

# **A Project/Dissertation Review-1 Report**

on

## **BOOKSHUB- A FREE E-LIBRARY**

*Submitted in partial fulfillment of the  
requirement for the award of the degree*

*of*

## **BACHELOR OF ENGINEERING IN COMPUTER SCIENCE AND ENGINEERING**



(Established under Galgotias University Uttar Pradesh Act No. 14 of 2011)

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**CANDIDATE'S DECLARATION**

I/We hereby certify that the work which is being presented in the thesis/project/dissertation, entitled “**BOOKSHUB-A FREE E-LIBRARY**” in partial fulfillment of the requirements for the award of the bachelors of engineering in computer science and engineering submitted in the School of Computing Science and Engineering of Galgotias University, Greater Noida, is an original work carried out during the period of september, 2021 to December,2021, under the supervision of bibhas rana,assistant professor Department of Computer Science and Engineering, of School of Computing Science and Engineering , Galgotias University, Greater Noida

The matter presented in the thesis has not been submitted by us for the award of any other degree of this or any other places.

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This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Supervisor name

**CERTIFICATE**

The Final Thesis/Project/ Dissertation Viva-Voce examination of ISHITA SHARMA(19SCSE1010504) and HARSHIT VATS(19SCSE1140014) has been held on \_\_\_\_\_ and his/her work is recommended for the award of BACHELORS OF ENGINEERING IN COMPUTER SCIENCE AND ENGINEERING-

**Signature of Examiner(s)**

**Signature of Supervisor(s)**

**Signature of Project Coordinator**

**Signature of Dean**

Date: November, 2013

Place: Greater Noida

## ABSTRACT

Information Communication Technology has changed the face of library function. The computerized system for handling the activities of e-library provides a comprehensive way of gaining knowledge with less physical labour and reduces complexity of the manual system.

Building digital library application and effectively adapting them to new emerging trends requires to develop a platform that offers standard and powerful building blocks to support application developers.

So, This project aims to design and implement a computerized recommendation hub of books, courses, previous year papers for government examinations and youtube playlists for video lectures.

This project is a website with an updation of chatbot in it which will help the users to find the correct source of learning to acquire knowledge in different fields.

This project has several advantages of using e-resources such as ease of – usability, affordability and accessibility. They can increase speed and ease to access and the amount of information available.

With this project, we concluded an one- step ahead website for different purposes of learning which will make things easier as Previously proposed, e-libraries provides a good source of books but do not recommend an appropriate resource for acquiring jobs and qualifying examinations.

## KEYWORDS

- E-library
- Resources
- Recommendation
- Accessibility

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## INTRODUCTION

Majority of studies, are related to Adoption, Perception, Attitude and Satisfaction of user towards E- Library services.

It is possible to archiving and accessing knowledge in the digitized form using e-library but it does not give a particular recommendation that could help in pertaining jobs and examinations. So, it doesn't give a less knowledgable person- a perfect way to gain and execute an appropriate instance.

In this competitive world, Everybody wants to be independent and succeed in life. Jobs are a major source of income that would lead to a valuable lifestyle. There are many categories of jobs in india.

For getting a desirable job, a person need to have appropriate knowledge of resources to qualify the examinations.

But majority of the people do not get enough knowledge of the resources and remain confused .

### . REASONS:-

- They do not know how to set the path and start learning.
- Poor recommendation of books leading to lack of interest.
- Not knowing about courses or video lectures for the better understanding about the exams.
- Time wastage in searching for a proper resource.

## **PROBLEM FORMULATION**

Due to spread of information, importance of information retrieval is very high. Therefore, it is very difficult to search for a particular thing.

For competitive exams ebook are the best because they explain the concept with audio, video and animation so it's become very easy to understand in this way.

When you buy book at store for competitive exams at time they are very expensive which everyone can't afford so ebook are best for competitive exams because once you download the book you can easily get the content of book print at cheapest rate also.

Previously proposed, e-libraries provides a good source of books but do not recommend an appropriate resource for acquiring jobs and qualifying examinations.

