Table of Content

List of Figures

List of Tables

Chapter 1: Introduction

1.1: Problem Definition

In today's digital landscape, there is an increasing need for simplified ways to access book resources from multiple platforms. Often, users have to browse through different sites to find books, either to buy or read online, which can be time-consuming and inefficient. Additionally, managing this book information and providing a central location where users can access these external resources can be a challenge for platform administrators.

The **"BookFinder"** system aims to solve these challenges by providing a centralized platform that allows Admins to upload book details and external links. Users can browse the book collection and, with a single click, be redirected to external sources where they can either buy or read the books. The system serves as a referral platform where user interaction is limited to basic functionalities such as registration, login, managing profiles, and browsing books.

1.2: Project Definition

The "**Book Finder**" system is designed to serve as an intermediary platform where book information is centralized for users. It allows Admins to manage a database of books by adding external links for users to either purchase or read the books. The primary goal of this project is to simplify the user experience by offering a one-stop location to discover books. This system does not host books but rather serves as a directory and referral system for book resources.

1.3 Project Scope

The **admin** can manage the book inventory, user data, and app content, while the **user** can search, browse and interact with books in the system.

Chapter 2: Overall Description

2.1: Product Perspective/Environment Description

2.1.1: Hardware Interface/ Hardware Specification

- **Server**: Cloud-based hosting with scalable resources.
- **Client**: Web browsers (Chrome, Firefox, Edge).

2.1.2: Software Interface/ Software Specification

- Language:
    - **Backend:** Node.js for server-side functionalities
    - **Frontend**: React.js for user interfaces.
- OS:
    - **Server**: Linux or Windows-based environments.
    - **Client**: Any modern web-enabled device including Windows, Linux, and Android platforms.
- Database:
    - MongoDB will be used as the primary database for storing book details, user profiles.
- Tools
    - Development Environment: Visual Studio Code for coding and debugging.
    - Firebase Console: For user authentication and real-time database services.

Chapter 3: System Specific Requirements

3.1: Functional Requirement

Module: Manage Login

RN	Description	Page
FR1	The system shall allow Admin users to securely log in to the platform using their credentials.	Login
FR3	The system shall allow users to securely log in using their credentials (email and OTP) or via Google Login.	Login

Module: Manage Book and User

RN	Description	Page
FR1	The system shall allow Admin users to add	Upload Book

	new books to the system by providing the following details: • Book Name • Book Description • Author Name • Book Category • Image URL (for book cover) • Book URL (link to purchase or read the book externally) • Book Type (flag for determining whether the URL is for "buy" or "read" functionality)	
FR2	The system shall allow Admin users to edit existing book entries, modifying fields such as: • Book Name • Book Description • Author Name • Book Category • Image URL • Book URL (buy or read)	Edit Books
FR3	The system shall allow Admin users to delete existing book entries from the system.	Edit Books
FR4	The system shall allow Admin to Add different category into the existing List	Add Category
FR5	The system shall provide Admin users with the ability to view all registered users, including the following information: • Username • Email • Registration Date/Time	Users

Module: Manage User Profile

RN	Description	Page
FR1	The system shall allow users to view and manage their profile information, including	Profile

	updating: • Username	
FR2	The system shall display a list of books to the user, which includes: • Book Name • Book Description (summary) • Book Category • Author Name • Image of the book • External Book URL (buy or read)	Shop
FR3	**Add Books to Favourites** • The system shall allow users to add and view books to their list of favourite books for easier access later.	LikedBook
FR4	**Book Redirection** • The system shall allow users to click on a "Buy" or "Read" button on a book card, which will redirect them to the external site associated with the provided book URL.	Single Book
FR5	**User Logout** • The system shall allow users to log out securely from the platform.	Logout

Module: Manage Books (client side)

RN	Description	Page
FR1	The system shall display a list of books to the user, which includes: • Book Name • Book Description (summary) • Book Category • Author Name • Image of the book • External Book URL (buy or read)	Shop
FR3	**Add Books to Favourites** • The system shall allow users to add and view books to their list of favourite books for easier access later.	Favorite
FR4	**Book Redirection** • The system shall allow users to click on a "Buy" or "Read" button on a book card, which will redirect them to the external site associated with the provided book URL	Single Book

