

Locating Book In Library Using Wi-Fi

N.Thulasi Chitra , R.Anusha , G.Roja, B.Dhana Lakshmi

Abstract: A library is an immense gathering of books. This requires an appropriate course of action and situation of books in a request that makes it simple for the client to locate a specific book. Yet, in huge libraries having a gigantic gathering, finding a specific book turns out to be a significant undertaking. Despite the fact that all books are organized in classifications, the area of class should initially be known with the goal that the client becomes more acquainted with, where that specific class of books are set. In such a condition there should be a path through client can decisively find the area of any book by simply composing its name. Here, we propose a server based framework utilizing an android application to accomplish this assignment utilizing WI-FI innovation. The library administrator simply needs to include the area of a book in the framework. This information is put away in the server. Presently individuals are given an android application that fills the book discovering need. At whatever point client inside WI-FI scope of server types the book name through the android gadget, it sends a demand to server for the specific book area. The server in this manner questions the database and returns the book area subtleties and accessibility to the android user. Thus, it permits to mechanize the library book finding and additionally accessibility checking usefulness in a library.

Index Terms :Library, WI-FI ,Android,Locator,Book.

I. INTRODUCTION

The main objective of the paper is to locate the book in library using WI-FI[1][2] easily than searching book manually. We all might have experience some difficulty in locating a specific book in a library. This application aims to develop a system used to locate a particular book in a library with the help of a personal computer or using a gadget .The user should have a mini gadget with the WI- FI possibility. Then, he can access the application regarding his requirement. We can find all the books accurately in specified location and we can also block for some time. custodians may not be knowing the correct position of the book that an individual is scanning for. In this circumstance, the Android Wi-Fi library book locator application comes into picture.

1. PROBLEM IDENTIFICATION

1.1 Methods to search book in Library

There are two methods in searching a book in Library:

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1.1.1 Manual Method:

In library, we have a large collection of books, to search for a book manually is a big task. It is a time consuming process also.

1.1.2 Automatic Method:

In automatic method, the library administrator simply needs to include the area of a book in the framework. All this data is stored in the server. Whenever the user search for a particular book from his android mobile[5][6] with the application installed in his mobile, immediately it is connected the android phone to the system and gives the location of book. The user can block the book for an hour.

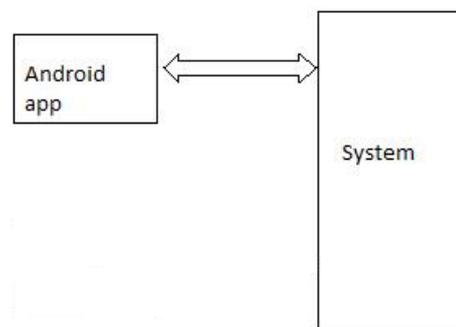


Fig.1.1.1 Android app connected to the system using WI-FI

II. EXISTING SYSTEM

2.1.1 Operating manually

As, the information technology had improved a lot , but in some schools and colleges library management system is still operated manually.

2.1.2 Most libraries are staff intensive

For library maintenance, we require more staff because of placing books in appropriate location and to search for book if any student didn't find it.

2.2 PROPOSED SYSTEM :

In the proposed system, how easily we can search a book in library by using WI-FI. The details of all books are stored in server. Each book has a unique id. Based on the unique id the operator search for the book availability. If the book is available, it blocks the book for an hour. Otherwise, it sends a message to user book is not available. If time exceeds one hour then it is automatically unblocked ,that book will be available.

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3. System Design

III. ARCHITECTURE DESIGN

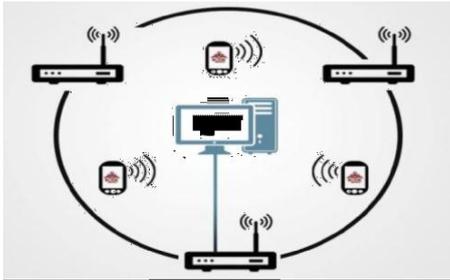


Fig.3.1.1 connection between android phone and the system

Fig 3.1.2 BLOCK DIAGRAM



3.2 Hardware and software Components

3.2.1 Hardware Components

- Hard disk- 2gb
- Ram-1gb
- Keyboard
- Monitor
- Printer
- Processor-dual core or above
- Mouse

3.2.2 Software Componentes

- Android software development kit(sdk)
- Notepad
- Netbeans
- Windows xp
- Java development kit(jdk)

III. MODULE DESCRIPTION

The proposed system consists of four modules.

