Project Report

On

“Online Book Store Management System”

Introduction:

Online shopping is the process whereby consumers directly buy goods, services etc. from a seller interactively in real-time without an intermediary service over the internet.

Online shopping is the process of buying goods and services from merchants who sell on the Internet. Since the emergence of the World Wide Web, merchants have sought to sell their books to people who surf the Internet. Shoppers can visit web stores from the comfort of their homes and shop as they sit in front of the computer. Consumers buy a variety of items from online stores. In fact, people can purchase just about anything from companies that provide their books online. Books, clothing, household appliances, toys, hardware, software, and health insurance are just some of the hundreds of books consumers can buy from an online store.

Many people choose to conduct shopping online because of the convenience. For example, when a person shops at a brick-and-mortar store, she has to drive to the store, find a parking place, and walk throughout the store until she locates the books she needs. After finding the items she wants to purchase, she may often need to stand in long lines at the cash register.

1.1 Background

Online shopping allows you to browse through endless possibilities, and even offers merchandise that's unavailable in stores. If you're searching for a niche product that may not be distributed locally, you're sure to find what you're looking for on the internet. What's even more useful is the ability to compare items, similar or not, online. You can search through multiple stores at the same time, comparing material quality, sizes and pricing simultaneously.

Say 'goodbye' to the days when you stood in line waiting, and waiting, and waiting some more for a store clerk to finally check out your items. Online shopping transactions occur instantly-saving you time to get your other errands done! Additionally, unlike a store, online

shopping has friendly customer service representatives available 24 hours a day, 7 days a week to assist you with locating, purchasing and shipping your merchandise.

1.2 Objective

My objective is to design such an application using which one can say 'goodbye' to the days when you stood in line waiting, and waiting some more for a store clerk to finally check out your items. Online shopping transactions occur instantly-saving you time to get your other errands done! Additionally, unlike a store, online shopping has friendly customer service representatives available 24 hours a day, 7 days a week to assist you with locating, purchasing and shipping your merchandise.

My main aim is to design such a book store where customer can visit our site anytime of the day from anywhere to view the available books, choose any of them and can order by paying online or can opt for cash on delivery as well. The administrator will regularly add any new books available to them for sale. The administrator will take books from the reputed publishers and vendors only.

1.3 Purpose and Scope

1.3.1 Purpose

Online Shopping system would have the following goals.

- Provide a web user interface to add, view, delete records in different areas.
- Provide a user interface to enter computer details.
- Provide a user interface to change details of all the computers and accessories.
- Provide a user interface for users to explore the store and choose items to buy.

1.3.2 Scope

The main scope and deliverables of the project would be to:

- Understand and prepare detailed requirement and specifications
- Prepare high level and detailed design specifications of the system
- Prepare Test Plan and Test cases
- Develop the system and coding

- Perform unit testing, integration and system testing
- Demonstrate a bug free application after suitable modification if needed.

1.4 Achievements

- By successfully implementing the project, a substantial knowledge has been acquired on the implementation of a database system using .net technologies. This knowledge will be useful in the future in creating any type of desktop application or online database systems.

2. SURVEY OF TECHNOLOGY

In a desktop application like Laboratory Management System, there is a scope for a large number of platforms, languages and frameworks to choose from. Before selecting from this large array of technologies, the following aspects, which are characteristic to windows based application like this one, have been kept in mind:

- Data validation
- Performance
- Reliability
- Scalability
- Security
- Portability
- Performance
- Time constraint
- Cost constraint

The various technologies available for consideration are as follows:

Operating System: Windows 11

Client Side Scripting:

- **HTML**
- **CSS**
- **JavaScript**

Other Software Used:

- **Adobe Dreamweaver**
- **Adobe Photoshop**

- **Wamp Server**

HTML

HTML or **HyperText Markup Language** is the standard markup language used to create web pages.