Therefore, we came up with an idea of preparing a website with a updation of chatbot.

### **FEATURES OF THIS PROPOSED WEBSITE:-**

- This website includes the recommendation of books for every category of exams for jobs in india.
- The recommendation will be categorized in three levels i.e basic, medium and advanced.
- This will also include recommendation of courses and youtube playlists.
- Examination paper of previous years of different exams.
- Exams would also be categorized as government exam, after 12<sup>th</sup> entrances, after completion of degrees etc.
- It will include a chatbot which will recommend books according to the subjects provided.

### **MODULES :-**

#### **CATEGORIES OF BOOKS**

- COMPETITIVE
- ENTRANCES
- PROGRAMMING
- GENERAL KNOWLEDGE
- GENERAL BOOKS (SCIENCE, COMMERCE ETC)



## **LEVEL**

- BASIC
- MEDIUM
- ADVANCED

## **LANGUAGE**

- ENGLISH
- HINDI

## **PREVIOUS YEAR'S QUESTION PAPERS**

## **COURSES RECOMMENDED**

## **YOUTUBE SUGGESTIONS(VIDEO LECTURES)**

## **REQUIRED TOOLS AND TECHNOLOGY**

### **HARDWARE**

- Processor- i3
- Hard disk- 4 Gb
- Memory – 2 Gb ram
- Internet connection
- Server

### **SOFTWARE**

- HTML- framework
- CSS and bootstrap- styling
- Java script/python- backend
- Mysql- database
- Scratch - chatbot
- Flask- chatbot

## LITERATURE SURVEY

Before the advent of computer in modern age there were different methods of recommendation of learning resources like books, courses etc.

People usually contacts an experienced person or a person in the same field for the resources which is a complex process because the level of acquiring and thinking differs individually.

A research paper named 'Digital/ e-library resource' by Vidya Bhaurao Thillar and Shyamla Chandrakant Yadav published in October 2016 proposed electronic library which is a collection of large and diverse repositories of digital objects and electronic information, which can be accessed by a large number of geographically, distributed users.

The major function of digital libraries is to facilitate systematic and efficient access to and sharing of information of matters, considered important by the users.

This research faces many challenges at every level of their selection, acquisition, preservation, maintenance and management .

This do not give the solution to all libraries financial, space, access and service problem.

'Design and implementation of an e-library search system' by abbas fadhil ali al- juboori proposed a system which has some methods of searches and it is convenient for the researchers to find their required information.

Digital library has become an integral part of academic research activities. It provides academic researchers with electronic access to national and international scholarly journals as well.

The database of the system contains only books names and theses title which provides the advantage to only academic organisations. This is a major setback of this paper. This mainly provides searching mechanism so a person need to have an information to use this plan appropriately.

A project named E-Library Resources and Services: Improvement and Innovation of Access and Retrieval for Effective Research Activities in University 2018 states that improved access to e-library resources enhances research E-

libraries in Kogi State Nigeria Wisdom by O. Anyim published in the year activities, promotes efficient delivery of information economically to all users; encourages cooperative efforts in research resources, computing, and communication networks; strengthens communication and collaboration between and among academic researchers and take leadership role in the generation and dissemination of knowledge.

The setback is that the e-resources and services have not been fully utilized as a result of access problem and retrieval difficulties which required improvement and innovation in other to sustain adequate patronage.

