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| **FPT-aptech computer education** |
| eProject Document |
| [BookStore] |
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| - Hanoi, <6>/<2013> - |

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# Introduction

* Book Store is general book stores .His book stores span across entire India with his daily bussiness running into thousands of dollar .Shradha Book Store boasts to be one of the finest collectors of books in India. Shradha Book Store contain books on a lot of different genres.They provide book travel,children,fiction,cookery,technical subjects,philosophy,sports,autobiographies,spirituality and so on.
* With the recent advent of Internet revolution,Everyone are developing e-commerce Web sites for different resaons: to reach new customers,to stay abreast with their competitors,and to meet their customers’ expectations and needs.This has resulted in more and more people buying commodities through the Internet.
* Hence,to cope up the dynamism in the market, he(Shradha) has now decided to launch a Book Store Online .This Web site would enable the customer to search his/her favorite book and shop for it.

*>*

# Problem Definition

## Problem Abstraction

Our client is a retail dealer for the books and sells the books at his shop

Shradha General Book Stores . He sells different types of books of different

publications of stories, school related text books, note books, essay writing books,

some of books for the competitions like General Knowledge, Essay Writing, and also

novels, books to improve vocabulary, for learning other languages, etc and also he

sells some of the book related materials like covers, pens, pencils, etc .. Also the

slam books, Files, etc . are available at his shop.

## The Current System

Actually the client deals directly with some of the publications for purchasing the books, and for some of the publications he purchases the books through the other

dealers. Also some of the dealers and the book sellers purchase the books from our

client. The customers either visit the dealer or call him for purchasing. Similarly is

the case with the client.

Because of no automation in the system, the orders placed get delayed, due to

which the customer dissatisfaction happens. Also in this competitive world where the

number of publications and the dealers are increasing, it becomes difficult to retain

the customers.

In order to retain the customers, he has placed some of the discount schemes

such as if the customer places an order in bulk then that customer can get the

discount based on the quantity of orders. Also he has provided a home delivery

which will be free, provided the distance is < 3 KMs and for the distance > 3 KMs,

the charges are as per the delivery charges as per the service chosen.

## The Proposed System

To bring the Automation in the system and to cope up in this competitive world, our client now want to incorporate an online sale system where the customers can directly interact and place their orders through online itself. So he has approached us for developing the website. He wants the following list to be maintained and

implemented for the website.

**Non-Financial :**

* He wants the website to be navigated through different pages like contact information, About Us (information about the dealer),Products (Books,etc),FAQs, Order Tracking, Buying a product, Feedback and Queries and the ADMIN.
* For the Products there should be information categorized based on the categories like Books, Magazines, Files, CD s, DVD s, Utilities like Pen, Pencil, Paper,Sketches, etc. and the sub categories based on the Publisher, type of the Products (like for books novel, Magazine, etc ., for CD s readable or rewritable, etc and similarly is the case with the other products)
* Also for the products like books, CD s, DVD etc . the details like the manufacturer, price, and the type of the product (like for CD s it will be readable or re writable) should be indicated
* For the Books like Novels, Preparation books like learning vocabulary, General Knowledge, etc the brief description is to be included (like What is the book all about and for what it is used, Author Name, Publisher Name, Release Date,Version, etc .)
* The products to be assigned with a unique seven digit code, which will be as follows :

1. The Category of the Products (like Book, Magazine, Files, CD s, DVD s, etc utilities etc ) are to be assigned with the Unique 2 digit alpha numeric code (first being Alphabet and the second one being the Numeric digit)
2. The subcategory of the Products are to be assigned with a unique 5 Digit Code (First three Digits being the first three acronyms of the Manufacturer and the remaining two being the Numeric digit) so as to separate the different products being manufactured by a single manufacturer (like if a manufacturer Ab Cd manufactures products X and Y , then the Code for X can be AC001 and for Y it can be AC002 , where AC0 is representing the manufacturer, AC being the first two acronyms of the manufacturer and the digit zero being added as the third one, as the manufacturer is having only two acronyms, and the remaining two will be the numeric order, which can be in the order you maintain the list of the products of that manufacturer).

* The details of the Products should be easily inserted, updated and deleted.
* The admin alone will be able to insert, update or delete a product. So there should be a login for the Admin.
* When one places the order, the order number is to be auto-generated and the code will be a unique 8 digit code, which will depend on the serial order of the receipt of the booking (order placed).
* Also one can track the order through the Order Tracking link in the Navigation bar. Also in this page alone one can cancel or update an order based on the conditions applicable.
* And One can provide a feedback and also can post their queries through Online through the Link Feedback and Queries in the navigation bar.
* In the Feedback and Queries and the Order Form (available when a product is chosen for placing an order i.e., Buy a Product page) page the Email id will be taken for further conversation.
* When an Order is to be Placed, i.e., in the order form, the following Message is to be displayed Apart from the Product Charges, the Delivery charges will be Nil, if <3 KMs and if >3KMs is as per the Delivery charges based on the type of the delivery chosen.
* As per the orders received, the customer details is to be maintained so as to track the details of the orders placed by that customer and as to know the status of the order.
* The payment is of three types:

1. Payment before delivery (Note : where the customer need to send a Demand Draft of the total bill so as to receive the order)
2. Payment after Delivery (Note : Payment to be done at the time of receipt of the product). It can be done in two ways, either payment through cash or payment through cheque.
3. Online Payment (Note : This payment is through the Credit Card, and the order will be dispatched only after the payment is being processed by the respective bank)

* The FAQ s Should consist the Following :

1. Will there be any charges for the delivery apart from the products ordered?
2. How many days will it take to deliver the order? (Ans : Depends on the Order,Quantity and Stock and as well on the payment type chosen, as if the payment option chosen is payment before delivery, then the order will only be dispatched after the receipt of the payment.)
3. What if the order delivered is not in proper condition? (Ans : If the order delivered is improper, it will be replace with the other)
4. Can an Order be cancelled? If yes, will there be any charges? (Ans : Yes, but if cancelled with in 24 Hrs. there will be no charges, but if cancelled after 24 Hrs. and if the Order is being dispatched the Delivery charges for the to and fro is to be bared by the one who has ordered).
5. How can the payment be made?

**Financial :**

The charges for the delivery will be as per the distance and the quantity ordered

and will be only the delivery charges and the total price of the products ordered. In

case of any cancellation, the charges will be the delivery charges (to and fro) alone.

Also the delivery charges are applicable only if the distance is >3 KMs.

## Boundaries of the System

Depending on the decision taken by the team,following are the requirements based on which the Web site needs to be developed:

**Functional Requirements:**

1. The Admin should alone be able to update or insert or delete the details of the

products and the order and as well that of the FAQ s.

2. The admin should alone be able to reply to the feedback and Queries that are

posted by the customer.

3. Auto generation of the unique 8 digit Order Number and based on the series

of the order received.

4. The products to be assigned a unique seven digit code based on the

manufacturer and the category of the product and as well based on the serial

order of entry of that particular product.

5. The feedback and query page to collect the feedback and queries of the

customer.

6. The Order tracking page, where one can track the status of the order and as

well cancel or update an order

7. Creation, maintenance and updating database, which contains

* Details of the Products.
* Details of the Manufacturers.
* Details of the stock available.
* Details Orders (included order details and the Delivery details).
* Details of the Payments based on the Order and Products and the
* Distance of delivery.

8. The billing for the order is to be calculated taking into account the Order

quantity, type of the product, and the Distance of the Delivery.

## Development Environment

*<* Following current scenario,we will develope a Web site named ”[www.shradhabookstores.com](http://www.shradhabookstores.com)” using ASP.NET and MS SQL Server 2008 & MS SQL Server 2012.The Web site authenticates the existing user by his user name and password.The Web site has a registration page where a new user can enter his personal details in the given fields.The user details get stored in the database and the database containig details of existing users gets updated.

After the user authenticated,the list of available books along is displayed.The Web site contains a form that allows the user to purchase the selected book by accepting the details such as Shipping Address,etc.For any queries and suggestions,the user can interact with the Web site coordinator through the given email address.

**Hardware Requirements:**

|  |  |  |
| --- | --- | --- |
| No. | Items | Description |
| 1 | CPU | Pentium IV CPU 2.80 GHz or better |
| 2 | RAM | 512 MB of RAM or better |
| 3 | HDD | Minimum 4 GB |

**Software Requirements:**

|  |  |  |
| --- | --- | --- |
| No. | Items | Description |
| 1 | Operating System | Windows 7 or 8 |
| 2 | Database | SQL Server 2008 |
| 3 | Browser | Firefox or Chrome |
| 4 | Other software | Windows Installer 3.0 or later, Internet Information Services (IIS) 7.0 or later, Visual Studio 2010, Microsoft .NET Framework version 3.5, Ajax Extender For Visual Studio 2010 |

**Scope of the Work (in brief):**

* A GUI containing text boxes, buttons, drop-down list boxes, labels and hyperlinks, which provide a user-friendly interface to the user to work with the web site.
* Allow customer to add, update and delete items in the shopping cart.
* Allow customer make payment through 3 types: payment before delivery, payment after delivery, online payment.
* Generation of invoice (bill) after successful purchase of a book.

