haven't caught on.
Since I've been doing an inordinate amount of online shopping recently (thanks to the theft last weekend and my upcoming lengthy trip to China), I feel uniquely qualified to share a few e-commerce site design tips - 17 tips, actually. Enjoy.
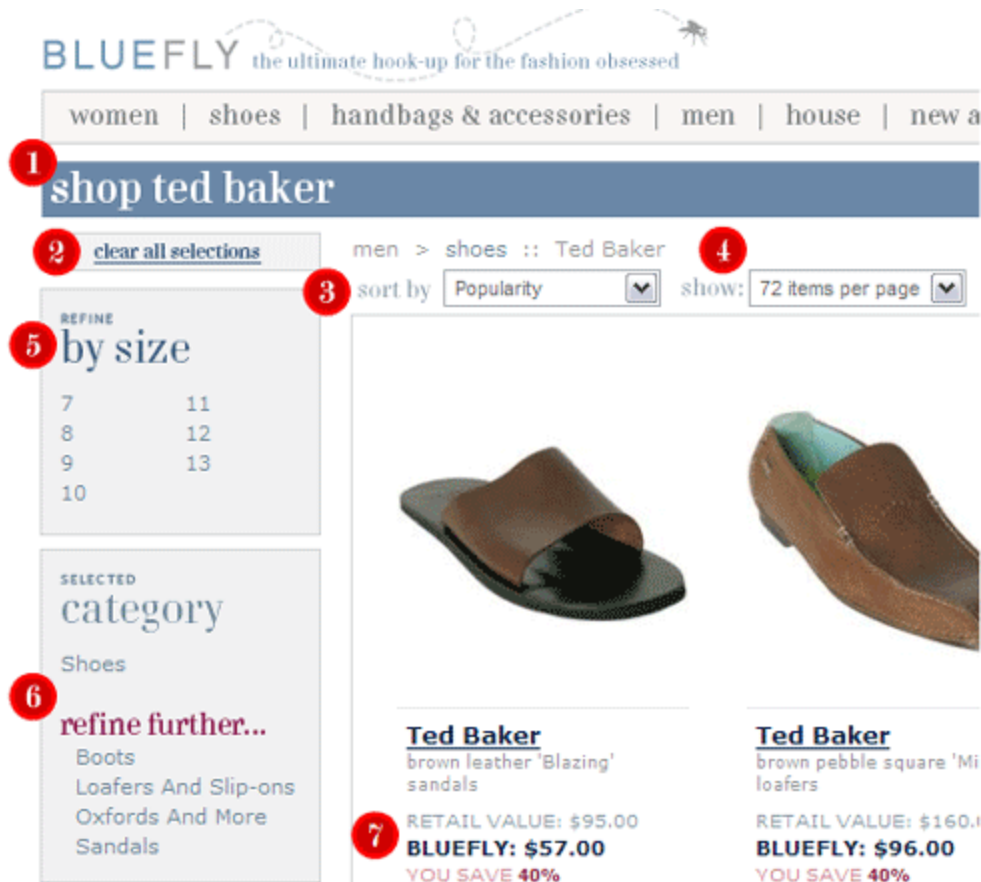
#1 - Tell Me Where I Am

Whenever a user is navigating inside a store with more than 1 sub-level of navigation, it's critical to show them where in the site structure they are. This should be accomplished with headlines, sub-headers (when necessary) and breadcrumbs (e.g. Home > Category > Sub-cat > Product).

#2 - Let Me Remove Narrowing Options

When a user starts to "narrow" their navigation inside a particular category (in this case by selecting the designer "Ted Baker"), it's only right to allow them to remove those navigation selections rather than forcing the use of repetitive "back button" clicks.

#3 - Allow Me to Sort Every Which Way

The standards are "Price - low to high," "Price - high to low," "Popularity," aka "Best Selling," "Featured," "User Rating" (or "Editor Rating" if you don't have users rate products), and "New" or "Latest." You can eliminate "Featured" if you've got nothing to push, but all the other sorting options must exist (assuming it's possible to do so).

#4 - Show Me the Products

Unless you've got more than 200 products total in a sub-category, it's only right to offer the user the option of seeing every product on one page. Broadband has rendered the load time argument nearly irrelevant and I personally (along with Mystery Guest) can't stand sites lacking the feature.

#5 - Refining Options Bring Joy

If you can provide the user with a useful refinement option, you've made their experience

better. In the instance of sizing, this is particularly important, as users loathe finding that "perfect" piece of apparel, only to discover you don't carry it in their size.