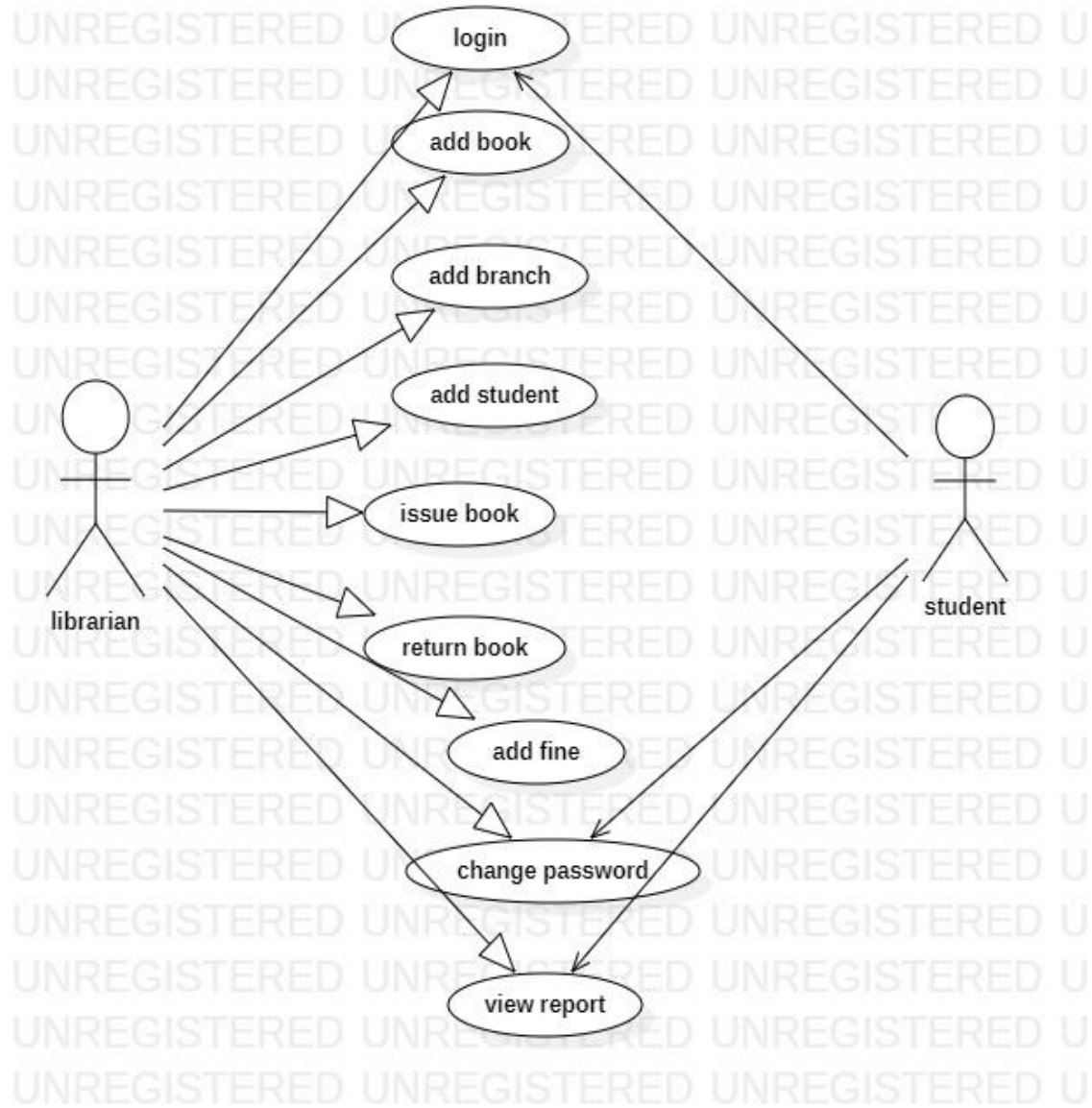
Asad

Khan (2016) investigated the factors that influence the adoption of Digital Library among research students. The findings revealed that Interface characteristics influence cognitive response which predict student's intention of using digital library. Whereas navigation, individual differences and system characteristics significantly affected the ease of use. Usefulness is directly affected by system characteristics and system quality. Finally, it is found that usefulness have highest effects on digital library usage intention.