HTML is written in the form of HTML elements consisting of *tags* enclosed in angle brackets (like <html>). HTML tags most commonly come in pairs like <h1> and </h1>, although some tags represent *empty elements* and so are unpaired, for example <img>. The first tag in a pair is the *start tag*, and the second tag is the *end tag* (they are also called *opening tags* and *closing tags*).

The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page. HTML describes the structure of a website semantically along with cues for presentation, making it a markup language rather than a programming language.

HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages.

CSS

CSS was first developed in 1997, as a way for Web developers to define the look and feel of their Web pages. It was intended to allow developers to separate content from design so that HTML could perform more of the function that it was originally based on the markup of content, without worry about the design and layout.

CSS didn't gain in popularity until around 2000, when Web browsers began using more than the basic font and color aspects of CSS.

Web Designers that don't use CSS for their design and development of Web sites are rapidly becoming a thing of the past. And it is arguably as important to understand CSS as it is to know HTML - and some would say it was more important to know CSS.

Style sheet refers to the document itself. Style sheets have been used for document design for years. They are the technical specifications for a layout, whether print or online. Print designers use style sheets to insure that their designs are printed exactly to specifications. A style sheet for a Web page serves the same purpose, but with the added functionality of also telling the viewing engine (the Web browser) how to render the document being viewed.

PHP:

PHP (recursive acronym for *PHP: Hypertext Preprocessor*) is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.

Instead of lots of commands to output HTML (as seen in C or Perl), PHP pages contain HTML with embedded code that does "something" (in this case, output "Hi, I'm a PHP script!"). The PHP code is enclosed in special start and end processing instructions <?php and ?> that allow you to jump into and out of "PHP mode."

What distinguishes PHP from something like client-side JavaScript is that the code is executed on the server, generating HTML which is then sent to the client. The client would receive the results of running that script, but would not know what the underlying code was. You can even configure your web server to process all your HTML files with PHP, and then there's really no way that users can tell what you have up your sleeve.

The best things in using PHP are that it is extremely simple for a newcomer, but offers many advanced features for a professional programmer. Don't be afraid reading the long list of PHP's features. You can jump in, in a short time, and start writing simple scripts in a few hours.

3. REQUIREMENTS AND ANALYSIS

3.1 Problem Definition

Problem Definition and Need for the New System

- Online Book Store is a specific requirement of the client that integrates the buying and selling services specifically to their customers.
- Reports can be generated at any time within few seconds, so that manual labor is not required, and also analysis can be performed much more frequently which helps in taking decision.
- The details regarding all users, books can also be maintained as their information is very helpful and sometimes becomes a critical requirement.
- Allows user to get registered from their places and transact for the required product.
- To overcome these problems we develop "**Online Book Store".**

SYSTEM REQUIREMENTS SPECIFICATIONS

System requirements are expressed in a software requirement document. The Software requirement specification (SRS) is the official statement of what is required of the system developers. This requirement document includes the requirements definition and the requirement specification. The software requirement document is not a design document. It should set out what the system should do without specifying how it should be done. The requirement set out in this document is complete and consistent.

The software specification document satisfies the following:-

- It specifies the external system behaviours.
- It specifies constraints on the implementation.
- It is easy to change.
- It serves as reference tool for system maintainers.
- It record forethought about the life cycle of the system.
- It characterizes acceptable response to undesired events.

User Class and Characteristics:

- General public
- Customers
- Administrator
- General public can use the system to see the books, their prices and quantity available.
- Non registered user cannot buy the books.
- Customers are using for viewing and buying the books.
- Customer can also write feedbacks for books and services
- Administrators can add, edit & delete books and provide services to the customer.
- Administrator can see the daily sell. Can also see the feedback given by the customer.
- Administrator maintaining the deliveries.

Functional Requirements:

- The System must provide following functionalities—
- Keeping records of registration of customers.
- Keeping the records of books.
- Keeping the daily sell.
- Storing the feedback given by the customer.
- Keeping details about the product it is delivered or not. etc.
- Storing the items selected by the customer in the temporary storage.

