## PKKM COLLEGE OF APPLIED SCIENCE (IHRD) MANANTHAVADY, WAYANAD

(Managed by Institute of Human Resource Development)

#### AFFILIATED TO KANNUR UNIVERSITY



#### PROJECT WORK

ON

## USED BOOK BUYING AND SELLING PORTAL

In partial fulfillment of the requirement for the award of the award of the degree of BSC Computer Science

**Submitted By** 

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MARCH-2023

# P.K.K.M COLLEGE OF APPLIED SCIENCE (IHRD) MANANTHAVADY, WAYANAD



## (Managed by Institute of Human Resource Development) AFFILIATED TO KANNUR UNIVERSITY

#### **CERTIFICATE**

This is to certify that the project report entitled "USED BOOK BUYING AND SELLING PORTAL" is bonafide record of the project work done by ALBIN JOSEPH, ARUNIMA V K, GATHUL KRISHNA K under our super vision and guidance, towards partial fulfillment of requirement for the award of the degree of BSc Computer Science Kannur University during the year 2023.

| HEAD OFTHE DEPARTMEN | VT Facul     | lty Guide |
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We express our sincere gratitude to all teachers in Computer Science Department and our parents and friends who helped to complete this project. Also we extend our thanks to respondents for their co-operation and above all almighty for giving to the power and knowledge to complete this project successfully.

## **DECLARATION**

I hereby declare that the project work entitled "USED BOOK BUYING AND SELLING PORTAL" has been completed, implemented and submitted to Kannur university in partial fulfillment for the award of the BSc Computer Science at **P K KALAN MEMORIAL COLLEGE OF APPLIED SCIENCE** Mananthavady is a bonafide record of original project work done by us during the period of study in college of Applied Science Mananthavady. This information submitted here in is true and original to the best of my knowledge.

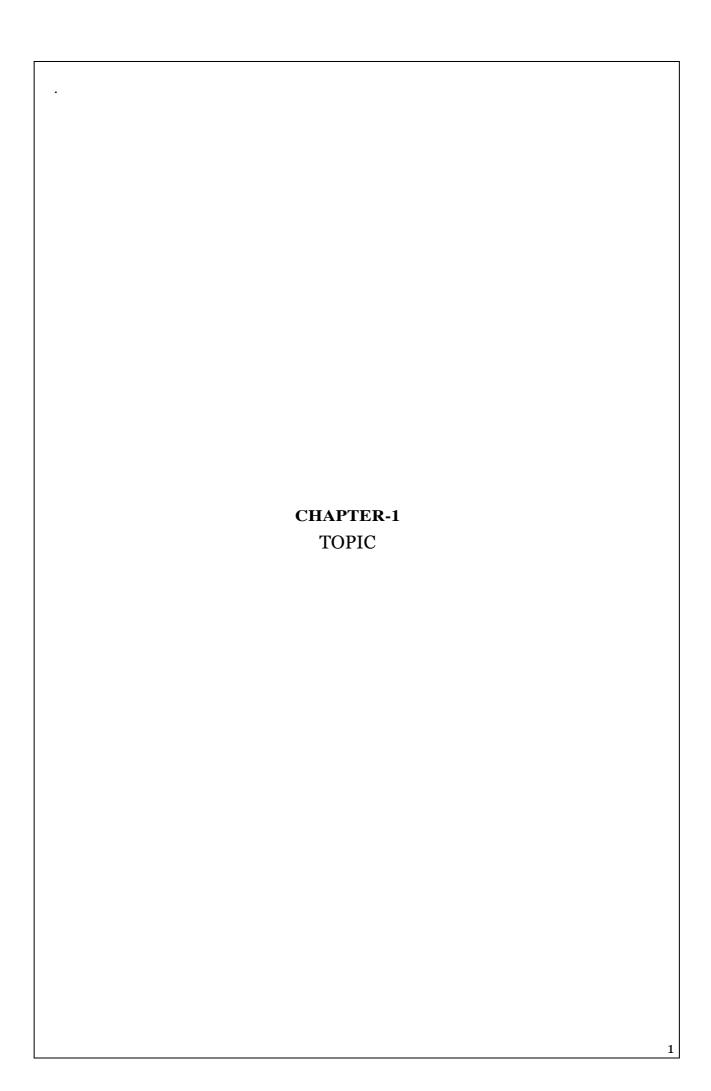
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Date Yours Truly,

ALBIN JOSEPH ARUNIMA V K GATHUL KRISHNA K

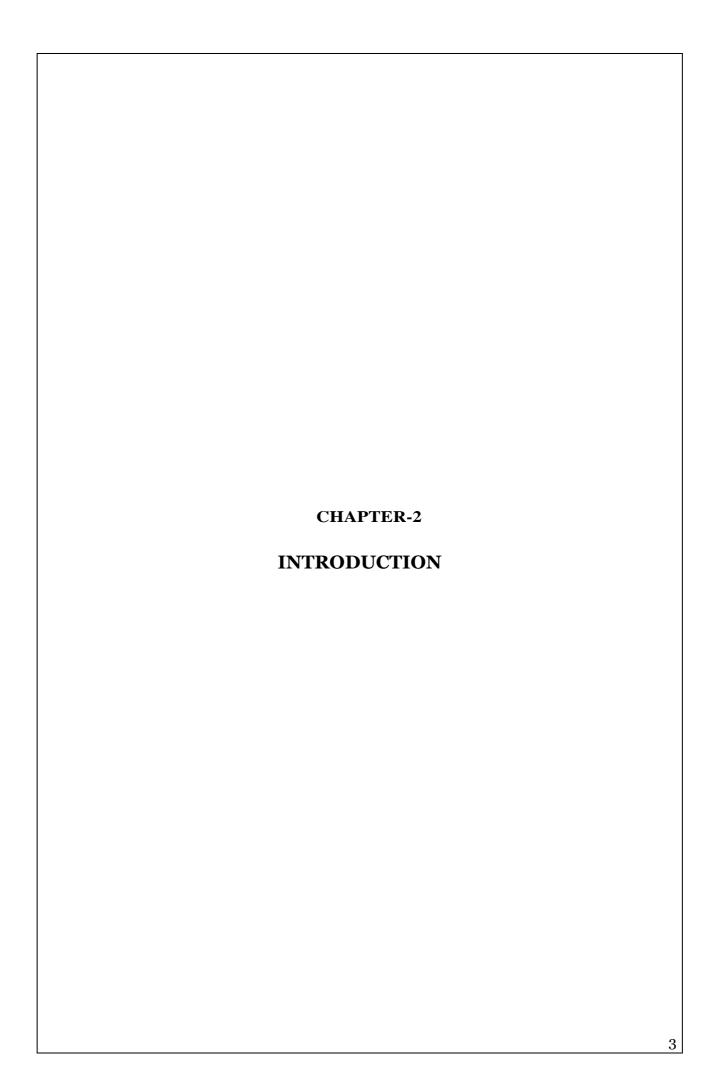
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### 1.1 ABSTRACT

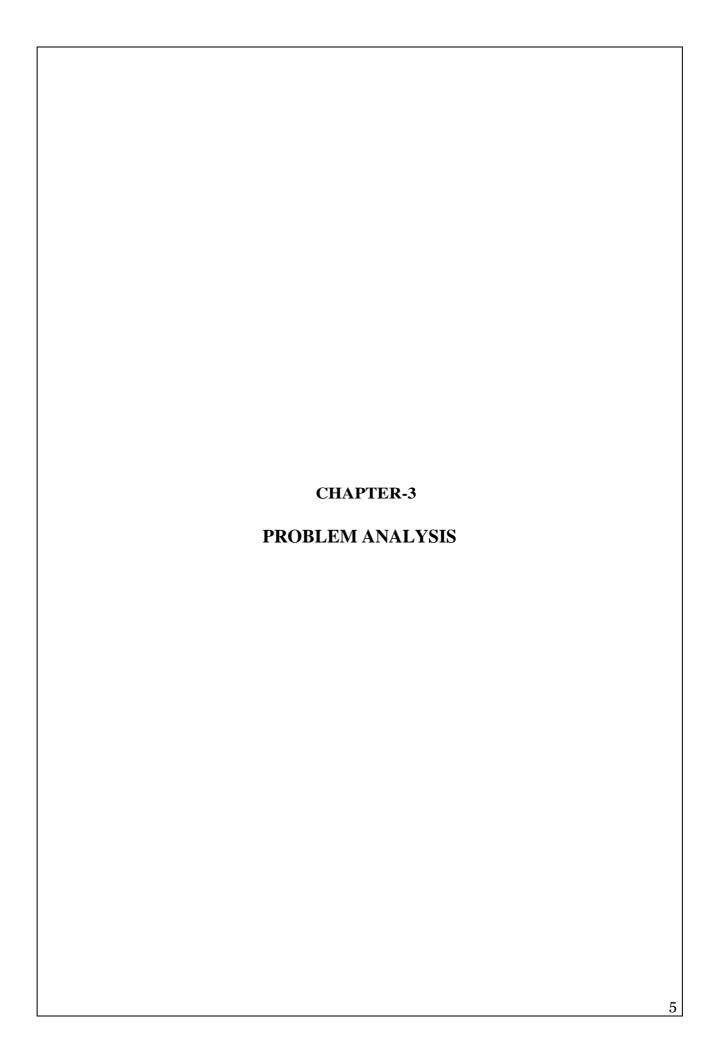
In this project, we develop Online Book Buying and Selling Portal. This project is like an e-bookstore website. A user can buy the books or can upload their books to resell them on the online. An online bookstore is a virtual store on the Internet where customers can browse the catalog and select books of interest. Users can choose different books based on their location and need it can be bought by communicating with the seller. You can either buy book by meeting directly or by sending it through courier. You need to check the book condition while buying to ensure that you are getting value for money. By buying used books we can reduce the use of paper and it is good for our nature. Sellers can also benefit from selling used books. They can earn money for books they are selling. Our website also includes functionalities like posting blogs, Viewing career page etc. By posting blogs users can express their thoughts on different topic and others users can also learn from this. So, it encourages your writing skill also. By exploring career page, you can stay updated about career news and users can learn about different career opportunities and it will help users to build a better career path. Our website also allows users to send their feedback and complaints about the website it will be delivered to admin user and reply will be provided through email. So overall our website is very user friendly and it contains all the features needed to help your studies.