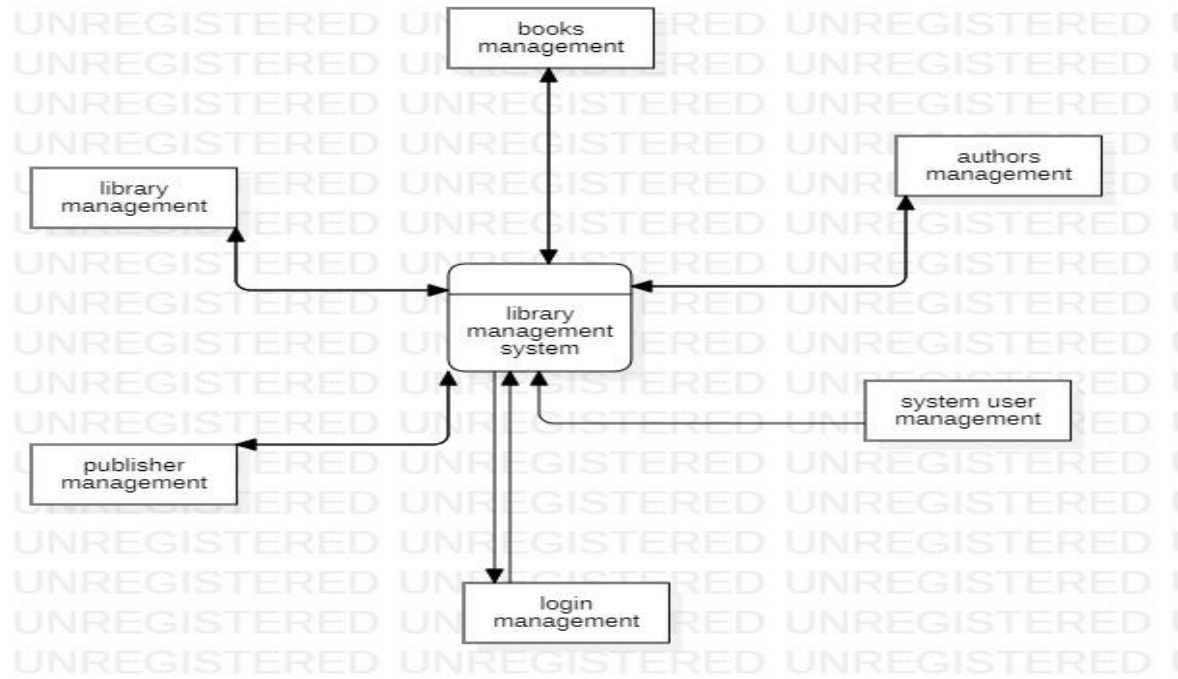
Ming-der et al (2012) research scholar are frequent users of digital resources of library in this regard this study investigated usage pattern, search behavior of graduate students and perception towards digital resources. Study reveals that students are using digital resources during thesis writing and science and technology student consider it as the most important for their research compare to other disciplines. Less number of students are using metasearch and alter services to collect update information. But this research did not conclude the advantages of the books for job purposes.