Non Functional Requirements:

Following Non-functional requirements will be there in the online shopping portal.

- Secure access of confidential data (customer's details).
- 24 X 7 availability.
- Better component design to get better performance at peak time.

Flexible service based architecture will be highly desirable for future extension Non functional requirements define system properties and constraints It arise through user

needs, because of budget constraints or organizational policies, or due to the external factors such as safety regulations, privacy registration and so on.

Various other Non-functional requirements are:

1. Security

2. Reliability

3. Maintainability

4. Portability

5. Extensibility

6. Reusability

7. Application Affinity/Compatibility

8. Resource Utilization

3.2 Conceptual Models

DATA FLOW DIAGRAM

What it is?

The Data Flow Diagram shows the flow of data or information. It can be partitioned into single processes or functions. Data Flow Diagrams can be grouped together or decomposed into multiple processes. There can be physical DFD's that represent the physical files and transactions, or they can be business DFD's (logical, or conceptual).

When it's used?

The DFD is an excellent communication tool for analysts to model processes and functional requirements. One of the primary tools of the structured analysis efforts of the 1970's it was developed and enhanced by the likes of Yourdon, McMenamin, Palmer, Gane and Sarson. It is still considered one of the best modeling techniques for eliciting and representing the processing requirements of a system.

Used effectively, it is a useful and easy to understand modeling tool. It has broad application and usability across most software development projects. It is easily integrated with data modeling, workflow modeling tools, and textual specs. Together with these, it provides analysts and developers with solid models and specs. Alone, however, it has limited usability. It is simple and easy to understand by users and can be easily extended and refined with further specification into a physical version for the design and development teams.

The different versions are Context Diagrams (Level 0), Partitioned Diagrams (single process only -- one level), functionally decomposed, leveled sets of Data Flow Diagrams.

Data Store

It is a repository of information. In the physical model, this represents a file, table, etc. In the logical model, a data store is an object or entity.

DataFlows

DFDs show the flow of data from external entities into the system, showed how the data moved from one process to another, as well as its logical storage. There are only four symbols:

- Squares representing **external entities**, which are sources or destinations of data.
- Rounded rectangles representing **processes**, which take data as input, do something to it, and output it.
- Arrows representing the **data flows**, which can either, be electronic data or physical items.
- Open-ended rectangles representing **data stores**, including electronic stores such as databases or XML files and physical stores such as or filing cabinets or stacks of paper.

There are several common modeling rules for creating DFDs:

- All processes must have at least one data flow in and one data flow out.
- All processes should modify the incoming data, producing new forms of outgoing data.

- Each data store must be involved with at least one data flow.
- Each external entity must be involved with at least one data flow.
- A data flow must be attached to at least one process.

DFDs are nothing more than a network of related system functions and indicate from where information is received and to where it is sent. It is the starting point in the system that decomposes the requirement specifications down to the lowest level detail.

The four symbols in DFD, each of which has its meaning. They are given below:

- External entities are outside to system but they either supply input data in the system or use the system output. These are represented by square of rectangle. External entities that supply data into a system are sometimes called Sources. External entities that use system data are sometimes called sinks.
- Dataflow models that passages of data in the system and are represented by line by joining system components. An arrow indicates the direction of the flow and the line is labeled by the name of the dataflow.
- Process show that the systems do. Each process has one or more data inputs and one or data outputs. Circles in DFD represent them. Each high level process may be consisting of more than one lower level processes. Process will be expanded in sequent level DFD. A circle or a bubble represents a process that transforms incoming data flow into outgoing dataflow.