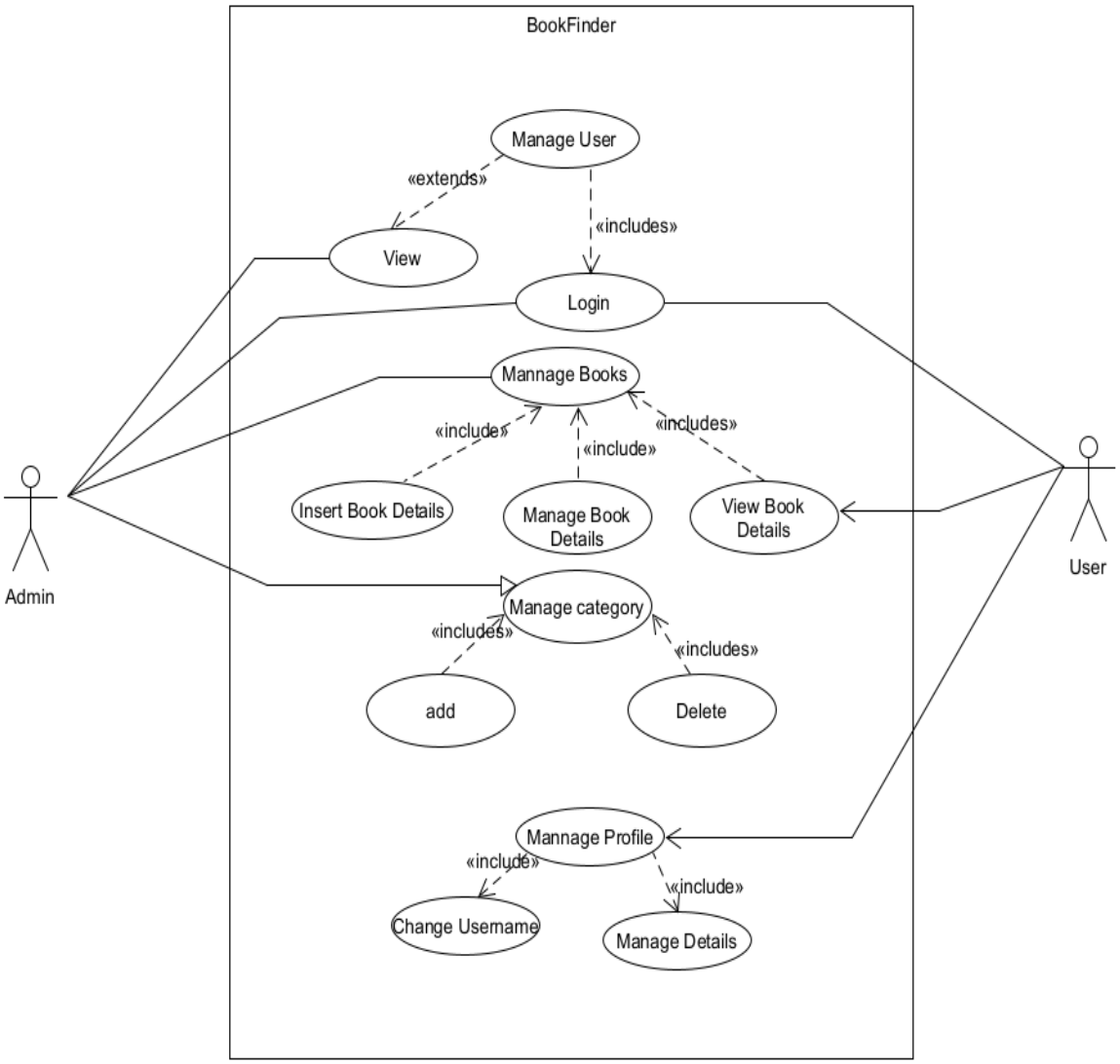
3.2: Non-functional Requirement

RN	Description	Comments
NFR1	Access to the system is 24x7 with proper internet connection.	Availability
NFR2	The system will provide the basic security	Security

	requirement by using OTP based login.	
NFR3	The system can adopt different browsers which support HTML and JS for user friendliness	Adoptability
NFR4	The system is highly reliable with different computers	Reliability
NFR5	The system shall be maintained when bugs arise, or new feature are needed to be added.	Maintainability
NFR6	The system will run in every environment.	Portability

