

A Minor Project-I Report on

BOOKAHOLIC

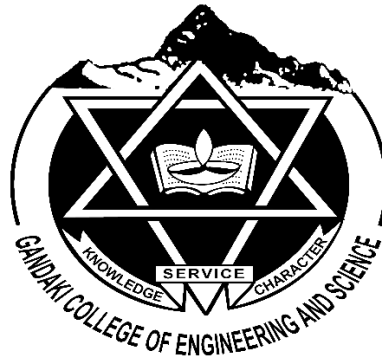
Submitted in partial fulfillment of the requirements for the degree of
Bachelor of Engineering in Software Engineering at Pokhara University

By

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Department of Research and Development

GANDAKI COLLEGE OF ENGINEERING AND SCIENCE

Lamachaur, Kaski, Nepal

(November, 2021)

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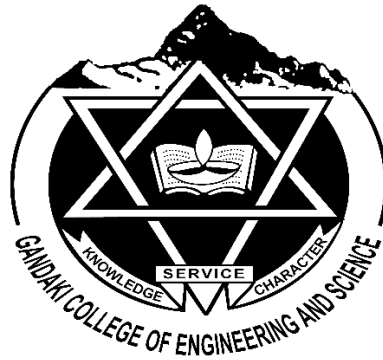
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BONAFIDE CERTIFICATE

This is to certify that this project titled **BOOKAHOLIC** in partial fulfilment of the requirements for the degree of BACHELOR OF ENGINEERING IN SOFTWARE ENGINEERING is a bona fide work of **Sishir Chhetri, Suman Darji, Sumit Gurung** under the supervision of **Er. Sujan Tamrakar**. It is further certified that this work doesn't form part of any other project work on the basis of which a degree or award was conferred on any earlier occasion on this by any other candidate.

Date of Evaluation: November 12, 2021

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ABSTRACT

Bookaholic is a free online reading web-application based on E-Book where one can search, read, and download desired books. The web app will have an e-commerce platform where users after validated registration can buy & sell books with one another. However, for the ease of the development connection within them it will solely depend on email & phone number. On the other hand, without any registration, all the users (visitors) of the web app will be able to search, read and download books, novels, etc. Moreover, registered users can upload books in PDF formats which will be available for all users and visitors to download & read online.

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CHAPTER 1

INTRODUCTION

1.1. BACKGROUND

Undoubtedly, Reading is important because it develops our thoughts, gives us endless knowledge, and also keeps our minds active. Reading books can help us learn, understand, and makes us smarter. Not to mention the knowledge, vocabulary expansion, and thinking skills we develop.

But reading physical books and getting along with the modern life act can be inconvenient sometimes. Moreover, the whole procedure of finding and getting one through the book store is too time-consuming in this timeless world. This is where the idea of E-books (electronic-books) comes into play. An electronic book, also known as an e-book is a book publication made available in digital form, readable on the flat-panel display of electronic devices (Michael Felix Suarez, 2010) . The E-books eliminates all the cons that prevail in a physical one. Our web app “Bookaholics” is fully based on the concept of e-books. In addition to this, it will have a simple E-commerce platform to eliminate the problems of searching and buying physical books.

1.2. STATEMENT PROBLEM

- The same physical book can't be available to the number of readers at the same time.
- Carrying the number of books may not be convenient.

- Searching & buying desired books in a bookstore is time-consuming.
- Limited life-span and insecurity of physical books.
- Lack of a reliable platform to share study materials.

1.3. OBJECTIVES

The main objective of this project is to develop a System of web application where one can search, download and read desired books online with the provision of buying the same physical book from other users if available. The other intended goals of this project are as follows:

- To provide the ability to registered users to upload softcopy books and comment on E-books.
- To provide a simple E-commerce platform for registered users to buy and sell books in physical form.
- To provide efficient search facilities for finding desired books.

1.4 IMPLICATIONS

Basically, Bookaholics is a free online reading web application. This web app is mainly targeted to the people who are bookaholic but it can come handy to students too as they can access study materials easily. This web app also provides an E-commerce platform for the registered user to buy and sell hardcopy books with one another. Moreover, registered users have ability to upload and share their softcopy books/study materials as a result this app can be implemented in an educational institute.

Chapter 2

LITERATURE REVIEW

Prior studies have identified many benefits for the E-Book and the system that it beholds. We found similar other products in the market. But unlike other programs, our Web-App provides a clean and easy-to-use user interface, strong search and simple E-commerce Environment.