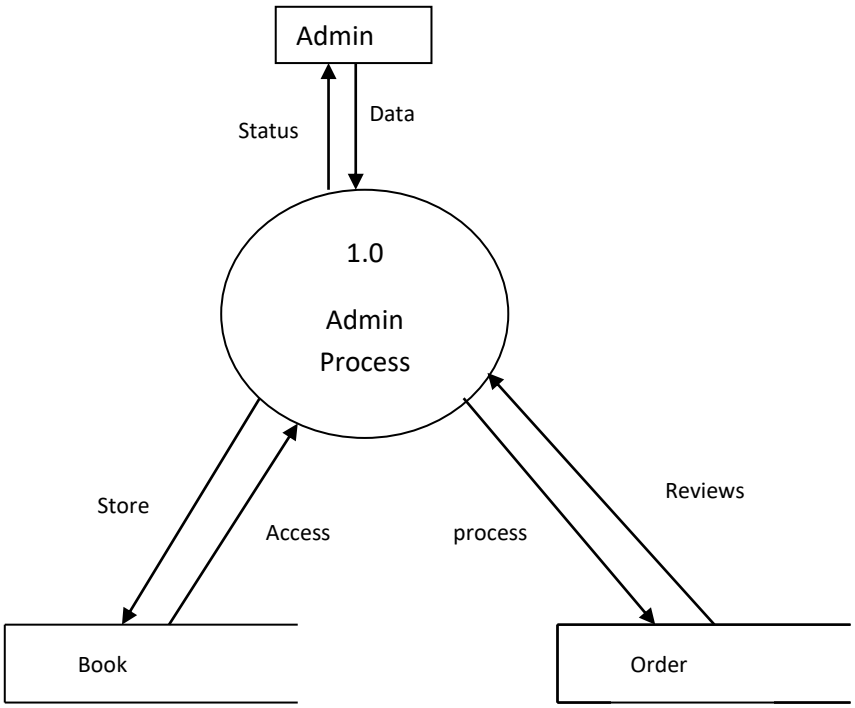
  The high level processes in a system are:

  - Receivable process.
  - Verifiable process.
  - Disposal process.

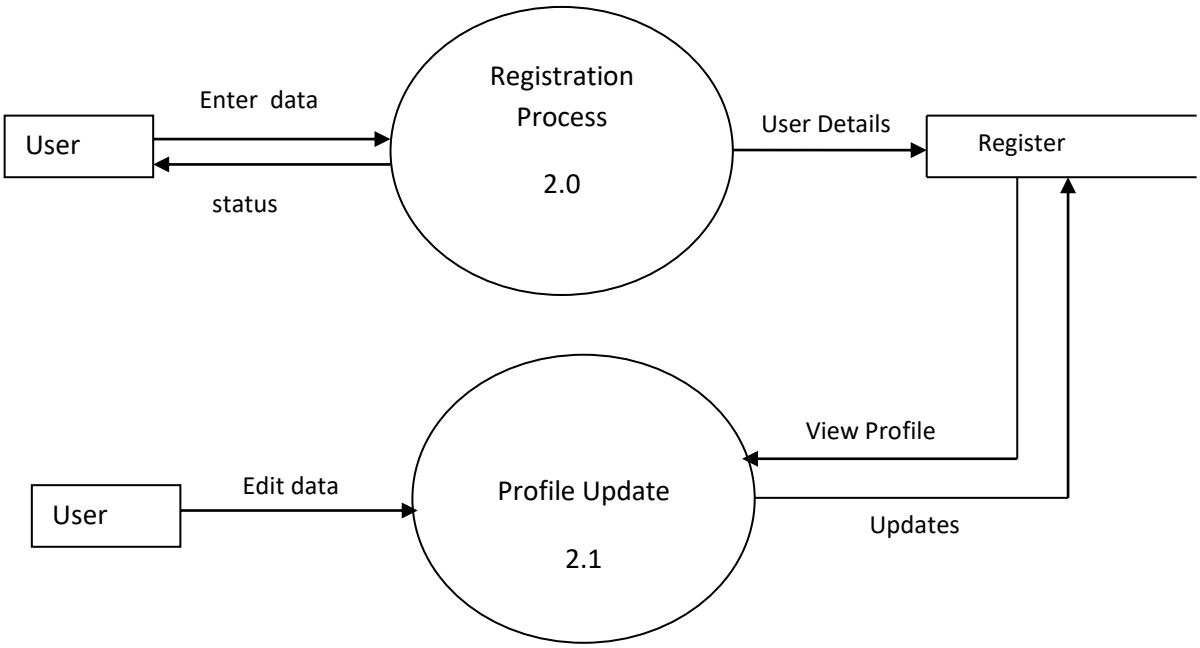
- File or data store is a repository of data. They contain data that is retained in the system. Process can enter data into data store or retrieved data from the data store. An open rectangle is a data store, data at rest.