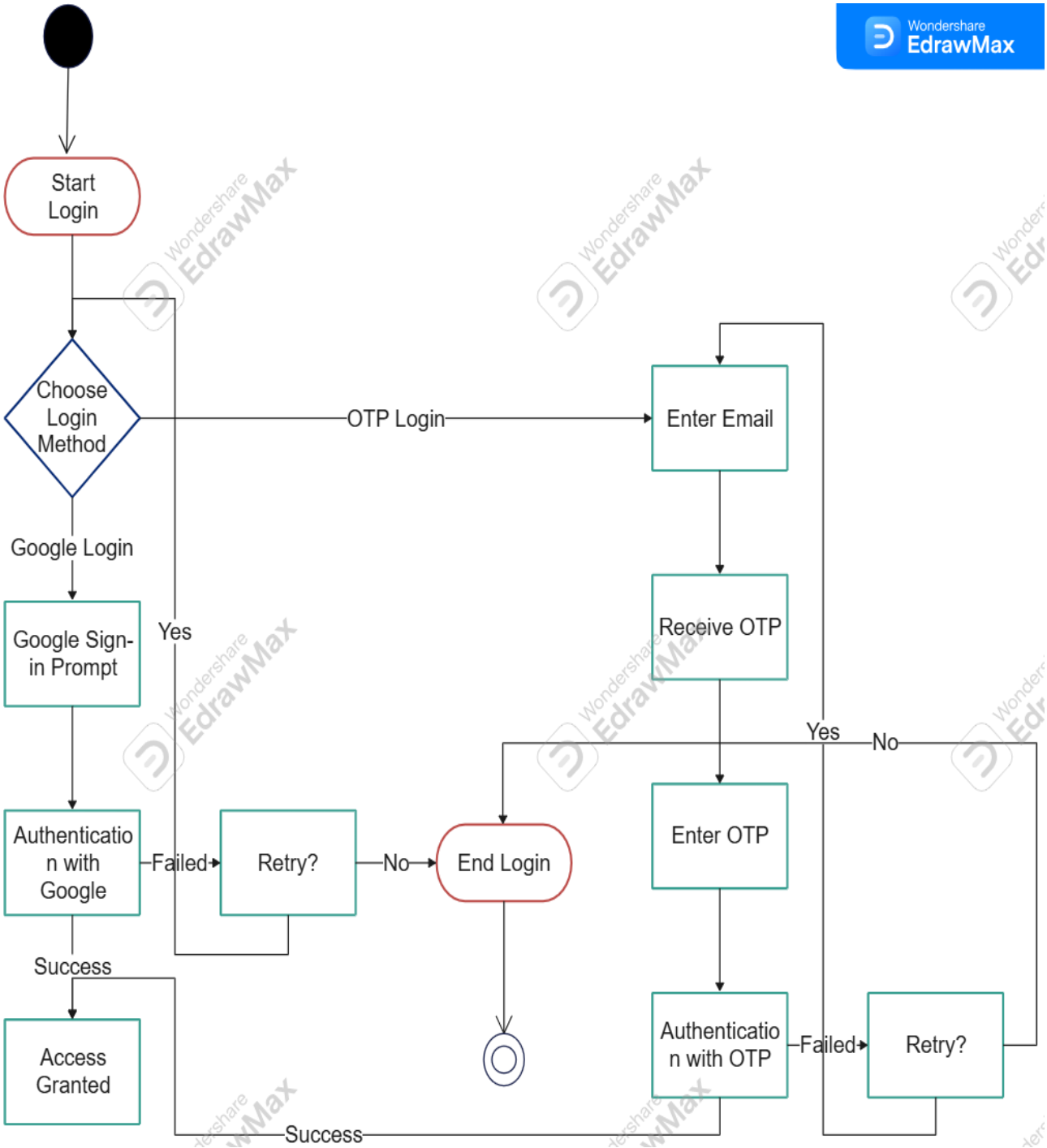
Chapter 4: UML Diagrams

4.1: Use case Diagram



4.2: Activity Diagram

1.Activity diagram for login



Chapter 5: System Design

5.1: Database Design

5.1.1: Data Dictionary:

Database Name: BookFinder

1. Books Collection:

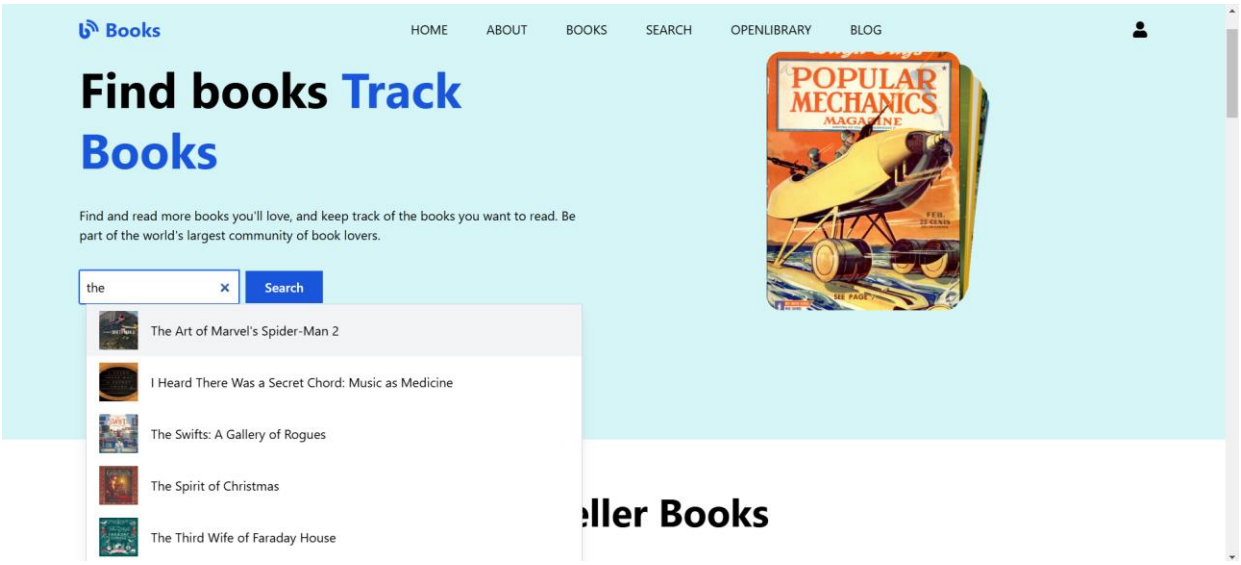
- **Collection Name: Books**
- **Document Structure:**
    - _id: ObjectId (Primary key, auto-generated)
    - bookTitle: String (Title of the book)
    - authorName: String (Name of the author)
    - category: String (Category or genre of the book)
    - bookDescription: String (Brief description of the book)
    - imageURL: String (URL of the book cover image)
    - bookBuyURL: String (URL for redirection)
    - bookReadURL: String (URL for redirection)
    - created at: Date (Timestamp of when the book was added)
- **Collection Name: Category**
- **Document Structure:**
    - _id: ObjectId (Primary key, auto-generated)
    - Category_Name: String (Name of the category)

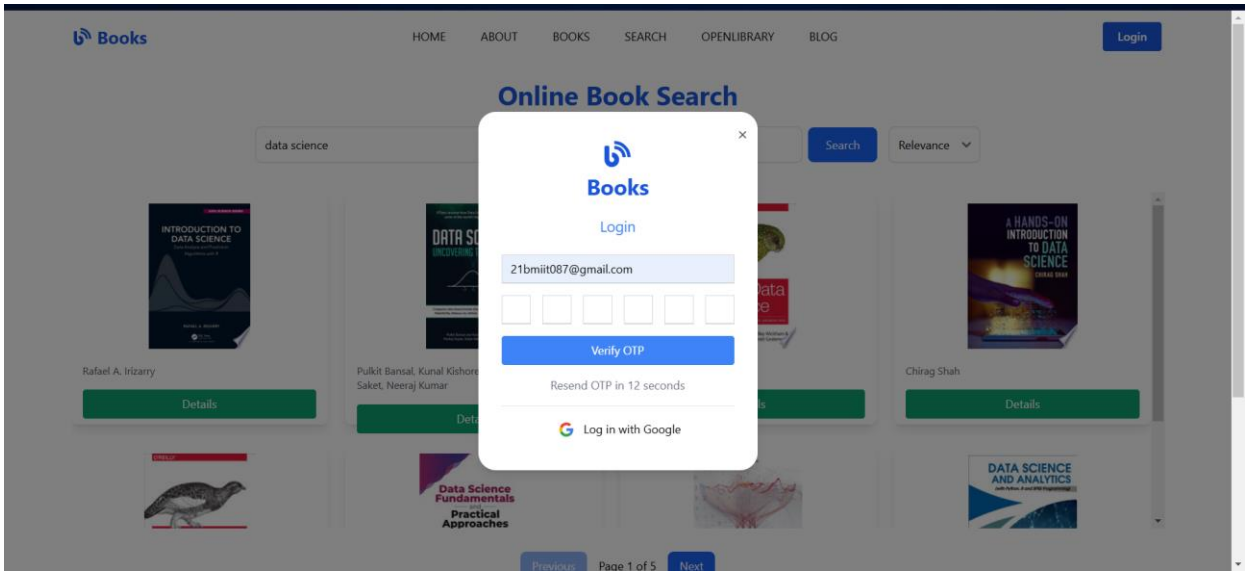
- **Collection Name: Users**
- **Document Structure:**
    - _id: ObjectId (Primary key, auto-generated by MongoDB)