#### 2.1 INTRODUCTION

We are dedicated to providing a platform for book lovers to easily buy and sell pre-owned books from the comfort of their own homes . As a buyer, you can browse our selection of books, read reviews, and contact the seller directly with any questions or concerns. As a seller, you can list your books for sale, set your own prices, and communicate with potential buyers. Our website is user-friendly and secure. Our website also includes functionalities like posting blogs, Viewing career page etc. By posting blogs users can express their thoughts on different topic and others users can also learn from this. So, it encourages your writing skill also. By exploring career page, you can stay updated about career news and users can learn about different career opportunities and it will help users to build a better career path. Our website mainly focuses on helping students. By buying used books students can reduce their spending on buying new books. Other users can also save money by buying used books. It is more practical as compared to the traditional way were we have to search for used books by contacting each person individually.

- o Admin
- User



#### 3.1 PRODUCT DEFINITION

Used books buying and selling includes a seller and buyer where a seller can post an ad about their used book and buyer can view this ad and he can communicate with the seller and he can buy the book by meeting directly or by sending it through courier. So our website is a platform that allows sellers and buyers to buy and sell books communicating each other. It also allows users to view and post blogs and allows users to browse career news and educational news.

#### 3.2 FEASIBILITY STUDY

A feasibility study is conducted to select the best system that meets performance requirement. This entails an identification description, an evaluation of candidate system and the selection of best system for the job.

The system required performance is defined by a statement of constraints, the identification of specific system objective and a description of outputs.

The key consideration in feasibility analysis is:

- Economic Feasibility
- Technical Feasibility
- Operational Feasibility

#### 3.2.1 ECONOMIC FEASIBILITY

It looks at the financial aspects of the project. It determines whether the management has enough resources and budget to invest in the proposed system and the estimated time for the recovery of cost incurred. It also determines whether it is worthwhile to invest the money in the proposed project. Economic feasibility is determines by the means of cost benefit analysis. The proposed system is economically feasible because we don't have to give salary to the administrator. The operating-environment costs are marginal. The less time involved also helped in its economic feasibility.

Because of initially we are not planning to release world wide. So no need for a very

high performing server. The backend required for storing other details is also the same database that is MySQL. The computers in the organization are highly sophisticated and don't needs extra components to load the software. Hence the organization can implement the new system without any additional expenditure. Hence, it is economically feasible.

#### 3.2.1 TECHNICAL FEASIBILITY

It is a measure of the practically of a specific technical solution and the availability of technical resources and expertise. The proposed system uses html as front-end and MySQL as back-end tool. MySQL is a popular tool used to design and develop database objects such as table views.

The above tools are readily available, easy to work with and widely used for developing commercial application.

Hardware used in developing this project is Intel Pentium Dual Core CPU3.20 GHz, 1GB RAM, 500 GB hard disk. This hardware's were already available on the existing computer system. Chromium web browser is suitable for running our website. So no additional hardware and software were required to purchase and it is technically feasible. As the users increases we have to buy a new powerful server. In initial stage it is not required.

#### 3.2.2 OPERATIONAL FEASIBILITY

The system will be used if it is developed well then be resistance for users that undetermined. No major training and new skills are required as it is based on DBMS model. It will help in the time saving and fast processing and dispersal of user request and applications. New product will provide all the benefits of present system with better performance.

- 3.2.2.1 Improved information, better management and collection of the reports.
- 3.2.2.2 User support.

User involvement in the building of present system is sought to keep in mind the user specific requirement and needs.

User can save time and make money while selling and buying used books. Users can also view and write blogs and users can stay updated about career by viewing career section.

#### 3.3 PROJECT PLANNING

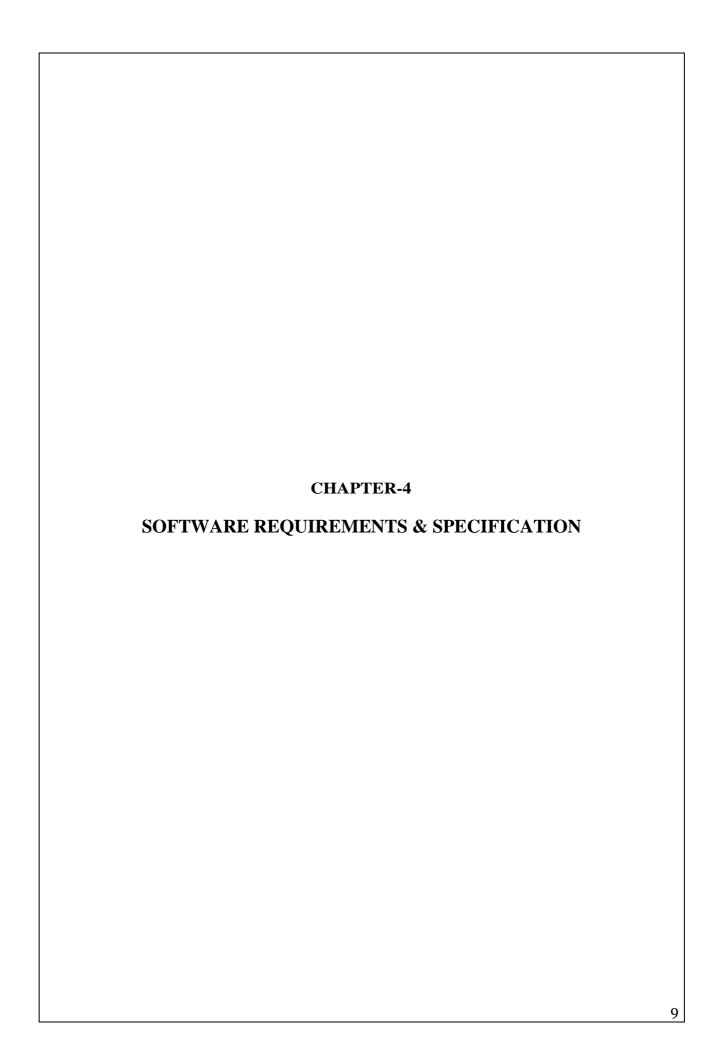
Project planning is a discipline for stating how to complete a project within a certain timeframe, usually with defined stages, and with designated resources. One view of project planning divides the activity into:

- 3.3.1 Setting objectives (these should be measurable)
- 3.3.2 Identifying deliverables
- 3.3.3 Planning the schedule
- 3.3.4 Making supporting plans

Supporting plans may include those related to: human resources, communication methods, and management. Computer hardware and software project planning within an enterprise is often done using a project planning guide that describes the process that the enterprise feels has been successful in the past. Tools popularly used for the scheduling part of a plan include the Gantt chart and the PERT chart.

#### Project Planning helps in

- Facilitating communication
- Monitoring /measuring the project progress and
- Provides overall documentation of assumptions/ planning decision



#### 4.1 SYSTEMSTUDY

#### **4.1.1 Existing System**

- Lack of interactivity between buyer and seller in online shopping
- Frauds in online shopping
- Lack of information about used books.
- It is time consuming to buy a used book in a traditional way.

#### Some of disadvantages are given

- In Existing System the Customer is completely depending on the manual process for buying the books.
- Manual process is a time consuming factor. And when customer approaches for a
  manual shopping directly, actually he/she does not have an idea about things like,
  price range, items, etc.,
- The time which has been spent by the customer in manual shopping can equates to
  multiple number of shopping. As customer can sit at home and browse in a fraction
  of seconds.

#### 4.1.2 Proposed System

- Customers can browse through different books and choose the one they need.
- An user can sell their second-hand books easily.
- This system saves both time and travelling cost of customers.
- User can get to know different kinds of books that they were unaware of by just browsing through the website.
- Our website is user friendly so anyone can access it and buy and sell used books.