#6 - The More Specifics, the Better

Rule #6 is so worthwhile, I'm repeating it. Actually, #7 serves to illustrate a substantive difference between refining your browsing in a section (as #6 shows) vs. navigating to a new sub-category. Offering the latter as an option where relevant and valuable (and when the number of items warrants it) is a wise decision.

#7 - Tell Me What it Costs & What I'm Saving

Some product category pages shows items without the detail users are craving. It's particularly important for discount sites (anything off MSRP helps conversions) to show pricing, but nearly every website can benefit from providing an extra bit of detail before the click to the product page. Tell them materials, give a tiny description or list the sizes/colors/options you have in stock.

1.2.3

—

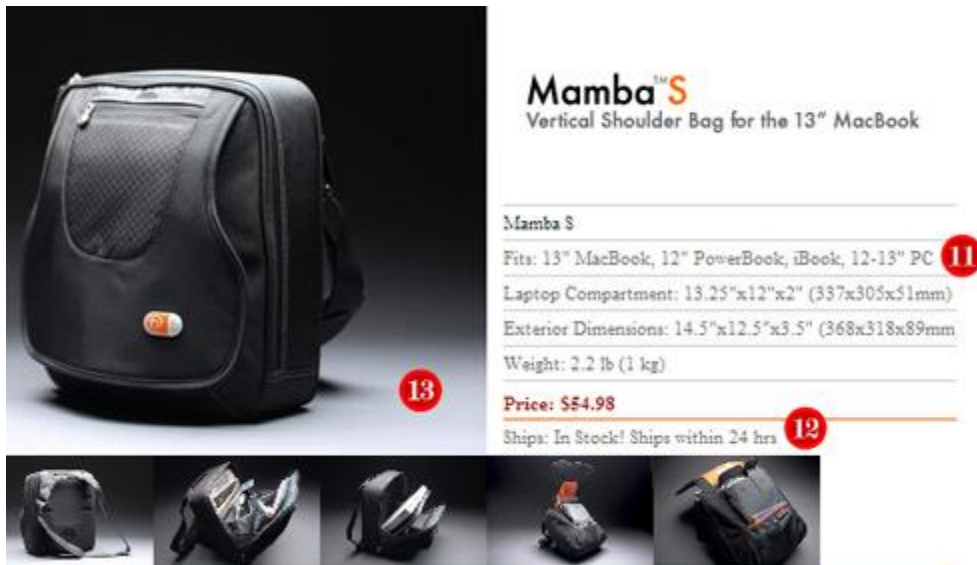*1.2.4* *#8 - Keep the Search Bar in Easy Reach*
When a search has been performed, don't just show the search and the results, do like the engines and make the search bar front and center, while maintaining the user's query in the box for potential modification.

1.2.5 *#9 - Give Me Search Refinement Options*
If you have an advanced searching system, or can allow users to select prices, options, colors, sizes, models, etc, do it. Your bottom line will thank you - users often rate "search" as the most frustrating part of many e-commerce sites (apologies for not having the study to cite here).

1.2.6 *#10 - Get as Close As You Can Get (while staying relevant)*
In the example above, eBay has done a masterful job showing which queries would have produced results. This advanced technique should be a wake-up call to others.

—

Mamba™ S
Vertical Shoulder Bag for the 13" MacBook

Mamba S
Fits: 13" MacBook, 12" PowerBook, iBook, 12-13" PC
Laptop Compartment: 13.25"x12"x2" (337x305x51mm)
Exterior Dimensions: 14.5"x12.5"x3.5" (368x318x89mm)
Weight: 2.2 lb (1 kg)
Price: $54.98
Ships: In Stock! Ships within 24 hrs

**#11 - Share the Critical "Fit" Information**
Many products are designed to "fit" certain criteria, whether it's a laptop (in this case) or a human body (with clothes) or another piece of equipment (when compatibility matters). In every instance of potential matches, show the critical information in the product details. I can't tell you how many laptop bag sites I browsed before finding this one that actually showed which laptop sizes it was intended for.

#12 - Tell Me If You've Got It
There are still sites out there that let you click "add to cart" or even "checkout" before discovering the awful truth - no more of your SKU in stock. It's the kind of experience that will lead you to permanently switch e-tailers.