0-Level DFD:

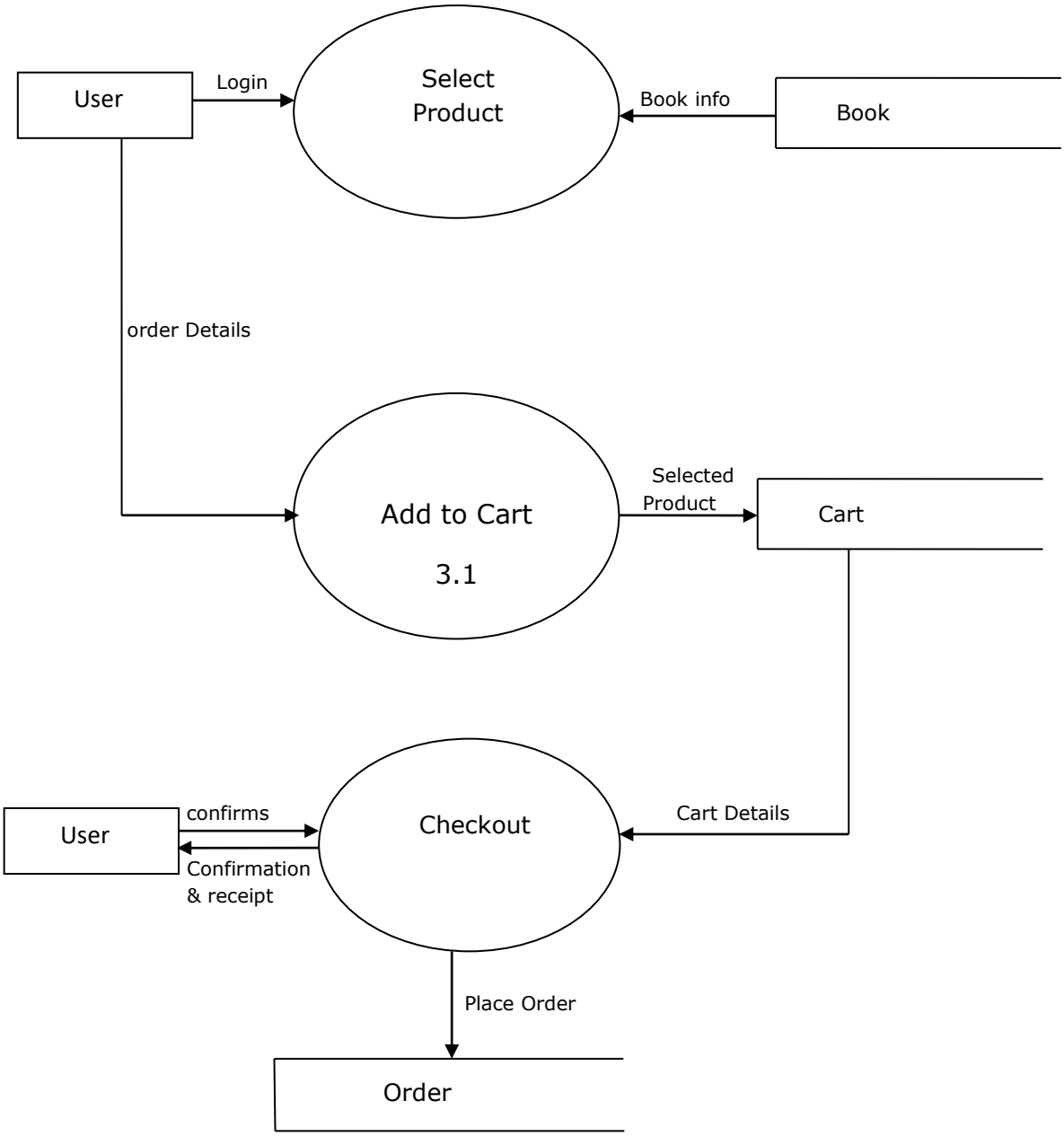
CONTEXT DTAGRAM



DFD for Admin Process



DFD For User Registration and Profile Update


User