.

#### Some of advantages of proposed system is given by

- 4.1.2.1 Better interface
- 4.1.2.2 Cost effective
- 4.1.2.3 Not time consumption

#### 4.2 MODULE DESCRIPTION

The system is proposed to have the following modules.

#### **4.2.1 ADMIN**

- 1. **Login:** Using valid login credentials, admin need to login into the system in order to access the system.
- 2. **View Books:** Admin can view all the added books online with their details.
- 3. **View Transaction:** System allows admin to view all the transaction details of buying and selling a book.
- 4. **View User:** All the registered user details will be displayed to the admin
- 5. **View Blogs:** Admin can view all the blogs posted in the site.
- 6. **View career:** View all the posts in career section.
- 7. View Messages: View messages sent by users
- 8. **Change Password:** You can change your old password and set a new one

•

#### 4.2.2 USER

- 1. **Sell Books:** You can sell books by entering book details and your address.
- 2. **Buy Books**: You can buy the books you need by checking the location and book condition.
- 3. **View Blogs**: Users can view different blogs uploaded by other users and can comment on them
- 4. **View Career**: Users can view career news and other information related to education.
- 5. **Dashboard**: It includes all the books and blogs uploaded by you and you can also view your personal details.
- 6. **Post Blogs:** You can post your own blog about the topic you like.
- 7. **Send Messages:** You can send your messages and suggestions to the admin.
- 8. **Change Password:** You can change your old password to a new one

## 4.3 REQUIREMENT ANALYSIS

#### **4.3.1** Software Requirements

A software requirements specification (SRS) is a document that describes what the software will do and how it will be expected to perform. It also describes the functionality the product needs to full fill all stakeholders (business, users) needs.

• Operating system : Windows 7+ or ,Ubuntu

Technology Used : PHP

• Frame work :Laravel

Database : My SQL

• Platforms : visual studio code

• Web browser : Google chrome

#### 4.3.2 Hardware Requirements

Computer hardware specifications are technical descriptions of the computer's components and capabilities. Processor speed, model and manufacturer. Processor speed is typically indicated in gigahertz (GHz). Computer hardware specifications are technical descriptions of the computer's components and capabilities.

• Processor : intel i3 or above

• Hard disk :320 GB and above

• Ram :4 GB and above

• Monitor : SVGA color

• Key board :104 keys

• Mouse :104 Key

#### 4.4 TECHNOLOGY SPECIFICATION

This application is based on web as well as mobile. So it is necessary to use a technology which is capable of providing the network facilities to the application. In this application we use Python as a frontend and MySQL as a backend and for mobile we use android OS.

#### 4.4.1 PHP

PHP stands for hypertext and is a very powerful, open-source and popular server-side scripting language that is used by developers to create dynamic and interactive web pages. The program language allows developers to form content that can interact with different database and is used to develop web-based software applications. The popular programming language is used by the tech giants like Google, Facebook, and yahoo and can be embedded into other frontend technologies like HTML.

PHP is very powerful and a very versatile programming language that an serve a lot of different purpose.

- **server-side scripting:** This is the main function of PHP and a developer needs three things to perform it. The developer needs a one PHP parser to convert a human-readable language to a computer-readable form, a web server to execute the files forming the web pages and a web browser to exhibit content or access the program output.
- Command-line Scripting: You can execute or run a PHP script without a web browser or a web server and using just a PHP parser. This function of PHP is normally used for simpler text processing tasks.
- **Desktop Application Development:** Another function of PHP is to create client-side applications. Such applications typically have graphical user interfaces. Advanced PHP features can be used to develop such applications.
- Graphic Design and Image Processing: PHP scripts are also used for manipulating image
  content along with text content. Different image processing libraries like ImageMagick, GD
  Library and Imagine can be integrated into PHP applications that can then manipulate the
  images.

#### **CHARACTERISTICS OF PHP**

PHP is one of the most widely used server-side scripting languages because of the efficient, quick, and practical nature of its services

- **Open Source:** Unlike many programming languages, this is an open-source language that can be redistributed and modified freely.
- Cross Platform: PHP is compatible with all leading web browsers and operating systems like Linux, Unix, MAC OS, Windows, Solaris. This feature of the software easy deployment of various applications across different browsers and operating systems.
- **Fast Performance:** PHP scripts can be executed much faster than the ones written in any other scripting language such as JSP or ASP.NET.

• **Simple, Interpreted and Efficient:** PHP is very easy to use and even beginners do not need much time to get the hang of it. PHP is an interpreted programming language that does not require compilation. PHP is efficient enough to be used in a multiuser environment. It supports object-oriented programming, has specific features for session management and reference counting and others.

#### 4.4.2 LARAVEL

Laravel is a free, open-source PHP web application framework that was first released in 2011. It is built on top of several Symfony components and provides an elegant and expressive syntax that makes web development fast and enjoyable.

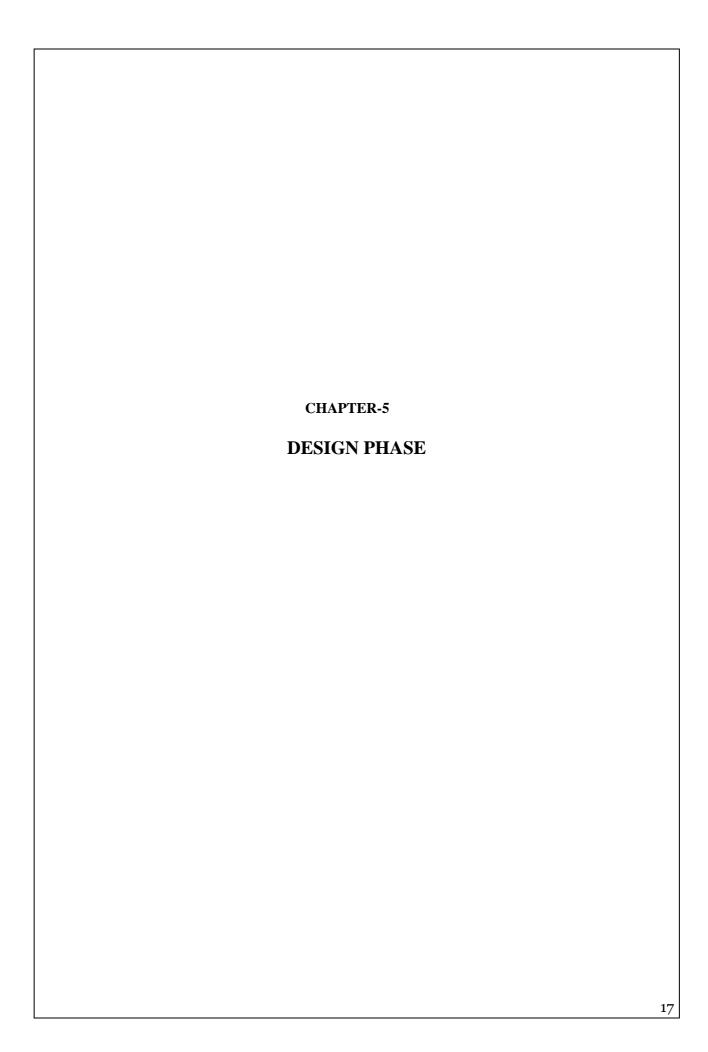
Here are some key features of Laravel:

- Routing: Laravel provides a simple and easy-to-use routing system that allows
  developers to define application routes quickly and easily.
- Middleware: Laravel comes with built-in middleware that can be used to handle requests and responses. Developers can also create custom middleware to add additional functionality to their applications.
- Eloquent ORM: Laravel provides a powerful Object-Relational Mapping (ORM) system called Eloquent, which allows developers to work with databases using an easy-to-understand syntax.
- Blade templating engine: Laravel's Blade templating engine provides an easy way to create reusable and modular views that can be used across multiple pages.
- Artisan CLI: Laravel comes with a built-in command-line interface called Artisan, which provides developers with a range of helpful commands for automating common tasks.
- Security: Laravel provides several built-in security features, including protection against SQL injection, cross-site scripting (XSS) attacks, and cross-site request forgery (CSRF) attacks.
- Testing: Laravel provides a range of testing tools and helpers to make it easy for developers to write automated tests for their applications.

• Overall, Laravel is a popular framework among PHP developers due to its powerful features, elegant syntax, and extensive documentation.

#### **4.4.3 MySQL**

MySQL is an open-source relational database management system (RDBMS). The MySQL development project has made its source code source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL is offered under two different editions: the open source MySQL Community Server and the proprietary Enterprise Server. MySQL Enterprise Server is differentiated by a series of proprietary extensions which install as server plugins, but otherwise shares the version numbering system and is built from the same code base.