# DESIGN

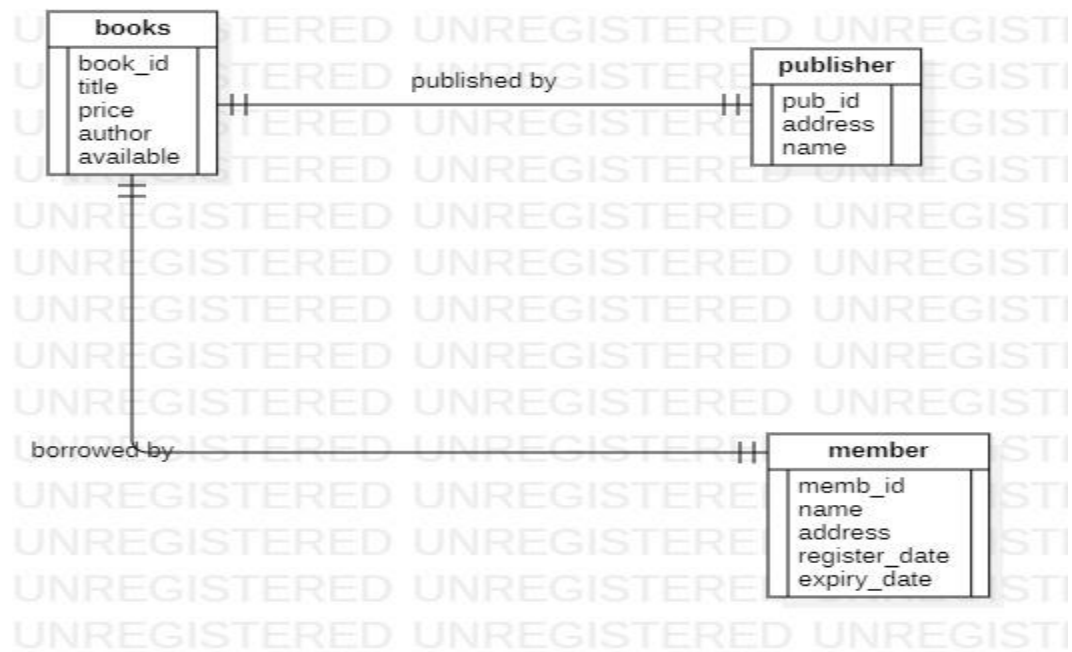
## USE CASE DIAGRAM



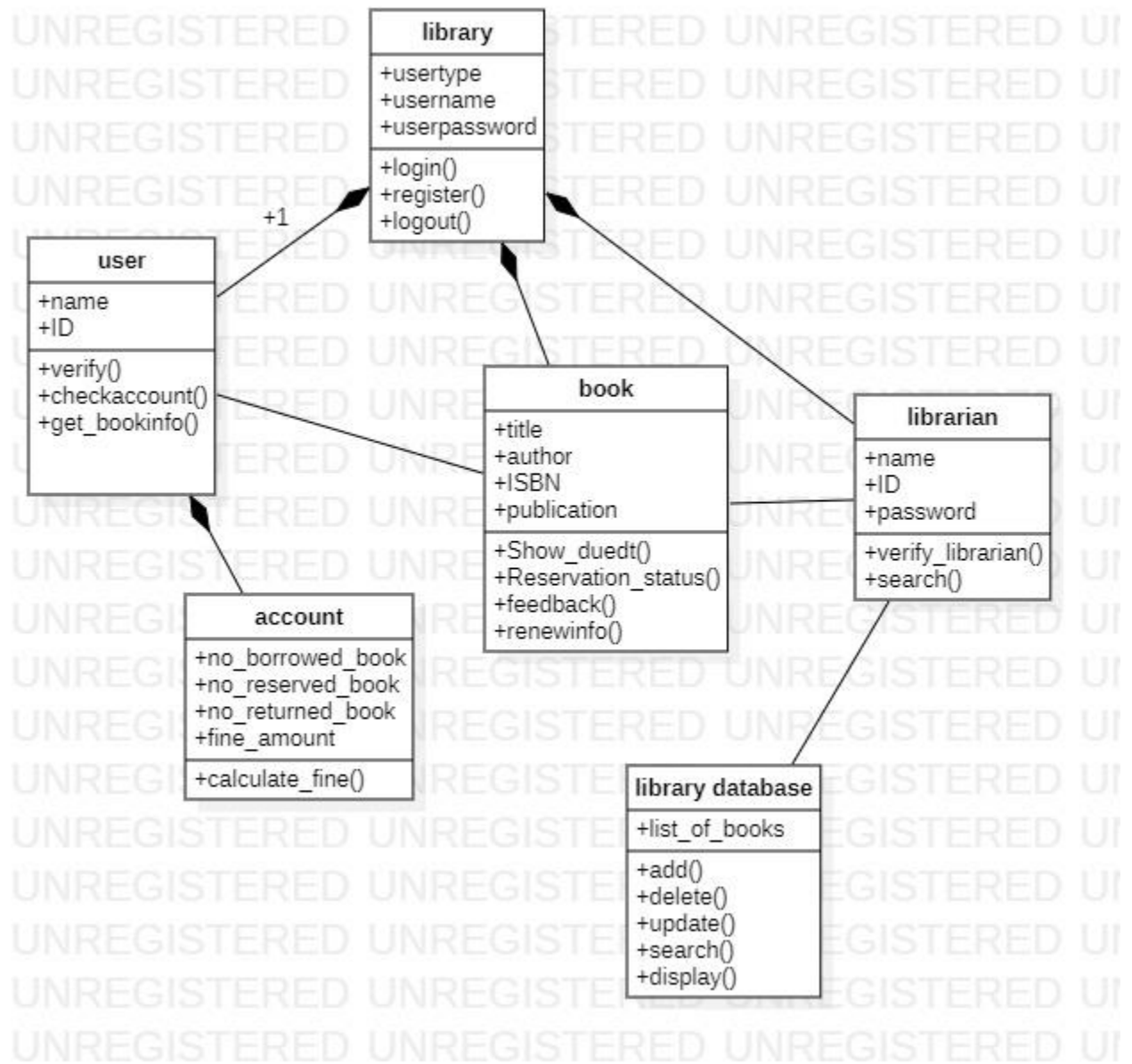
## DATA FLOW DIAGRAM



## ERD DIAGRAM



## CLASS DIAGRAM



# IMPLEMENTATION

This project is implemented by the reference WORK PLAN which is divided into three phases.

A website needs proper stimulation of data and proper interpretation which is done by different parts i.e front-end,back-end and database and these phases organizes these important part accordingly.

## A. 1<sup>ST</sup> PHASE

### FRONTEND

When it comes to web Designing it's easier and important to focus on one task at a time.

So, First we will create a temporary portfolio of our website on a notebook and then according to it we will start working on it using the HTML and create the basic structure of our website.

We will add styling in the website using CSS and BOOTSTRAP to make the website responsive.

Then we will focus on the most important part of website such as media photos and videos. The CSS will ensure that our website is super simple and it works for most responsive website.

The last step is typography. While pixels are fine when our website should have a fixed width, a responsive website should have a responsive font. Your site font should be related to its parent container width, so it can adapt to the screen of the client and be easily readable on mobile devices.

#### Important details frontend will have

- Addition of responsive meta tags in your HTML document
- Applying media queries to your layout
- images and embedded videos that are responsive
- Ensuring that typography will be easily readable on mobile devices