#13 - You Can Never Have Too Many Photos
Since you don't get to see the item in real life, photos, reviews, videos and even fancy, 3D interfaces (where appropriate) are invaluable to helping the user feel like they've "experienced" the product prior to purchase. One photo, from one angle, sent by the manufacturer to every online store doesn't cut it. Go above and beyond the call of visual duty and conversions will skyrocket - links might, too.
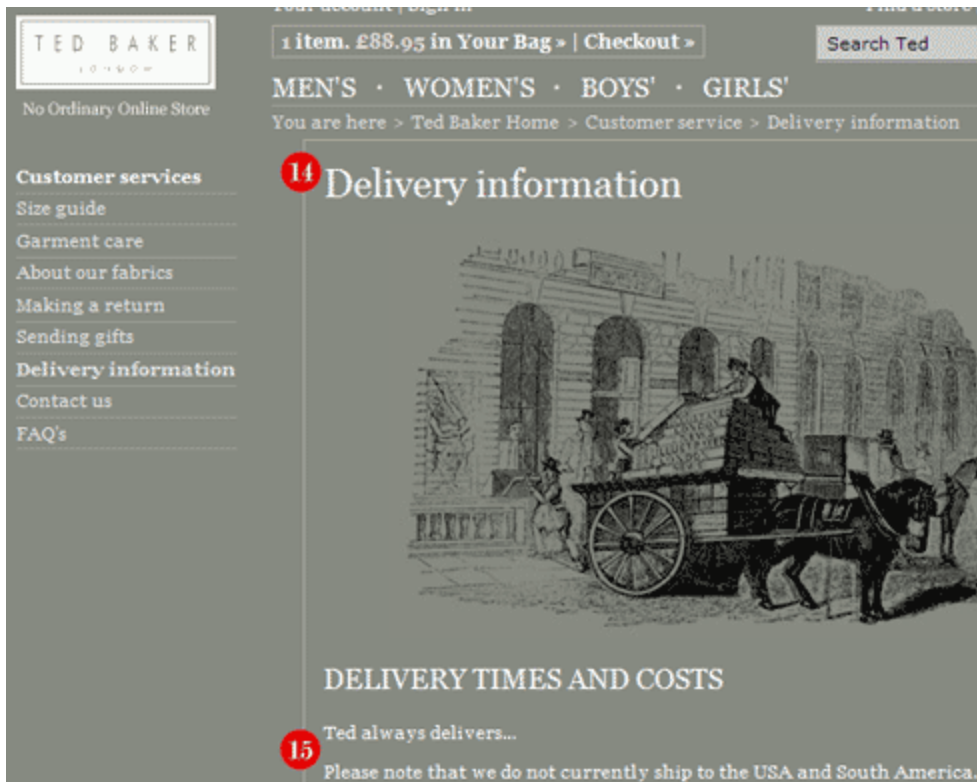
#14 - Let Me See Delivery Options
There is a certain subset of users that has to see the delivery options before they start shopping. Older generations often fit this stereotype, but those baby boomers still have a lot of online spending years to go, so don't ignore them. It's best to make the link obvious in the permanent navigation (it's most customarily at the bottom of each page).

 # 15 - If You Won't Send it To Me, Tell Me Who Will
In the example, Ted Baker is refusing to sell me the $200 dress shoes I want, but what's worse is that he won't tell me who will ship them to his old colony. I ended up finding them on Amazon.com, eventually, but Ted's losing out on his commission with them by not providing the link (and if I wasn't so dedicated to the brand, he'd probably lose the sale, too).

Shipping Information

Delivery Contact:	Rand Fishkin
	SEOmoz.org
Delivery Phone Number:	(206) 6323171 (work)
Delivery Address:	4314 Roosevelt Way NE
	Seattle, WA 98105
Shipping Method:	**16** 2nd Business Day Delivery

Order Detail

Item Description	Unit Price	Quantity
XPS M1210 STD: 1Yr Ltd Warranty and On-site Service	$0.00	1
XPS M1210 Notebook: Intel Core 2 Duo Processor T5600 (1.83GHz/667MHz/2MB) Genuine Windows Vista Home Premium **17**		1

XPS M1210 Notebook: Intel Core 2 Duo Processor T5600 (1.83GHz/667MHz/2MB)

#16 - Reassure Me With Email

I panicked earlier tonight when I realized the replacement laptop I ordered may not have been shipped quickly enough to arrive in time for my trip to China (and no one wants to spend 28 hours on planes without a lappy). Luckily, Dell's order confirmation proved that I'd chosen wisely. Replicate this experience for your own customers, rather than leaving them in the dark (or, worse, crowding up your customer service dept. with e-mails that could have been answered in an automated fashion).

#17 - Give All the Order Details ASAP

When you send out order confirmations, make sure to include all of the product details to re-assure the buyer that they've selected properly. If I accidentally ordered the size 9 instead of size 8, I want to be able to fix it before the package arrives.

Hopefully, these techniques will find their way to your e-commerce sites, and when they don't, you'll grab the project manager and point them to this blog post. Together, we'll make the Internet an even better place to shop.

Project Management

Github link: https://github.com/Dip-Ghosh/Online-CloudShop