#### **5.1 DESIGNPHASE**

A software design is a meaningful engineering representation of some software product that is to be built. A design can be traced to the customer's requirements and can be assessed for quality against predefined criteria. During the design process the software requirements model is transformed into design models that describe the details of the data structures, system architecture, interface, and components. Each design product is reviewed for quality before moving to then next phase of software development Design forms a blue print of the system and adds how the components relate to each other. The design phase proceeds accordingly to an ordinary sequence of steps, beginning with review and assignment of task and ending with package design. Design phase is the life cycle phase in which the detailed design of the system selected in the study phase is accomplished. A smooth transition from the study phase to design is necessary because the design phase continues the activities in the earlier phase. The first step in the design phase is to design the database and then input and output within predefined guidelines.

#### 5.2 DATA FLOWDIAGRAM

Data Flow Diagram is the graphical description of the system's data and how the processes transform the data. Data Flow diagram depicts information flow, and the transforms that are applied as data move from the input to output. It is the starting point of the design phase that functionally decomposes there requirement specifications down to the lowest level of details. Thus a DFD describes what data flows (logical) rather than how they are processed. Unlike detailed flowchart, Data Flow Diagrams do no supply detailed description of the modules but graphically describes a system's data and how the data interacts with the system. A DFD consists of a series of bubble joined by lines. The bubble represents data transformation and lines represent data flow in the system. So DFD is also called Bubble Chart.

#### **5.2.1 Basic Symbols**

To Construct a Data Flow Diagram with the help of following symbols

- > Arrow
- > Circles

➤ Open End Box ➤ Squares **ARROW** An arrow identifies the data flow in motion. It is a pipeline through which information is flown like the rectangle in the Flow Chart. Data may flow a source to a processor and from a data store or process. An arrow line depicts the flow, with the arrowhead pointing in the direction of flow. **CIRCLE** Circle stands for process that converts the data into information. A process represents transformation where incoming data flow is changed into outgoing flows. RECTANGLE A Rectangle defines a source or destination of system data

A source is a person or a part of organization, which enters or receives information from the system but is considered to be outside the context of the data flow model.

| • ( | OP | $\mathbf{F}\mathbf{N}$ | EN | $\mathbf{DR}$ | $\mathbf{O}\mathbf{X}$ |
|-----|----|------------------------|----|---------------|------------------------|
|     |    |                        |    |               |                        |

An Open End Box represents a data store, data at rest or temporary reposition of data.

A graphical picture of the logical steps and sequence involved in a or a program is called a flow chart. Unlike detailed flow chart, Data Flow Diagram does not supply detailed description of the modules but graphically describes a system's data how the data interact with the system.



#### SIX RULES FOR CONSIDERING DATA FLOW DIAGRAM

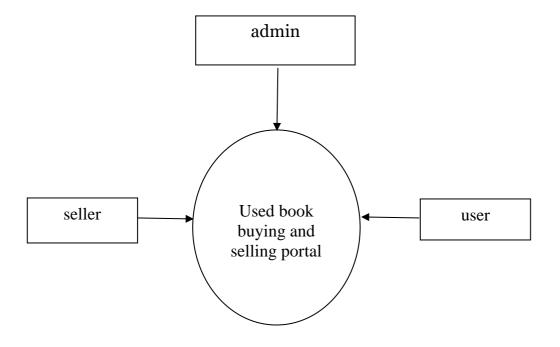
- Arrows should not cross each other
- Squares, circles and Data Store must have names
- Decomposed data flow squares and circles can have the same names.
- Choose meaningful names for dataflow
- Draw all data flows around the outside of the diagram.
- Control information such as record count, password and validation Requirement is not relevant to Data Flow Diagram

#### 5.2.2 DIFFERENT LEVELS OF DATA FLOWDIAGRAMS

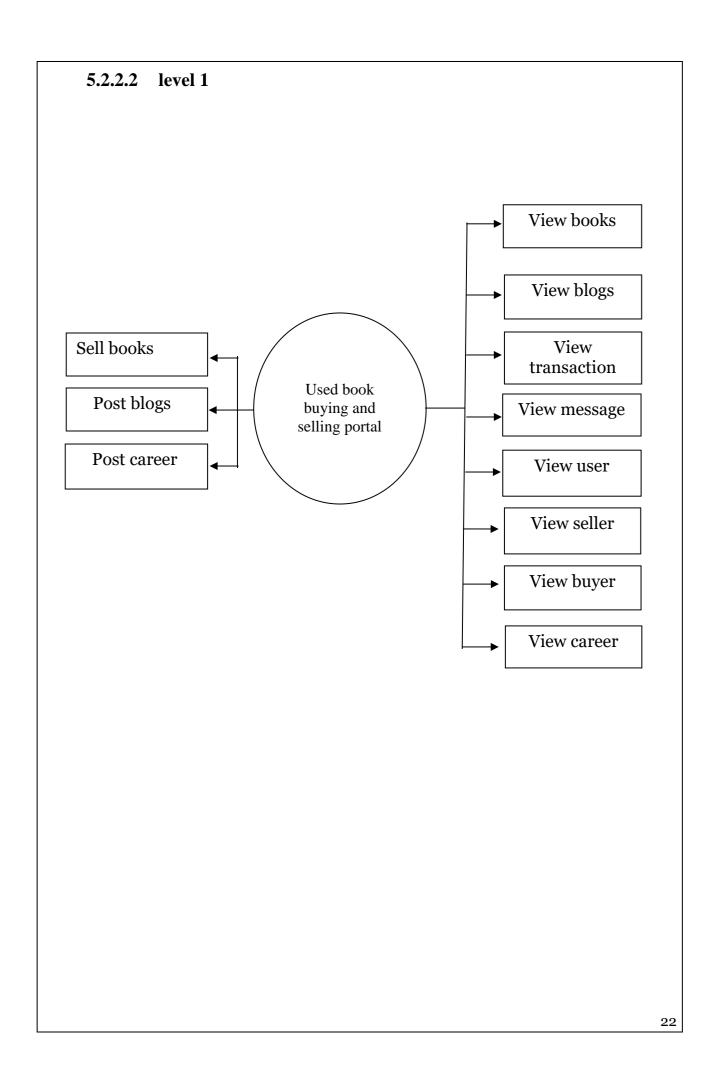
A dataflow diagram as a diagram that depicts data source, data sinks, data storage and processes performed on data as nodes, and logical flow of data as links between the nodes. Generally DFD are used as a design notation to represent architectural design and top level design specification.

DFD represent the system in hierarchical manner with the one top level and many lower level diagrams with each representing separate parts of the system. Since diagrammatic representations are easier to interpret as compared to the technical descriptions, the non-technical users can also understand the system details clearly.

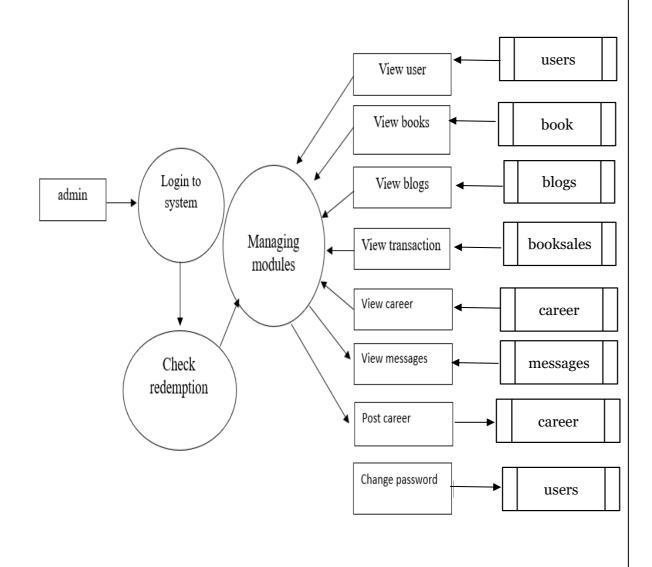
#### 5.2.2.1 level 0



Fig; DFD of whole system

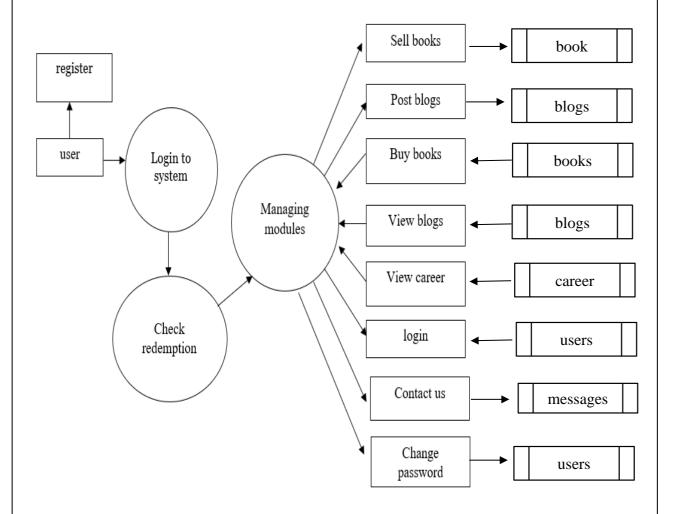


## 5.2.2.3 level 1.1



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## 5.2.2.3 Level 1.2



Fig; DFD of User module

#### **5.3 DATABASE DESIGN**

Database is a collection of related tables, which whole the data. We use these data to produce information to the user and the management. So database design should be done in a way we can store all the needed information correctly and clearly. Redundancy and loss of flexibility must be avoided. In the computerized inventory control system we design a database, which successfully avoid this problem.