# Requirements and Business Flow

## Customer Requirement Specification

* This Web site aims at providing the customer with searching a book for their favorite category and subsequently shopping for it.The Web site would also enable the customer to place a request for a book.Additionally,the Web site should provide the following factors to the customers for better usability:
* Flexible and easy scanning and selecting books from the Web site
* Consistent layout of the Web site
* Returning to different parts of the site after successfully adding an item to the shopping basket.
* Minimal and effective security notifications
* Simple navigation features from the home page to other web pages
* Provide three payment method delivery

***Inputs provided by the Client:***

* Inputs fot the Web-based application
* Outputs form the Web-based application
* Processed involved in the Web-based application
* Expected purchasing order

## Activity Diagram

*<Business processes should be modeled carefully. Use activity diagrams to show important businesses. Focus on non-trivial ones>*

## Use Case Diagram

*<Put here the overall use case diagram. If the system can be partitioned into several sub-systems, you can use multiple diagrams to show the overall functionalities of the system>*

## Use Case Specification

*<Write down all non-trivial use cases. This should reflect what you get when your team does the system analysis. Use the template to write the detailed specification for use cases>*

*<Use case temlpate:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | <UC001> | **Use-case Version** | | <1.0> |
| **Use-case Name** | <Name> | | | |
| **Author** | <Members> | | | |
| **Date** | Dd/mm/yyyy | **Priority** | <High\Normal\Low> | |
| **Actor:**  <Lit all actors>  **Summary:**  *<Briefly describe the use case>*  **Goal:**  *<Briefly describe the goal of use case>*  **Triggers**  *<What leads this use case?>*  **Preconditions:**  *<List the required pre-conditions for this use case>*  **Post Conditions:**  *<List the required post-condition for this use case>*  **Main Success Scenario:**  *<List the main steps for this use case to reach the goal successfully >*    **Alternative Scenario:**  *<List the other steps for this use case to reach the goal in some alternatives condition >*  **Exceptions:**  *<list the exceptions of this use case>*  **Relationships:**  *<List the relationships that use case relates to>*  **Business Rules:**  *<Any concern about the business>* | | | | |

## Other Concerns<Optional>

*<You can list here all other concerns about the business or the requirements if needed>*

# Design

*[This section shows design of the system. This could be a part of the Developers Manual]*

## System Architecture

*<Explain and present the architecture of the system using texts or diagams>*

## Class Diagram

*<Provide class diagrams for the project>*

## Class Diagram Explanation

*<Provide brief explanation about the class diagram above. You do not need to explain “obvious” parts of your class diagram. For example, I know what a “Login” class is. Don’t say “The login class was created to store login information.”>*

## Sequence Diagram (Optional)

*<for important and complex interactions, protocols or algorithms, sequence diagrams should be drawn for clearing the details and supporting the system implementation. This section is optional>*

## Collaboration Diagram (Optional)

*<for important and complex interactions, collaboration diagrams should be drawn for clearing the details and supporting the system implementation. This section is optional>*

## State Diagram (Optional)

*<put all state diagrams here>*

## Entity Relationship Diagram

*<Provide the ERD Diagram for the system here. If your team uses file or in-memory storage facility instead of database, replace this section by ‘Data Structures’>*

## Database Design

*<Provide the detailed database design for the system here. If your team uses file or in-memory storage facility instead of database, remove this section, use the ‘Data Structures’ section >*

## Algorithms (optional)

*<Provide the detailed description about algorithms used in the system. You can use Flow Chart or Activity Diagram to represent algorithms. Focus on the important and complex algorithms>*

## Others (optional)

*<Any design concerns or diagrams can be put here>*

# System Prototype

*<Put the system prototype or mock UI here. Focus on* ***important forms*** *and the* ***screen flows*** *between forms. If you use RAD and .NET, prototyping really help you to reach your development goals quickly>*

# Management and Project Planning

## Management Approach

*< Briefly describe the management approach that your team selects. Is your team self-managed or managed by one leader? How do you assign tasks to team members? How often do you meet? What do you do during meeting? Etc.>*

## Project Plan

*<The detailed project plan is put here. You can use WBS Excel sheet, Sprint Backlog (see Sprint Backlog\_Template.xls), Task sheet, Gantt chart, etc. to present your team’s plan. You can capture the Gantt chart in PMS if you use it to plan your project>*

## Task Sheet

*<Write down the tasks in Task Sheet-compatible format, this Task Sheet works as the activity report of the projec or the plan of the project (not recommended); see eProject Guide for detailed Task Sheet>*

## Meeting Minutes (Optional)

*<Put all minutes of your team meetings here>*

# Checklists

## Check List of Validation

*< Put the checklist here; describe how it is used and the resulted checklist>*

## Submission Checklist

*< Put the checklist here; describe how it is used and the resulted checklist>*

# Screenshots

*<Capture some intuitive and main screens of the software and put them here>*

# Coding Convention

*<Provide the coding convention for your team. If you simply want to use the existing code standard(s) such as ‘Java Code Convention’, you can refer to it\them by name or URL>*

# Other Concerns<Optional>

*<If you have any other information you want to add to this document, place it here. This could include thoughts on the eProject, improvements, etc.>*

# Appendix

## Glossary [Optional]

*<Place all definitions or abbreviation used in this document >*

## References [Optional]

*<Place all referenced materials used in this document >*

## Others<Optional>