We collected this information by comparing Bookaholic to Project Gutenberg (Project Gutenberg, 2016) and Manybooks.net (Manybooks, 2005). On comparing our web-app with them, we came to the following conclusion:

Web App Features	Project Gutenberg	Manybooks.net	Bookaholic
Search	YES	YES	YES
Add comment	NO	YES	NO
E-commerce platform	NO	YES	YES
Free Download	YES	NO(SOME)	YES
Registered user's Ability to Upload	NO	NO	YES

Table 2.1: Comparison Table

Chapter 3

TOOLS AND METHODOLOGY

3.1. REQUIRED TOOLS

Many tools are required for the development of Bookaholic. Some of the tools that are required in the project are listed below:

1. Visual studio code: For IDE
2. Html, CSS, SASS, Partical.js: For Front-end development
3. PHP: For back-end development
4. MS-Word: For preparing the proposal and the final report
5. App.lucidchart.com: For designing UML diagrams
6. My-SQL: For managing database
7. Git: For source code management

3.2. APPROACH USED

Every software development methodology approach acts as a basis for applying specific frameworks to develop and maintain software. Several software development approaches have been used since the origin of information technology. Since the system we are developing is small, the waterfall model will be used in our project.

Moreover, for front-end development BEM (Base Element Modifier) naming convention will be used for naming classes whereas, 7-1 Architecture will be used to structure the project.