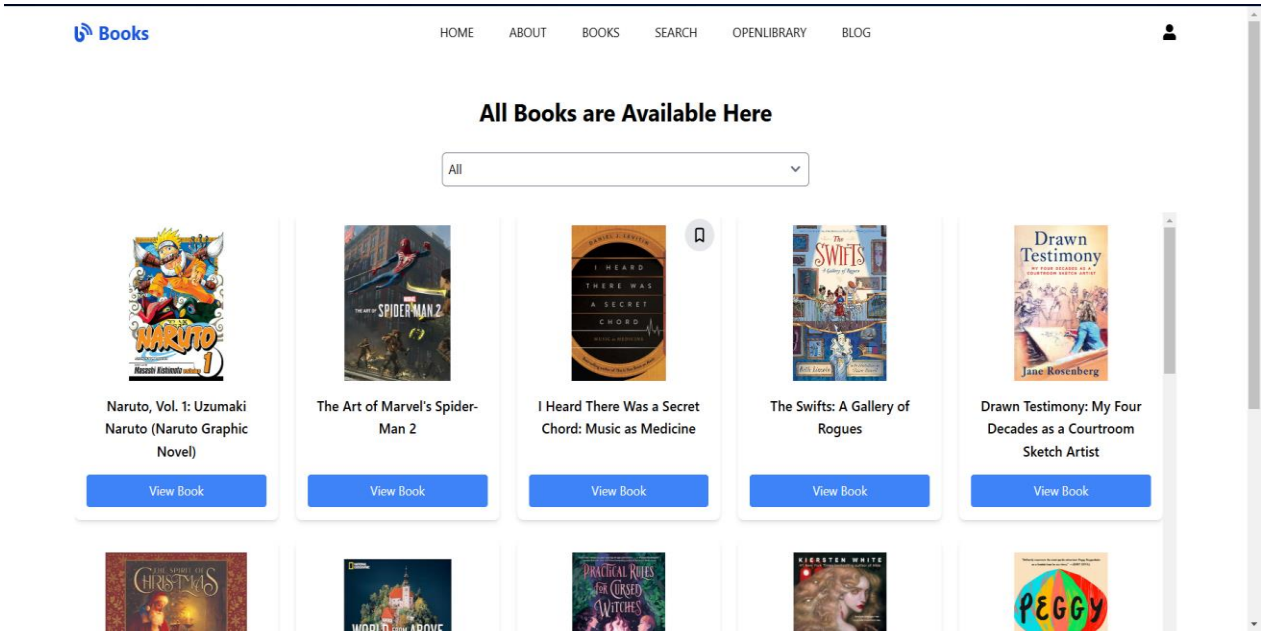
- username: String (The user’s name)
- email: String (Unique email of the user)
- role: String (User role: 'admin' or 'normal')
- bookmark: array of ObjectId (reference to the book collection objectId)
- Favourite: array of ObjectId (reference to the book collection objectId)
- created at: Date (Timestamp when the user registered)

Chapter 6: System Implementation

6.1: Screenshots


Books
HOME
ABOUT
BOOKS
SEARCH
OPENLIBRARY
BLOG
Find books Track Books
Find and read more books you'll love, and keep track of the books you want to read. Be part of the world's largest community of book lovers.
the
Search
The Art of Marvel's Spider-Man 2
I Heard There Was a Secret Chord: Music as Medicine
The Swifts: A Gallery of Rogues
The Spirit of Christmas
The Third Wife of Faraday House
POPULAR MECHANICS
MAGAZINE
eller Books


Books
HOME
ABOUT
BOOKS
SEARCH
OPENLIBRARY
BLOG
Login
Online Book Search
data science
Search
Relevance
Books
Login
21bmiit087@gmail.com
Verify OTP
Resend OTP in 12 seconds
Log in with Google
Rafael A. Irizarry
Details
Chirag Shah
Details
Data Science Fundamentals
Practical Approaches
DATA SCIENCE AND ANALYTICS
Previous
Page 1 of 5
Next


Books
HOME
ABOUT
BOOKS
SEARCH
OPENLIBRARY
BLOG
All Books are Available Here
All
Naruto, Vol. 1: Uzumaki Naruto (Naruto Graphic Novel)
View Book
The Art of Marvel's Spider-Man 2
View Book
I Heard There Was a Secret Chord: Music as Medicine
View Book
The Swifts: A Gallery of Rogues
View Book
Drawn Testimony: My Four Decades as a Courtroom Sketch Artist
View Book

Chapter 7: Testing

7.1: Test Cases

Chapter 8: Future Enhancement

Conclusion