## **BACKEND**

We will use **PYTHON language** for making backend of our website as this back end code will adds utility to everything to the front-end of the website . This is responsible for creating, maintaining, testing, and debugging the entire back end. This includes the core application logic, databases, data and application integration, API and other back end processes.

### **B. 2<sup>ND</sup> PHASE**

#### **DATABASE**

Till now, we completed our first phase of making a website by building the front-end and back-end to make it responsive.

But without a database the website will not be in use for the people.

As Database, is a collection of data, or information, that is specially organized for rapid search and retrieval by a computer. Databases are structured to facilitate the storage, retrieval, modification, and deletion of data in conjunction with various data processing operations.

For preparation of database, we will use **MYSQL**

First we will make the **ENTITY-RELATIONSHIP** diagram for our modules. Now, according to the diagram, we will make tables by using different mysql queries like create, delete, append etc. For recommendation of material our website need,

#### **CONNECTION**

Since, the front-end, back-end and database are built. Then, we will connect these three parts together for the working of the website as each of them works as combined effort for the working of a responsive website.

Usually the frontend (client) talks to the backend (server) using a protocol (likely HTTP) through an API that could be REST . The backend receives these calls and if it has to fetch information from a database it does so, usually calling the backing database through TCP (from mysql), fetching such data, working on it and then sending it back to the frontend.