#### • First Normal Form

Eliminate repeating groups in individual tables. Create a separate table for each set of related data. Identify each set of related data with a primary key. In this project all the tables are in first normal form.

#### Second Normal Form

Create separate tables for sets of values that apply to multiple records. Relate these tables with a foreign key.

#### • Third Normal Form

If we decompose the table such that no non-candidate key becomes functionally dependent on another non-candidate key, then the redundancy is removed.

#### 5.4 TABLE DESIGN

The data base tables used in this project are given below

• Table 5.4.1

• Name: career

• **Description:** show career

| Field Name  | Data Type    | Constraints       | Description  |
|-------------|--------------|-------------------|--------------|
| Id          | bigInt(20)   | Primary key, auto | Table row id |
|             |              | increment         |              |
| Ctitle      | Varchar(100) |                   | title        |
| description | Varchar(100) |                   | text         |
| image       | Varchar(50)  |                   | image        |

Table 5.4.2Name: book

• **Description:** show book items

| Data Type    | Constraints  | Description  |
|--------------|--|--|
| bigInt(10)   | Primary key,auto increment   | Table row id   |
| bigInt(10)   |  | Seller id  |
| Varchar(100) |  | Seller   |
| Varchar(40)  |  | Book name  |
| Varchar(100) |  | Text   |
| Varchar(100) |  |  |
| Varchar(50)  |  | Address  |
| int (40)     |  | Phonenumber  |
| Int(10)      |  | Date   |
| float        |  | Price  |
| Varchar(40)  |  | Coverpage  |
| Varchar(40)  |  | Coverpage  |
|              | bigInt(10) bigInt(10) Varchar(100) Varchar(40) Varchar(100) Varchar(100) Varchar(50)  int (40) Int(10) float Varchar(40) | bigInt(10) Primary key,auto increment  bigInt(10) Varchar(100) Varchar(40) Varchar(100) Varchar(100) Varchar(50)  int (40) Int(10) float Varchar(40) |

Table 5.4.3Name: user

• **Description:** Show user

| Field Name  | Data Type   | Constraints                | Description  |
|-------------|-------------|----------------------------|--------------|
| Id          | Int         | Primary key,auto increment | Table row id |
| Username    | Varchar(25) |                            | User id      |
| Email       | Date        |                            | date         |
| phonenumber | Varchar(25) |                            | Total price  |
| Utype       | Int(10)     |                            | type         |
| password    | Varchar(25) |                            |              |
|             |             |                            | password     |

|                 | <u> </u>     |          |
|-----------------|--------------|----------|
| Remember_tocken | Varchar(100) | remember |

• Table 5.4.4

• Name: book sales

• **Description:** show book sale details

| Field Name | Data Type   | Constraints                | Description  |
|------------|-------------|----------------------------|--------------|
| Id         | bigInt(20)  | Primary key,auto increment | Table row id |
| Bid        | bigInt(20)  |                            | Book id      |
| Bname      | Varchar(25) |                            | Book name id |
| Buyer_id   | bigInt(20)  |                            | buyer id     |
| Seller_id  | bigInt(20)  |                            | Seller id    |
| Date       | Varchar(25) |                            | Datetime     |
| Amount     | float       |                            | float        |
| Status     | bigint(20)  |                            | status       |

• Table 5.4.5

• Name: message

• **Description:** show messages

| Field Name      | Data Type    | Constraints      | Description     |
|-----------------|--------------|------------------|-----------------|
| Id              | bigInt(20)   | Primary key,auto | Table row id    |
|                 |              | increment        |                 |
| Userid          | bigInt(20)   |                  | user id         |
| Message_subject | Varchar(50)  |                  | Message subject |
| Message_content | Varchar(200) |                  | Message content |

• Table 5.4.6

• Name: booksales

• **Description:** show book sales informations

| Field Name | Data Type    | Constraints                | Description  |
|------------|--------------|----------------------------|--------------|
| Id         | Int          | Primary key,auto increment | Table row id |
| Buyer_id   | bigInt(20)   |                            | buyer id     |
| Seller_id  | bigInt(20)   |                            | Seller id    |
| Date       | Varchar(25)  |                            | Datetime     |
| Replay     | Varchar(100) |                            | Replay text  |
| Comment    | Varchar(100) |                            | text         |
| Book_id    | Bigint(20)   |                            | Book id      |

• Table 5.4.7

• Name: book complaints

• **Description:** show book complaints

| Field Name | Data Type    | Constraints      | Description  |
|------------|--------------|------------------|--------------|
| Id         | bigInt       | Primary key,auto | Table row id |
|            |              | increment        |              |
| Buyer_id   | bigInt(20)   |                  | buyer id     |
| Seller_id  | bigInt(20)   |                  | Seller id    |
| Status     | Bigint(20)   |                  | Status       |
| Complaint  | Varchar(100) |                  | text         |
| Book_id    | Bigint(20)   |                  | Book id      |

• Table 5.4.8

• Name: career comments

• **Description:** show career comments

| Field Name  | Data Type   | Constraints                | Description  |
|-------------|-------------|----------------------------|--------------|
| Id          | bigInt(20)  | Primary key,auto increment | Table row id |
| User_id     | bigint(20)  |                            | User id      |
| Career      | bigint(20)  |                            | password     |
| Comment     | Varchar(50) |                            | text         |
| commentdate | Varchar(20) |                            | datetime     |

• Table 5.4.9

• Name: blogs comments

• **Description:** show blog comments

| Field Name  | Data Type   | Constraints                | Description  |
|-------------|-------------|----------------------------|--------------|
| Id          | Bigint(20)  | Primary key,auto increment | Table row id |
| User_id     | bigint(20)  |                            | User id      |
| Blog_id     | bigint(20)  |                            | Blog id      |
| Comment     | Varchar(50) |                            | text         |
| Like        | Bigint(20)  |                            | like         |
| Commentdate | Varchar(20) |                            | Date time    |

• Table 5.4.10

• Name: book seller

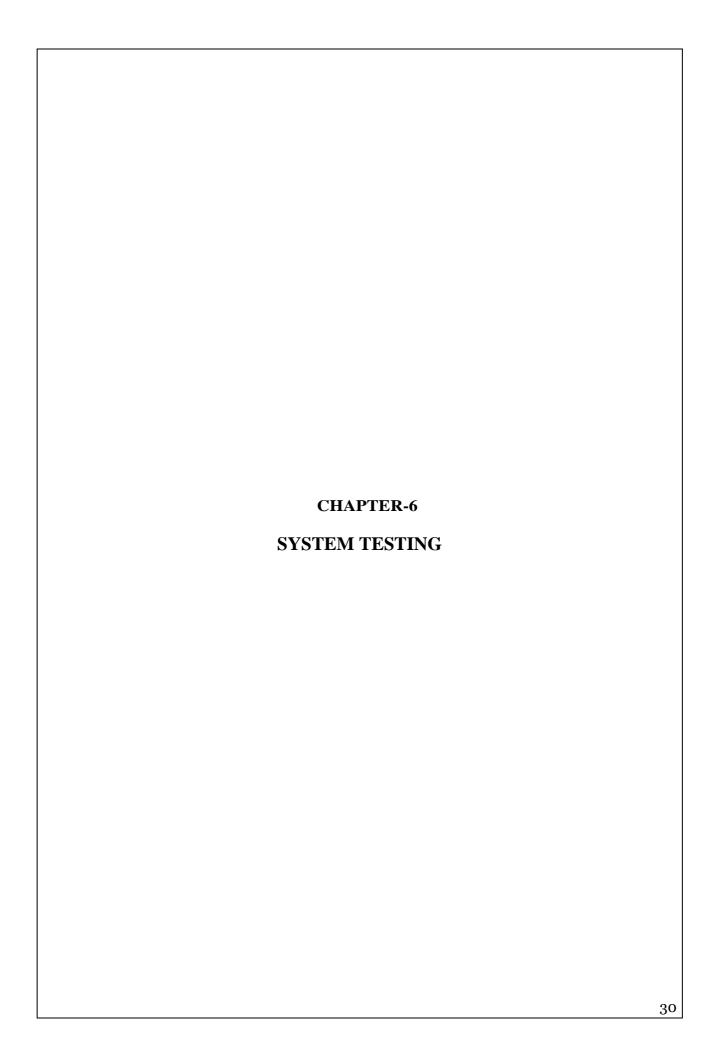
• **Description:** show book seller

| Field Name | Data Type    | Constraints      | Description     |
|------------|--------------|------------------|-----------------|
| Id         | Bigint(20)   | Primary key,auto | Table row id    |
|            |              | increment        |                 |
| User_id    | Bigint(20)   |                  | User id         |
| Contact_no | Varchar(25)  |                  | Conatact number |
| Address    | Varchar(100) |                  | text            |
| Location   | Varchar(100) |                  | Location        |

Table 5.4.11 Name: blogs

• **Description:** show blogs

| Field Name       | Data Type   | Constraints | Description  |
|------------------|-------------|-------------|--------------|
| Id               | Bigint(20)  | Primary     | Table row id |
|                  |             | key,auto    |              |
|                  |             | increment   |              |
| User_id          | Bigint(20)  |             | User id      |
| Blog_title       | Varchar(25) |             | Blog title   |
| Blog_description | Varchar(25) |             | text         |
| Bdate            | Varchar(25) |             | Blog date    |
| Bimage 1         | Varchar(60) |             | Blog image   |
| Bimage 2         | Varchar(60) |             | Blog image   |
| Blike            | bigint(20)  |             | Blog like    |



#### **6.1 TESTING**

Software testing is critical element of software quality assurance and represent the ultimate review of the specification, design and coding. System testing makes a logical assumption that all the part of the system is correct; the goal will be successfully achieved.