3.3. DESIGNS

3.3.1. USE CASE DIAGRAM

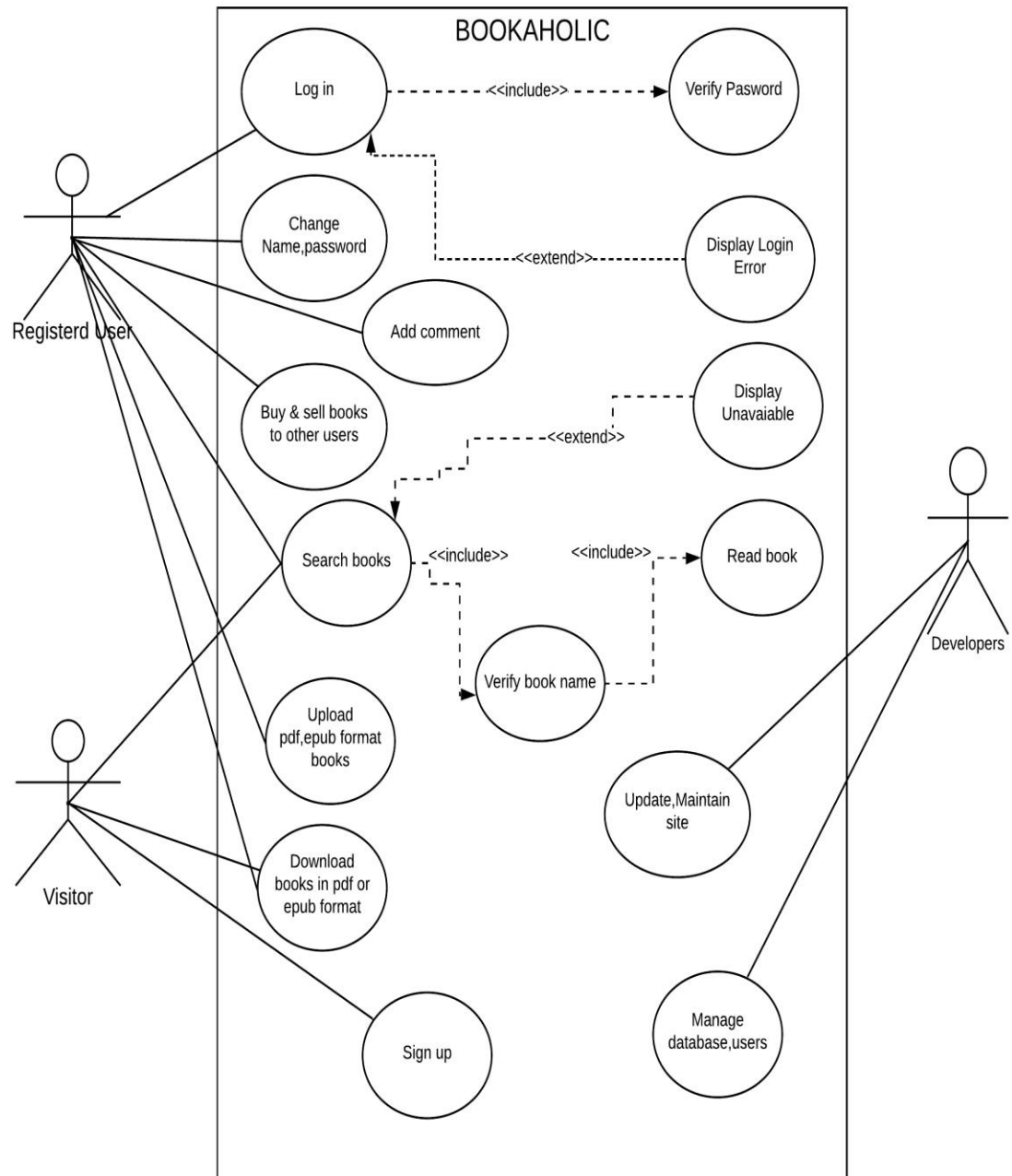


FIG 3.3.1: USE CASE DIAGRAM

Use Case UC1: Search Book

Primary Actor: ALL registered and unregistered user

Pre-conditions:

A user must know the name of Book they are searching for.

Post-conditions:

Individual page of Book should be opened.

Alternative flow:

At any time system fails, the search request halts and the user has to carry out the process again from the start.

Use Case UC2: Sign Up

Primary Actor: Unregistered User

Precondition:

Post condition: User will be registered and are able to use features.

Alternate flow: At any time system fails, User should fill up the form from the start.

Use Case UC3: Login

Primary Actor: Registered User

Precondition: User must be signed up

Postcondition: Registered user can upload softcopy books.

Alternate flow: At any time the system fails, he/she must reopen the website.

Use Case UC4: Read Book

Primary Actor: All users

Precondition: searched book should be available

Postcondition: User can read the book in pdf format.

Alternate flow: If the user is unable to open the website then he/she must reopen the website.

Use Case UC5: Download Book

Primary Actor: All User

Precondition: Searched book should be available

Postcondition: The Book in pdf format should be downloaded.

Alternate flow: If the user is unable to download the book then he/she must reopen the website.

Use Case UC6: Upload Book

Primary Actor: Registered User

Precondition: User should be Registered and all information of book should be validated

Postcondition: Book is uploaded to system database and should be available to all users for download and read online

Alternate flow: At any time system fails, User should fill up the form from the start.

Use Case UC7: Buy and Sell Book

Primary Actor: Registered User

Precondition: User should be registered and the physical book should be available.

Postcondition: If physical book is available, registered user can contact the uploader who has the book in physical form.

Alternate flow: If the user is unable to make contact then he/she must reopen the website.