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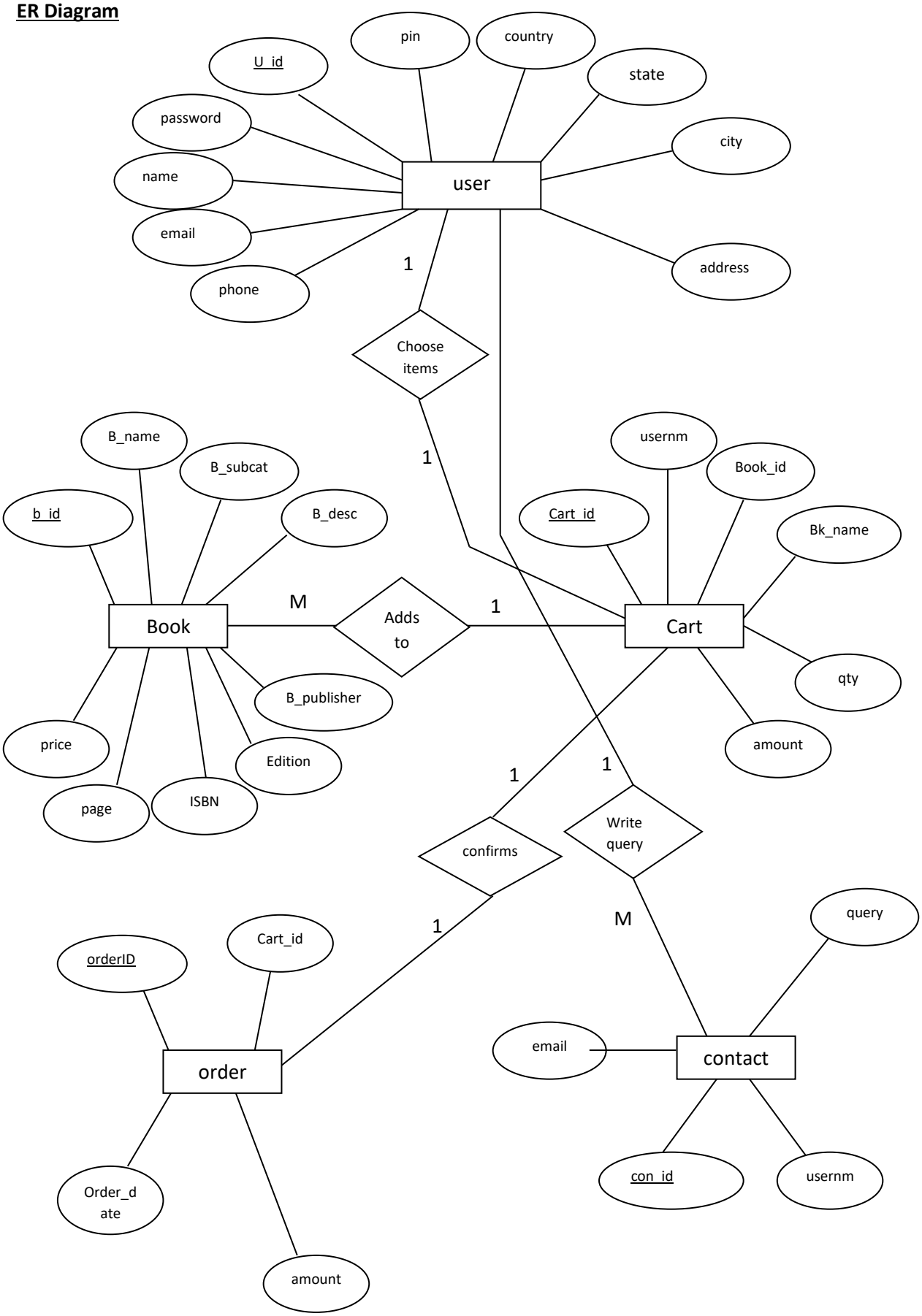
ER Diagram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1. SYSTEM DESIGN