Testing is a set of activity that can be planned in advance and conducted. Systematically, this is aimed at ensuring that the system works accurately and efficiently before live operations commences,

- Testing is the process of correcting a program with intend of finding an error.
- A good test case is one that has high probability of finding a yet undiscovered error.
- A successful test is one that uncovers a yet undiscovered error

#### **Testing Objectives**

There are several rules that can serve as testing objectives,

- Testing is a process of executing a program with the intent of finding an error.
- A good test case is one that has high probability finding an undiscovered error.
- A successful test is one that uncovers an undiscovered error.

Testing is vital to the success of the system. System testing makes a logical assumption that if all parts of the system are subject to variety of tests on- line response, volume, stress, recovery and security and usability tests. A series of tests are performed before the system is ready for user acceptance testing.

#### **6.2 TESTING STRATEGIES**

- White box testing
- O Black box testing

#### **6.2.1 WHITE BOX TESTING**

White box testing is also known as code testing. The code testing strategy checks for the correctness of every statement in the program. To follow this strategy, there should be cases that

result in execution of every instruction in the program or module, which is every path in the program, is tested. The test cases should be guaranteed that independent paths within module are executed once.

- Exercise all logical decision on their true or false sides.
- Execute all loops at their boundaries and within their operational bounds.

This testing strategy, on the face of it, sounds exhaustive. If every statement in the program is checked for its validity, there does not seem to be much scope of error.

#### 6.2.2 BLACK BOX TESTING

Black box testing is also known as specification testing. To perform black box testing, the analyst examines the specification taking what the program or module should do and how it should perform on the various conditions and submitted for processing. By examine the result, the analyst can examine whether the program performs according to the specified requirements.

#### **Testing objectives are:**

Testing is a process of executing a program with the intend of finding an error.

#### 6.3 TYPES OF TESTING

Different types of testing are,

- Unit testing
- Integration testing
- System testing
- Validation testing
- User acceptance testing

#### **6.3.1 UNIT TESTING**

Unit testing enables a programmer to detect error in coding. A unit test focuses verification of the smallest unit of software design. This testing was carried out during the coding itself. Among the more common errors in computation are:

- Misunderstood or incorrect arithmetic precedence Mixed mode operations
- Incorrect initialization.
- Precision inaccuracy.
- Incorrect symbolic representation of an expression.

This testing was carried out during the coding itself. In this testing step, each module is going to be work satisfactorily as the expected output from the module.

#### **Project aspect:**

The front-end design consists of various forms. They were tested for data acceptance. Similarly, the back-end also tested for successful acceptance and retrieval of data.

The test causes are prepared for each module. Here testing is done in order to verifying whether the user can register to the system successfully or not.

The following are some of the test cases for unit testing, The test cases for each module tabulated below:

#### **6.3.2 INTEGRATION TESTING**

Through each program work individually, they should work after linking together. This is referred to as interfacing. Data may be lost across the interface; one module can have adverse effect on the other. Subroutines after linking may not do the desired function expected by the main routine. Integration testing is the systematic technique for constructing the program structure while at the same time conducting test to uncover errors associated with the interface. Using integrated testplan prepared in the design phase of the system development as a guide, the integration test was carried out. All the errors found in the system were corrected for the next testing step.

#### **Project aspect:**

After connecting the back-end and the front-end as whole module, the data entered in the front-end once submitted were successfully entered in the database. On request, data were successfully retrieved in to forms.

#### 6.3.3 SYSTEM TESTING

After performing the integration testing, the next step is output testing of the proposed system. No system could be useful if it doesn't produce the required output a specified

format. The output generated are displayed by the system under consideration and then tested by comparing with the format require by the user. Herethe output format is considered in to two ways, one in on-screen and other in printedformat.

#### **Project aspect:**

The entire project was tested and found successful.

#### **6.3.4 VALIDATION TESTING**

The user has to work with the system and check whether the project meets his needs. In the validation checking, the user works with the beta version of the software. Project aspects: User enters the appropriate data and results was checked and validated Validation checks are performed on the following field:

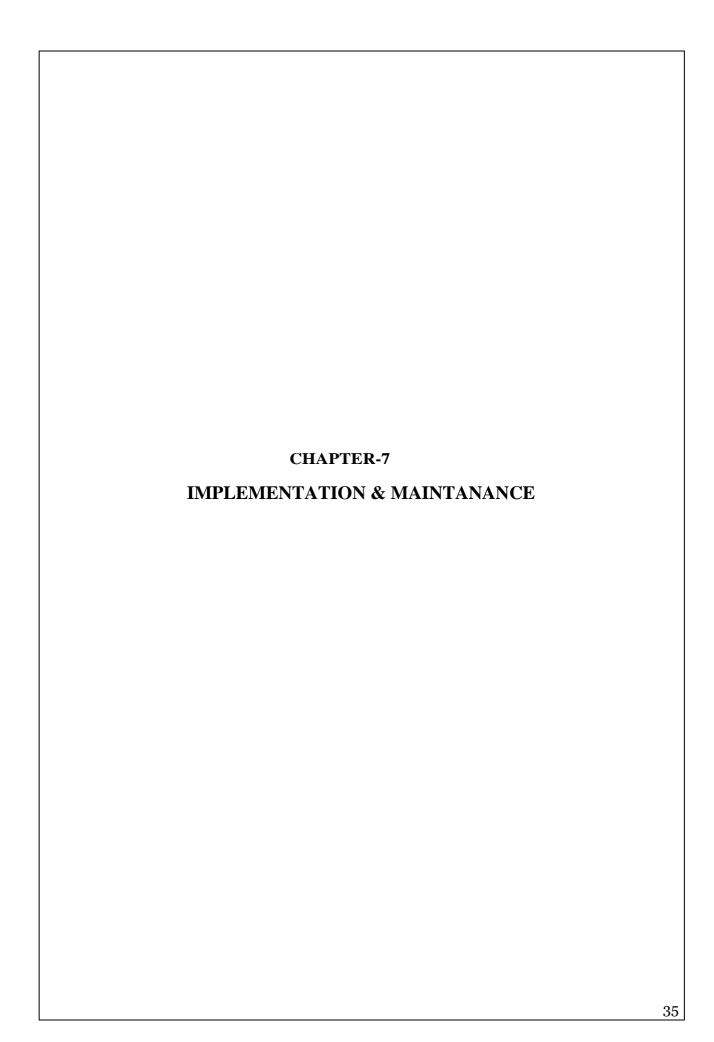
- **Text Field**: The text field can contain only the number of characters lesser than or equal to its size. The text fields are alphanumeric in some tables. Incorrect entry always flashes an error message.
- Numeric Field: The numeric field can contain only numbers from 0-9. An entry of any characters flashes an error message. The individual modules are checked for accuracy and what it has to perform. Each module subjected to test run along with the sample data. The individually tested modules are integrated into single system. Testing involves executing the real data information used in the program. The existence of any program defect is inferred from the output. Testing should be planned so that all the requirements are individually tested.
- Email validator: The email field can contain @ , .com /.in. The email fields are checked for these symbols. The email field does not contain these symbols entry always flashes an error message.

#### 6.3.5 USER ACCEPTANCE TEST

User acceptance of a system is a key factor of the success of any system. The system under consideration was tested for user acceptance by running a prototype of the software.

#### **Project aspect:**

An alpha version is demonstrated to the users. Their suggestions are recorded



#### 7.1 IMPLEMENTATION

System implementation is the stage when the user has thoroughly tested the system and approves all the features provided by the system. The various tests are performed and the system is approved only after all the requirements are met and the user is satisfied.

