PRACTICAL 1

AIM: Project Definition and objective of the specified module and Perform Requirement Engineering Process.

LIBER:

"LIBER" is the web-based application. It provides the users the information about the library in most handy way. It provides information about the books which are available at the library, provides online reading of books and also a facility to download the book online and many more features are also provide.

INNOVATIVE FEATURES OF THE SYSTEM:

- Mobile response web design which allows the user to access the same site from any type of device like smartphone, tablets, smart tv, pc, laptop.
- This web site contains new feature like "Help me find the book".
- Also provides the E-books at minimum charges.
- Also provides and interacting chat box where they are also given suggestion on the base of user's interest.
- Users can also read and write the reviews about the book.
- There is also a feature in which fine will be calculate automatically.
- Also tracks the user's record.

SCOPE OF THE SYSTEM:

- It only provides the information of the local library.
- Books include in the website will only be decided by administrator of the library.
- It focuses on:
    - Online Reading of books
    - Tracking whole record of User
    - Calculate the fine of the users.

- It will be developed in PHP, CSS, HTML.
- This project manages the Library Resources.

MAIN MODULE OF THE SYSTEM:

- Admin Module.

- User Module.

- Search and view operation by site visitor (guest) for the books.

- Advertisement posting about the books.

- Payment of the books, fines etc.

- Facility of E-book.

REQUIREMENT OF SYSTEM:

DEFINITION OF REQUIREMENT ANALYSIS:

Analysis of system requirements involves a clear understanding of the application to be developed with the view of removing all ambiguities from user perception.

REQUIREMENT SPECIFICATION:

• Non-functional requirement:

The non-functional requirements include those that are implicit and improve the quality of the software.

- **Security:**

    There is a facility for security of data. Authenticated users can access the application.

- **Easy to use:**

    The system is easy to use and a good GUI.

- **Reliability:**

    Reliability is assured by carrying out several tests for various test data as well as real live data and the output result matches the actual result.

    The system has been tested thoroughly which is described in the testing part. Hence the system is reliable. The system supports generation of the printed reports.

• Functional Requirement:

1. **USER LOGIN:**

This feature used by the user to login into system. They are required to enter user id and password before they are allowed to enter the system.SThe user id and password will be verified and if invalid id is there user is allowed to not enter the system.

REQUIREMENTS:

- user id is provided when they register
- The system must only allow user with valid id and password to enter the system
- The system performs authorization process which decides what user level can access to.
- The user must be able to logout after they finished using system.

2. ADMINISTRATOR:

Administrator of the system has all the rights and authorities to view as well as tomodify and update the system whenever required for example he can add, remove, edit,

area, valid zip code list, categories.

3. REGISTER A NEW USER:

This feature can be performed by all users to register new user to create account

REQUIREMENT:

- System must be able to verify information
- System must be able to delete information if information is wrong

4. REGISTER NEW BOOK:

This feature allows to add new books to the library.

REQUIREMENT:

- System must be able to verify information
- System must be able to enter number of copies into table.
- System must be able to not allow two books having same book id.

5. SEARCH BOOK:

This feature is found in book maintenance part. we can search book based on book id, book name, publication or by author name.

REQUIREMENT:

- System must be able to search the database based on select search type
- System must be able to filter book based on keyword entered
- System must be able to show the filtered book in table view

	VIEW	SEARCHING	MODIFY	ADD	WRITE

					REVIEWS
ADMINISTRATOR	Y	Y	Y	Y	N
GUEST	Y	Y	N	Y	Y

FEASIBILITY STUDY:

Feasibility study is the study of the application to check whether the application made is feasible or not. It is very useful to check whether the application works as per requirement or not. It is undertaken to determine the possibility of developing completely new applications. There are four feasibility studies that are considered.

● Technical feasibility

● Operational feasibility

●Implementation feasibility

- **TECHNICAL FEASIBILITY:**

  - It determines that work for the project is done with the present equipment and existing software technology.

  - As suggested for technical feasibility LIBER will be user friendly and has a better GUI.

  - Does the proposed equipment have the technical capacity to hold the data required to use the new system?

  - Are there technical guarantees of accuracy, reliability, ease of access and data security.

- **OPERATIONAL FEASIBILITY:**

  It covers mainly two aspects. It determines how the proposed system will fill in the current operation and what will happen if the job retraining and reconstructing may be needed at the end of the implementation system. The operational feasibility checks whether the user who is going to be using the system is able to work with the software in which the system is coded! System is very user friendly. Level of security and any other access control constraints are high.

- **IMPLEMENTATION FEASIBILITY:**

- As we have mentioned that we are going to use PHP, HTML, CSS, MYSQL to develop this project, we found that these technologies are easy to learn and then use.

- There is no copyright issue we face in development.

- We can use any hardware configuration of pc/laptop to complete development of this project.

- Once project is developed, it can be hosted on any web server with any operating system.

FEATURES OF THE SYSTEM:

- Also provides and interacting chat box where they are also given suggestion on the base of user's interest.

- Users can also read and write the reviews about the book.

- There is also a feature in which fine will be calculate automatically.

- Also tracks the user's record.

SYSTEM REQUIREMENT STUDY AND ASSUMPTION:

- **Hardware requirements**

The online system that we have built requires some specific hardware configuration; I have mentioned the basic minimum hardware recommendations to run the system adequately. Any higher configuration hardware would only add to the performance of the system. the minimum hardware would only add to the performance of the system. the minimum hardware requirements to run the system properly are as follows.

- 20 GB hard disk

- 512 DDR RAM

- Network card/network connection

- 1.4 GHZ processor

- **Software requirements**

➢ **Server side:**

- Operating System: any modern operating system like window, Linux, MACOS

- Web Server: Internet Information Services (IIS) Server or Apache.

- Database: MySQL

- Server-side scripting language: PHP

> **Client side:**

  - Operating System: any modern operating system like window, Linux, MACOS

  - Web Browser: any modern browser like Firefox Mozilla / Internet Explorer.

- **Technology used for development**

  - Front – End: HTML,CSS,JS,AJAX,BOOTSTRAP

  - Back – End: PHP,MYSQL

  - Tools: NotePad++/Sublime,Xamp

- **Operating System:**

  - Operating System: any modern operating system like window, Linux, MACOS.