Introduction:

System design is the solution of a “how to approach to the creation of the new system. It is composed of several steps. It facilitates the understanding and provides the procedural details necessary for implementation of the system recommended in the feasibility study. Emphasis is given on translating the performance requirements into design specification. Design goes through logical and physical stages of development.

Logical design reviews the present physical system; prepares input and output specification; make editing; security and control specification; details the implementation plan, and prepare logical design walk through. The physical design maps out the details of the physical system; plans the system implementation plan and specifies hardware and software. System design translates the system requirement into the ways of the system as recommended in the feasibility study. Thus the system design is the translation from user-oriented document to a programmer or a database personal oriented document. System design is a highly creative process that can be greatly facilitated by the following:-

- Strong Problem Definition
- Pictorial description of the Existing System
- Set of Requirements of the new system

Modules Description:

1. Registration: Customer can register their account here to continue shopping.
2. Admin: Admin can add books, check orders and make sure the orders are delivered on time and can confirm payments by the customers.
3. Shopping Cart: Customers after login can browse through the different books and choose one or more products and can add them to cart.
4. Payment: Cash on Delivery facility is available.

3.2 INPUT DESIGN

Very careful attention had to be given to input design, which is a major part of the overall system design. In order to make the data entry as easy, logical and error free as possible, specific standards had been followed. Validation checks, provided in the system prevented the user in entering incorrect, erroneous data. This made sure that, only valid data had been available for data processing. If valid data was entered, then meaningful error messages had been prompted to enter correct data. The interactive screen formats facilitate the entry of valid data.

3.2.1 VALIDATIONS:

Some fields are having only number, as an I/P. For this key ASCII is checked. If they entered characters, it would display the message to enter number only. Exchange rates field will be validated for number and dot symbols.

3.2.2 INPUT DESIGN OBJECTIVES:

The numbers of clear objectives of input design are,

- To produce a cost effective method of input
- To achieve the highest possible level of accuracy
- To ensure that the input is acceptable to and understand by the user staff

3.3 OUTPUT DESIGN:

Output, as you probably know, generally refers to the results and information that are generated by the system. For many end-users, output is the main reason for developing the system and the basis on which they will evaluate the usefulness of the application. Most end users will not actually operate the information system or enter data through workstations, but they will use the output from the system.

When designing output, systems analysts must accomplish the following.

- Determine what information to present
- Decide whether to display, print, or “speak” the information and select the output medium.
- Arrange the presentation of information in an acceptable format.
- Decide how to distribute the output to intended recipients.

That alignment of information on a display or printed document is termed as layout. Accomplishing the general activities listed above will require specific decisions, such as whether to use preprinted forms when preparing reports and documents, how many lines to plan on a printed page, or whether to use graphics and color.