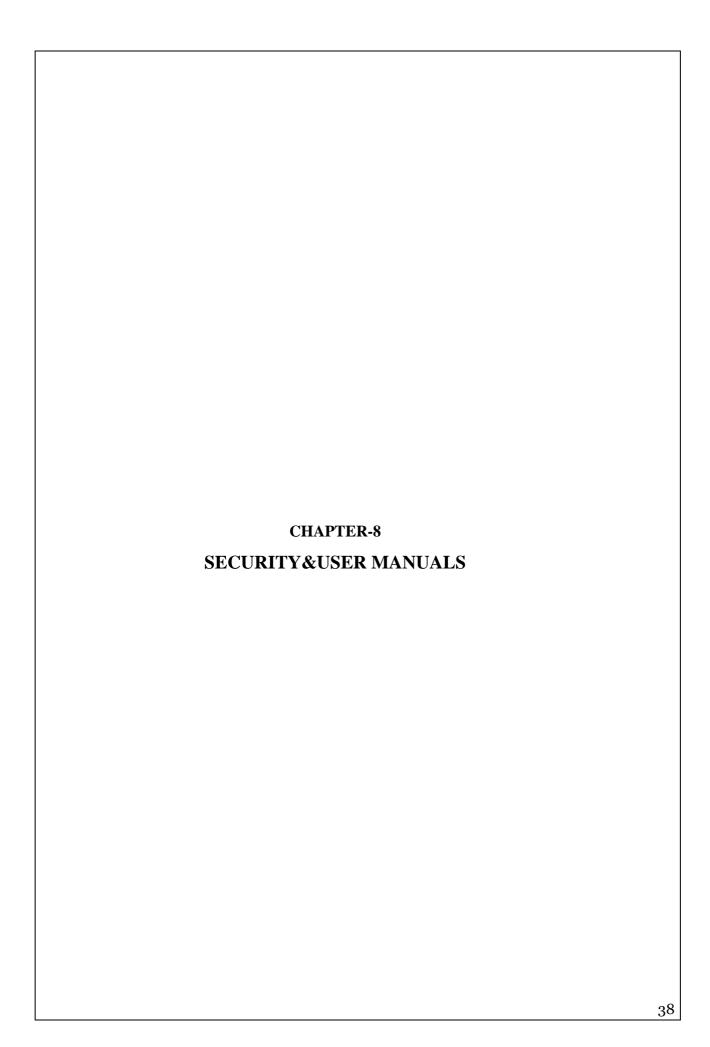
Implementation is the process of hosting the website in a network. This phase is less creative than system design. Depending on the size of the organization that will be involved in using the application and the risk involved in its use, systems developers may choose to test the operation in only one area of the firm with only one or two persons.

The implementation of the web based or LAN based networked project has some extra steps at the time of implementation. We need to configure the system according the requirement of the software.

#### 7.2MAINTENANCE

The better the system design, the easier it will be to maintain and the maintenance costs is a major concern, since software maintenance can prove to be very expensive. It is important to detect software design errors early on; as it is less costly than errors remain unnoticed until maintenance is necessary. Maintenance is performed most often to improve the existing software rather than to respond to a crisis or system failure. As user requirements change, software and documentation should be changed as part of the maintenance work. Maintenance accounts for 50-80 percent of total system development. To put maintenance in its proper perspective requires considerable skill and experience and is an important and ongoing aspect of system development. Maintenance demands more orientation and training than any other programming activities. The environment must recognize the needs of the maintenance programmer for tools, methods and training. Maintenance involves the software industry captive, typing up system resources. It means restoring something to its original condition.

| Maintenance involves a wide range of activities including correcting, coding, and      |
|--|
| design errors, updating documentation and test data, and upgrading user support.       |
| Maintenance was done after the success implementation. Maintenance is continued till   |
| the product is re-engineered or deployed to another platform. Maintenance is also done |
| based on fixing the problems reported, changing the interface with other software or   |
| hardware enhancing the software.   |
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#### 9.2 SECURITY

Security is an important consideration in android application. The first step in securing our application is deciding where you need security and what it needs to protect. In this application, every account is protected with a unique username and password which is known only by the user itself.

#### 9.3 USERMANUALS

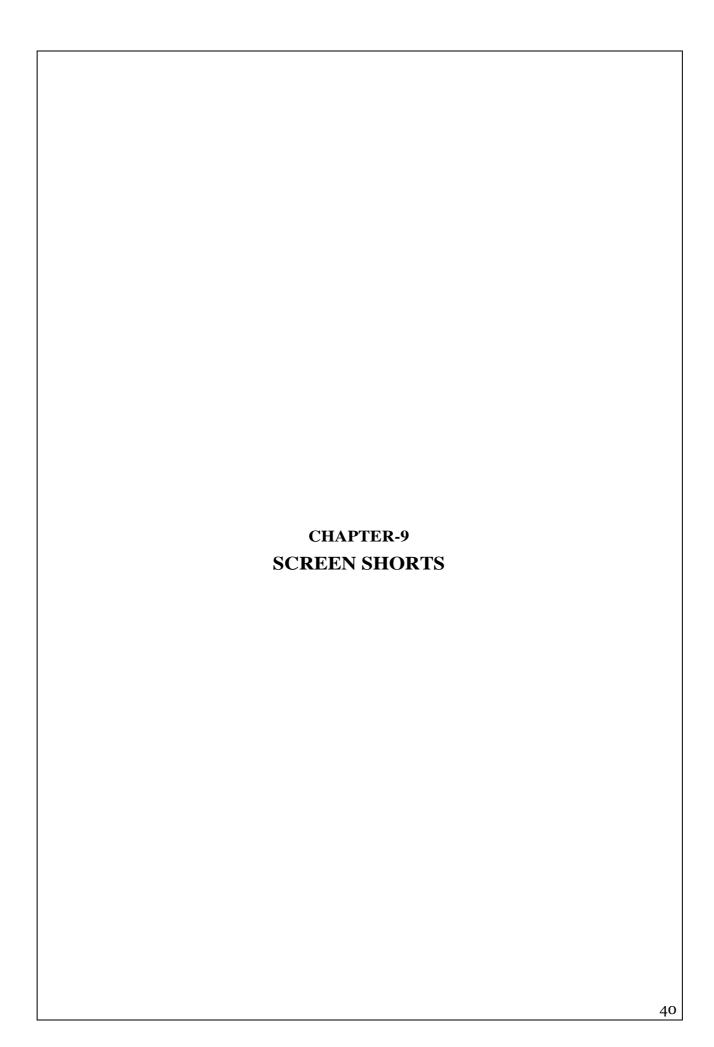
The User Manuals provides the detailed description regarding the usage of the software.

#### **9.3.1 ADMIN**

- 9.3.1.1 Firstly enter Admin username and password.
- 9.3.1.2 Then login Admin page. In this page admin can do many activities including viewing user, view books, view career, post career, view transactions etc...
- 9.3.1.3 Admin can view and delete users, books, careers, blogs etc....
- 9.3.1.4 Admin can change password by accessing change password page.

#### 9.3.2 USER

- 9.3.2.1 You can create a new account if you do not have one
- 9.3.1.5 Login using user username and password.
- 9.3.1.6 You can access different functionalities of website after logging in.
- 9.3.1.7 User can sell book by uploading image and other details about book.
- 9.3.1.8 User can view different books and buy them according to their need.
- 9.3.1.9 Users can view and post blogs.
- 9.3.1.10 Users can view career section which shows career news.
- 9.3.1.11 Users can contact admin by accessing contact us menu
- 9.3.1.12 Users can change password by accessing change password menu