3.3.2. ENTITY RELATIONSHIP DIAGRAM

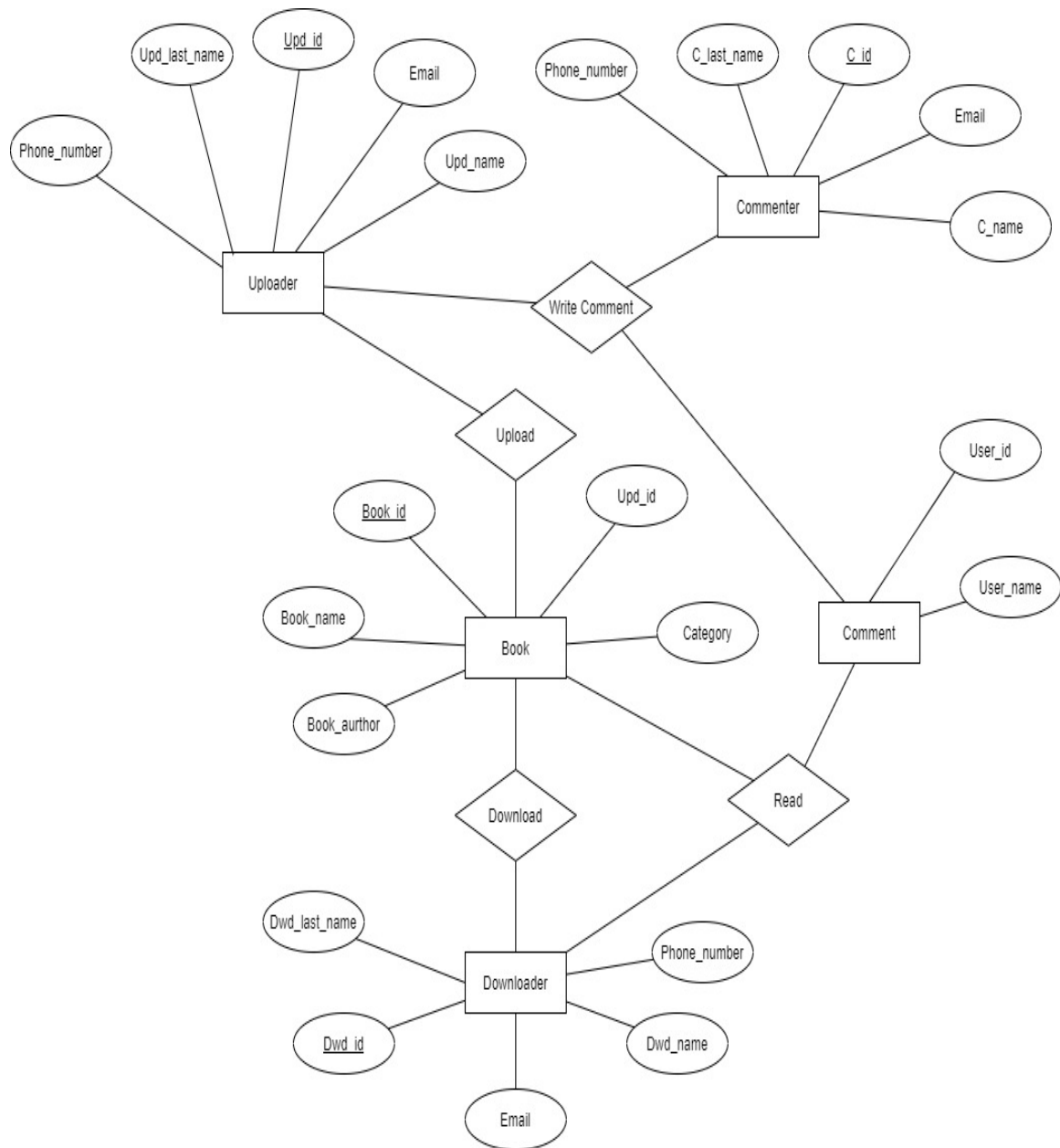


FIG 3.3.2: ENTITY RELATION DIAGRAM

3.3.3 SYSTEM SEQUENCE DIAGRAM

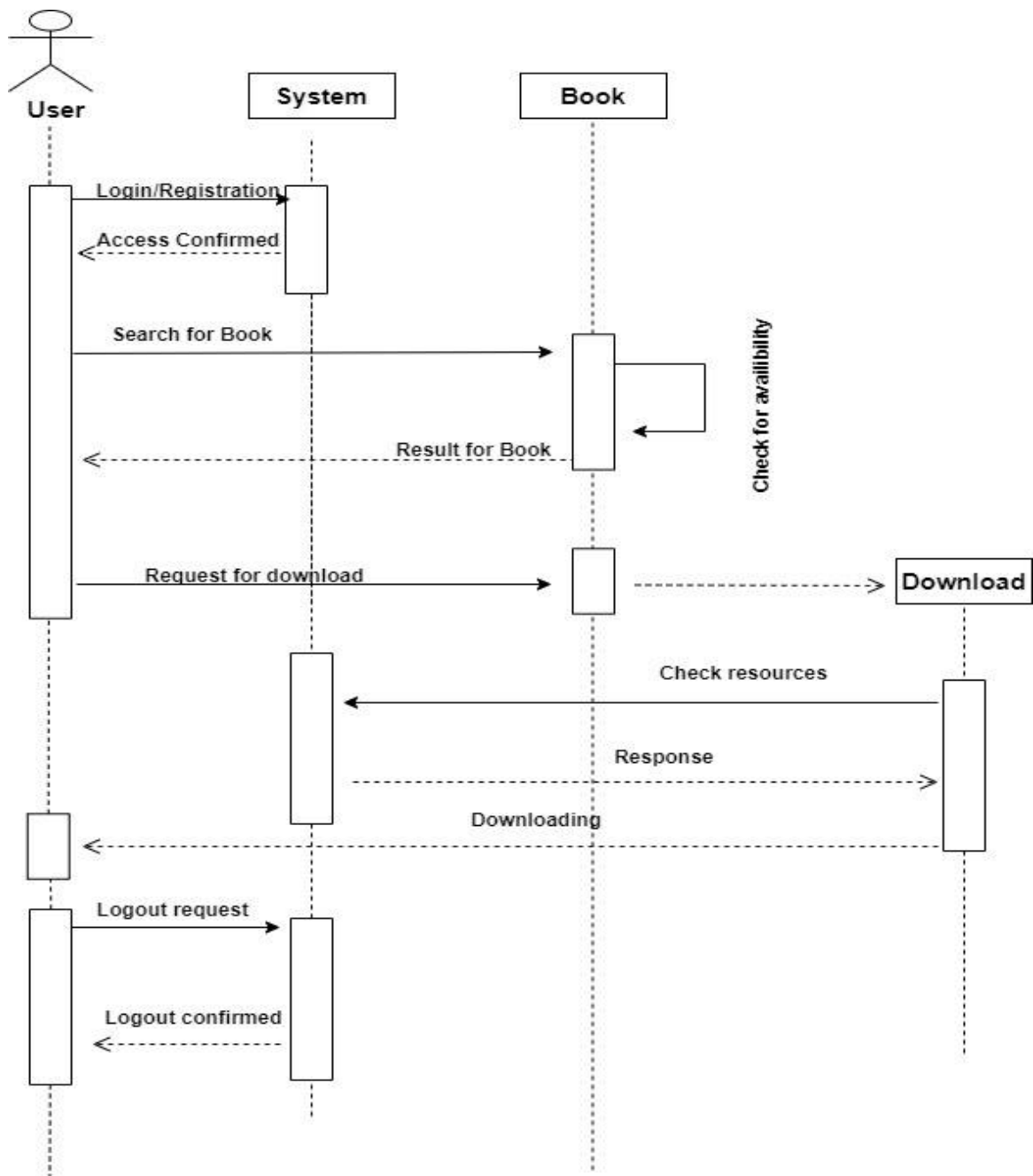


FIG 3.3.3: SYSTEM SEQUENCE DIAGRAM

CHAPTER 4

TESTING

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and code generation.

4.1 OBJECTIVE OF TESTING

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

4.2 TEST RESULT

Test Case ID	Purpose	Test Case	Expected Result
TC1	Validation	Enter empty Email, Name, Location, Phone Number	All field should be filled
TC2	Validation	Enter numbers or symbols in name field	Only letters are valid
TC3	Validation	Enter invalid Email format	Email should be of valid format
TC4	Validation	Enter wrong password in confirm password field	Password should be same

TC5	Validation	Set password less than 6 characters with no numbers	The password must at least be six letters and a number
TC6	Validation	Enter wrong phone number format	Phone number must contain 10 digits
TC7	Validation	Uncheck agree checkbox	Accept terms before submit
TC8	Authentication	Enter empty password	The password is empty
TC9	Authentication	Enter incorrect password	Password is incorrect
TC10	Authentication	Enter unregistered email	Access denied
TC11	Upload Book	Submit empty book name, author, pdf, etc.	All field must be filled
TC12	Read Book	Read book online	Book Pdf should be open
TC13	Download Book	Download book	Book pdf should be downloaded for offline use.
TC14	Search Books	Enter book name	If available, entered book's webpage should be opened. Else, Show Unavailable.
TC15	Buy and Sell Physical Books.	Contact uploader who has physical book	Registered user can contact uploader via email for buying physical books if available.

Table 5.2: Test Result

Chapter 5

RESULTS AND DISCUSSIONS

Our project Bookaholic helped us to learn in detail about the development of web application. It provided us the opportunity to get expertise in various web development languages. Our product can be used in the real-world for Reading and sharing books in efficient manner. This project was completed within the estimated time and with the coordination of team members.

5.1 LIMITATIONS

This web-application is based on E-Book where one can search, read, and download desired books. But there are some limitations. They are listed below:

- Internet access is required.
- Technical persons needed to manage the system.
- Digital devices are required for accessing the website and developing quality content.

5.2 FUTURE IMPROVEMENTS

Some of the improvements that can be implemented in the future are as follows:

- Optimization of the system.
- Addition of new features and functionalities like adding comments, review.

CHAPTER 6

CONCLUSION

Bookaholic is a free online reading web-application based on E-Book where one can search, read, and download desired books. Moreover, registered users have ability to upload and share their softcopy books/study materials as a result this app can be implemented in an educational institute the provision of buying the same physical book from other users if available. Overall, Bookaholic fulfills the need of a Bookaholic and students .

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Appendix