The output design is specified on layout performs, sheets that describe the location characteristics, and format of the column headings and pagination. As we indicated at the beginning of this discussion, these elements are analogous to an architect's blue print that shows the location of the each component.

3.4 DATABASE DESIGN

The general theme behind a database is to handle information as an integrated whole. A database is a collection of inter-related data stored with minimum redundancy to serve single users quickly and efficiently. The general objective is to make information necessary, quick, inexpensive and flexible for the user.

Database Tables

user Table

Field Name	Data Type	Size	Allow Null	Constrain
u_id	int	4	No	PK
u_fnm	varchar	35	No	
u_unm	varchar	25	No	
u_pwd	varchar	20	No	
u_gender	varchar	7	No	
u_email	varchar	35	No	
u_contact	varchar	12	No	
u_city	varchar	20	No	

Category Table

Field Name	Data Type	Size	Allow Null	Constrain

cat_id	int	4	No	PK
cat_nm	varchar	30	No	

Subcat Table

Field Name	Data Type	Size	Allow Null	Constrain
subcat_id	int	4	No	PK
Parent_id	Int	4	No	
Subcat_nm	varchar	35	No	

Contact Table

Field Name	Data Type	Size	Allow Null	Constrain
con_id	int	4	No	PK
Con_nm	varchar	40	No	
Con_email	varchar	40	No	
Con_query	Longtext	0	No	

Book Table

Field Name	Data Type	Size	Allow Null	Constrain
b_id	int	4	No	PK
b_nm	varchar	60	No	
b_subcat	varchar	25	No	
b_desc	longtext	0	No	
b_publisher	varchar	40	No	
b_edition	varchar	20	No	
b_isbn	varchar	10	No	
b_page	int	5	No	
b_price	int	5	No	
b_img	longtext	0	No	
b_pdf	longtext	0	No	

Cart Table

Field Name	Data Type	Size	Allow Null	Constrain
cart_id	int	4	No	PK
user_nm	varchar	20	No	
Book_id	varchar	10	No	PK
Book_name	varchar	25	No	
qty	int	4	No	
Amount	Float		No	

Checkout Table

Field Name	Data Type	Size	Allow Null	Constrain
order_id	int	4	No	PK
Cart_id	varchar	60	No	
Order_date	datetime		No	
Total_Amount	Float	0	No	

7. DOCUMENTATION

❖ For Management

Online Shopping System is primarily designed for providing information from the data after processing them. This system is designed for supplying information to the strategic level of management from the operational control. It includes almost all the functional areas needed like keeping Employee Records Student Records and Fees Records.

❖ For User

With this electronic data processing system, the operators will able to maintain the following task:

- Information regarding Patients.

- Records of Test Report with their details.
- Regular Transaction Details

❖ For data processing department

- In maintenance, the data processing department needs to create backup of the database file from time to time.
- The main menu of the system provides different menus for different purposes.

FUTURE APPLICATION

Software development is never –ending process and continues the life of the software as per the changing needs of the user from time to time. The project is no doubt has been developed keeping in mind easy modification and enhancement that may be required from time to time.

However, there are many scopes to modify this software. As because due to shortage of time, we here become unable to include many things. We are trying to cover all their existing system for sales return records of the items but due to shortage of time we become unable to include many things. Due to lake of time I here include none of them and a future scope one can develop these returns which are so much essential. Only with a little more doing it is possible to design the formats for those returns. Moreover, an on-line system will be more helpful to the organization. . With almost the same data with only a little modification an on-line system can be designed to fulfill their demands. All these can be considered to be future scope for this project.

CONCLUSION

After implementing the application it will contain the advantages were incomparable to the present contemporary systems used by company. The most admirable feature founded was its simplicity in terms of application to the user but its highly beneficial outputs can't be ignored. The users will be highly benefited after using the system.

It is hoped that this project will help the future developers to modify and implement the system. After modifying some techniques of the programs, it will give us the best performance as our requirements. The project will be very useful for the users.