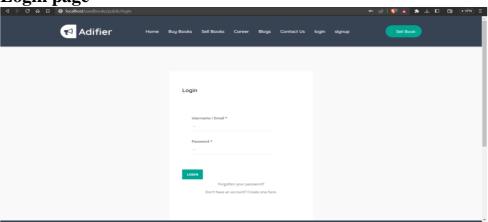


# **≻Program code**

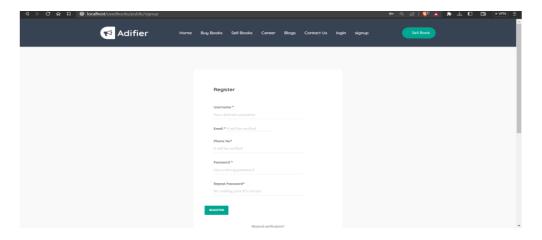
# **≻**Guest Page



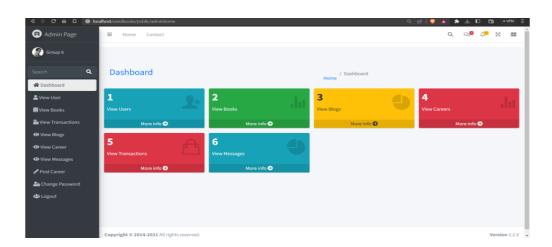
**≻**Login page



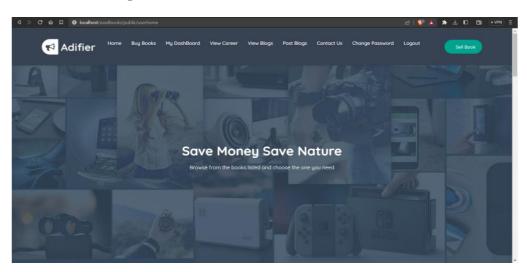
## **≻**Signup page



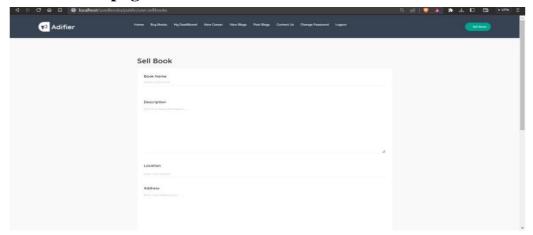
# **Adminpage**



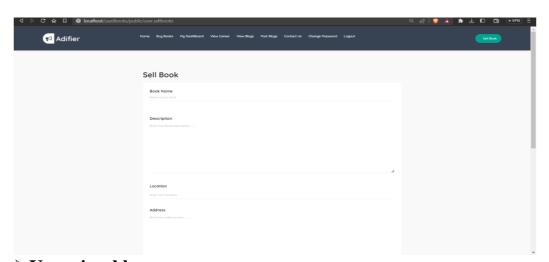
# **≻**User Home Page



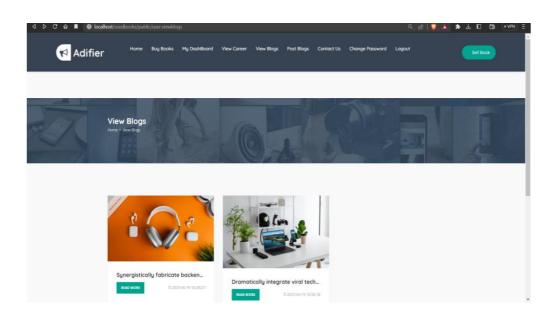
# **≻**Sell books page



## **>** User contact us



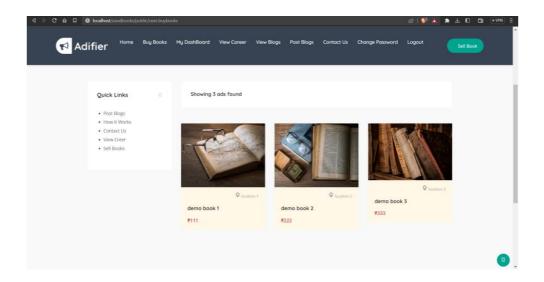
## **>** User view blogs



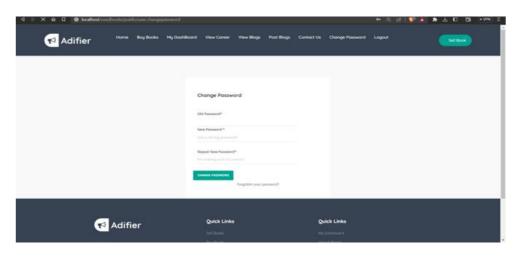
## **≻View career**



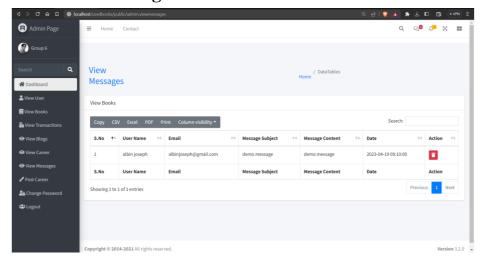
## **≻**Buy books



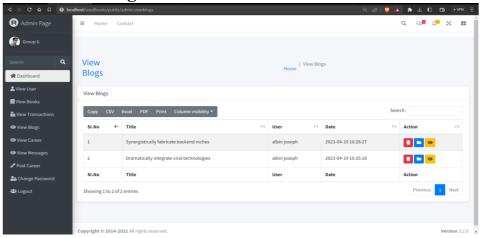
## **≻**User Change Password



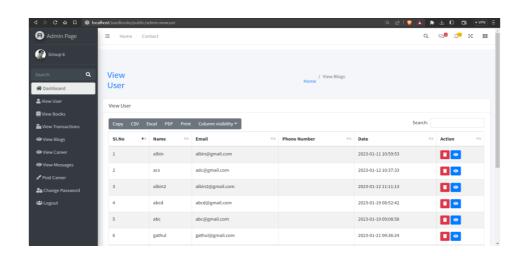
## >Admin view messages



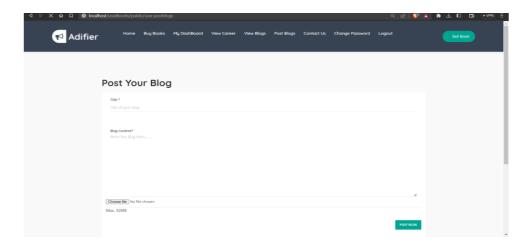
>Admin view blogs



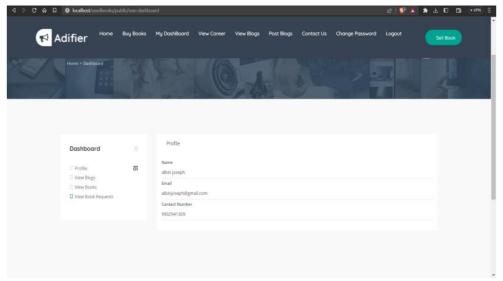
#### **≻**Admin view user



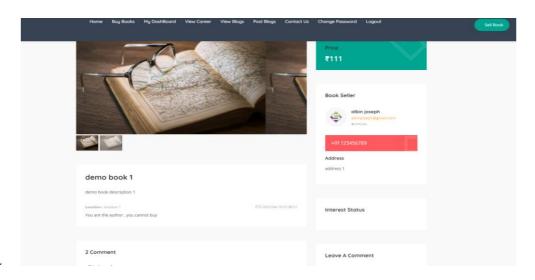
## **≻**User post blogs



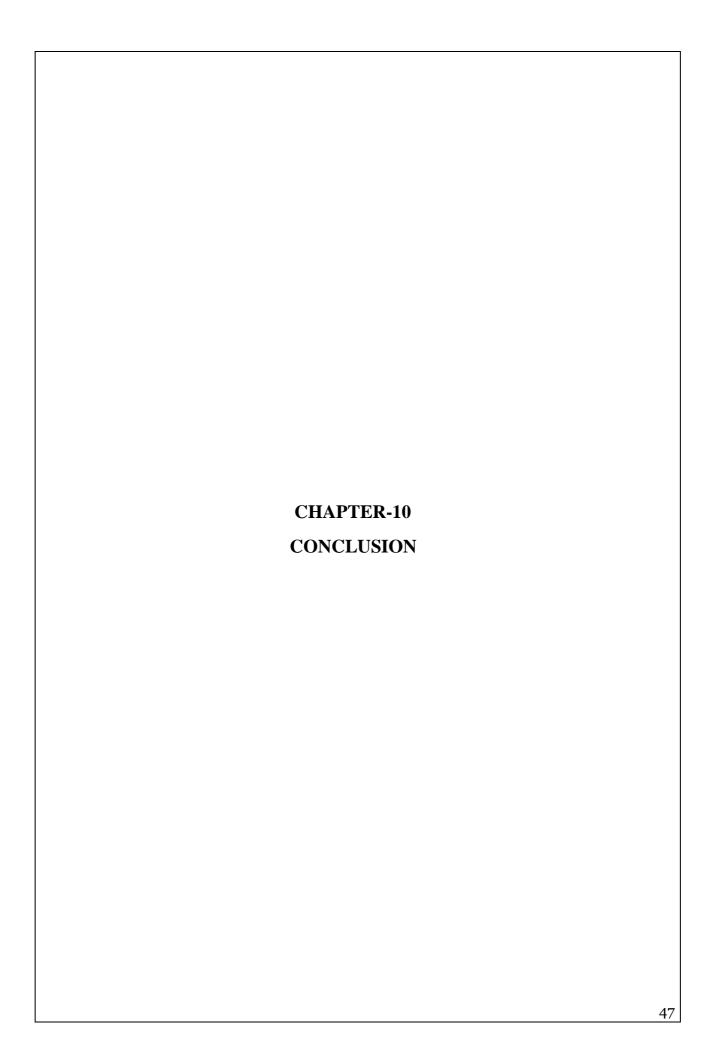
## **>** User dashboard



# **≻**Buy books page



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#### **10.1 CONCLUSION**

Our project 'USED BOOK BUYING AND SELLING PORTAL' is a Website that is implemented with simplicity. These websites often provide a convenient way for people to find and purchase affordable books and also offer an opportunity for sellers to earn some extra money by selling their old books.

However, as with any online transaction, it is important to exercise caution and take appropriate safety measures, such as carefully reading seller ratings and reviews, verifying the condition of the book before purchasing, and being aware of any potential scams or fraudulent activity.

Overall, used book buying and selling websites can be a valuable resource for book lovers, but it is important to approach them with a critical eye and use common sense to ensure a positive experience

# **REFERENCES** www.google.com www.wikipedia.com 49