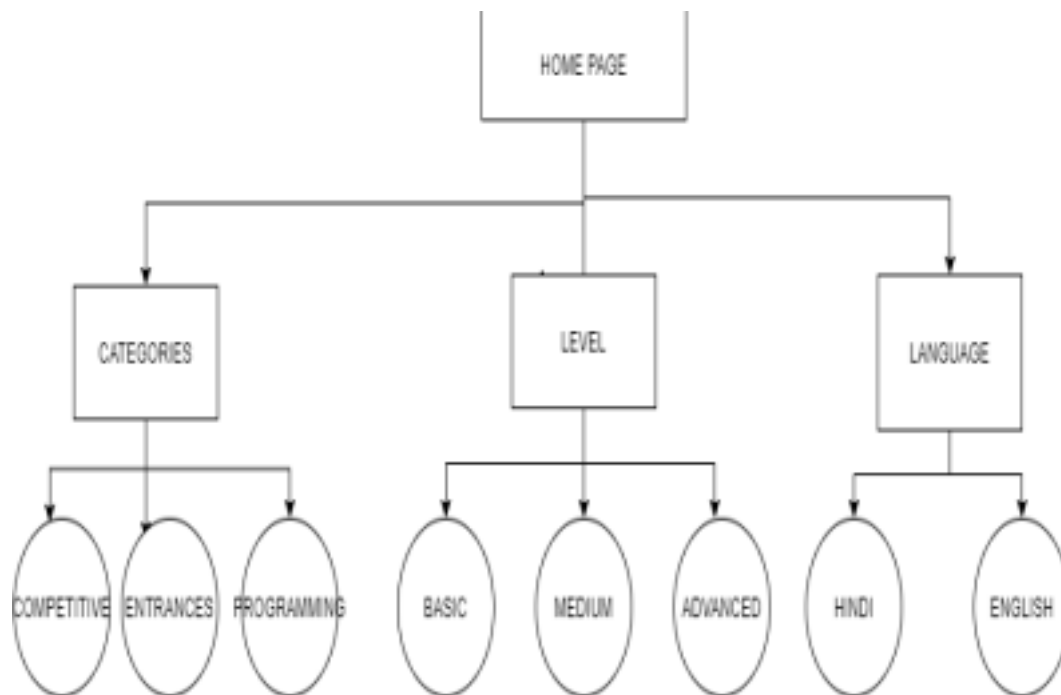
### **C. THIRD PHASE**

#### **CHATBOT**

After the two phases are complete. Then we will build a chatbot using scratch which will provide the information about the books on the basis of authors to make it easy for the customers to go through the whole website and work accordingly.

After building the chatbot, we will connect it to the website for further use.





### GLIMPSE OF CODE:-

```

<html>
<head>
<title>
BOOKSHUB- A free e-library
</title>
<link rel="stylesheet" type="text/css" href="style.css">
<meta charset="utf-8">
<meta name="viewport" content="width=device width, initial-
scale=1">

<style type="text/css">
nav
{
float: right;
word-spacing: 30px;
padding: 20px;

}
  
```

```

nav li
{
display: inline-block;
line-height: 80px;
}
</style>
</head>
<body>
<div class="wrapper">
<header>
<div class="logo">

<h1 style="color: white;">BOOKSHUB A free e-library</h1>
</div>
<nav>
<ul>
<li><a href="index.html">HOME</a></li>
<li><a href="books.html">CATEGORIES</a></li>
<li><a href="student_login.html">YOUTUBEPLAYLISTS</a></li>
<li><a href="admin_login.html">COURSES</a></li>
<li><a href="student_login.html">STUDENTLOGIN</li>
</ul>
</nav>
</header>

```

Remaining code on github.



## CONCLUSION

With this project, we concluded an one- step ahead website for different purposes of learning which will make things easier.

We also conclude the feasibility analysis of this project as follows:

At a present time with widely spread of information, importance of information retrieval is very high. Therefore, it is very difficult to search for a particular thing.

- For competitive exams ebook are the best because they explain the concept with audio, video and animation so it's become very easy to understand in this way.
- When you buy book at store for competitive exams at time they are very expensive which everyone can't afford so ebook are best for competitive exams because once you download the book you can easily get the content of book print at cheapest rate also.
- Previously proposed, e-libraries provides a good source of books but do not recommend an appropriate resource for acquiring jobs and qualifying examinations.

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Research paper published by Asad Khanin 2016.

Research paper published by Ming-der et al in 2012.

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