4.1.1 SETUP BOOK MODULE:

This module contains relations (tables) and lists of all the books available with their exact position in the shelf and the library **admin** as well as **user** both can access this module from the open web.

4.1.2 ADMIN MODULE:

All the details about the users, all the server side management, all the updating of information related to library are done by administration of the system.

4.1.3 USER MODULE:

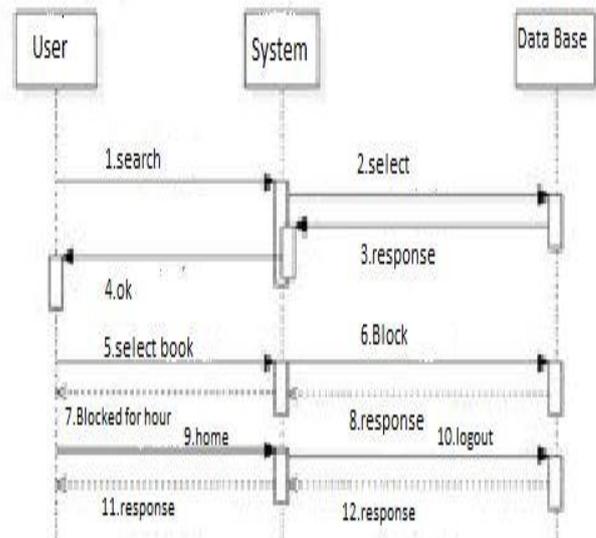
Users of the library should have unique id number and roll no (if this system is being used for the college/school or any institution)

and they can register themselves through the roll number and then can access every book location via using the search filter.

4.1.4 DATABASE MODULE:

All the queries are being executed in this module and database management is done in this module

IMPLEMENTATION



5.1 PROCESS DESCRIPTION

The user search for a selected book in the library using WI-FI. Through android app and WI-FI it is connected to the server system. The server checks for the book availability in the database. If the book is available it responds with ok message. Now the user can select the book and block the book for an hour. The message had been sent to the authenticated user your book is blocked for an hour and collect the book with in the given time. If the user didn't collect the book within the time, it is automatically unblocked and can be used by other user. After getting confirmation, the user can logout from the application.

IV. RESULTS

The paper "LOCATING BOOK IN LIBRARY USING WI-FI" was designed to search a book in library in an easy way by using android app. By using this project, the user can select a book and block the book for an hour.

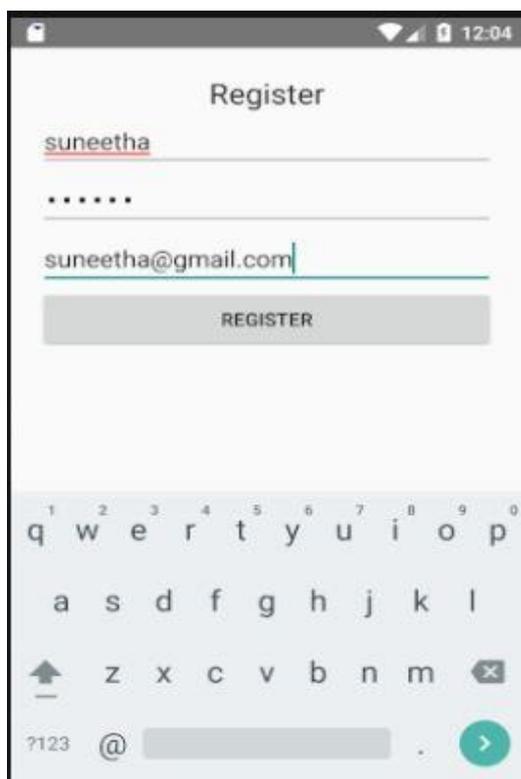


Fig 6.1 User Registration in android app

Fig 6.2 Authentic User



Fig 6.3 Search Your Book

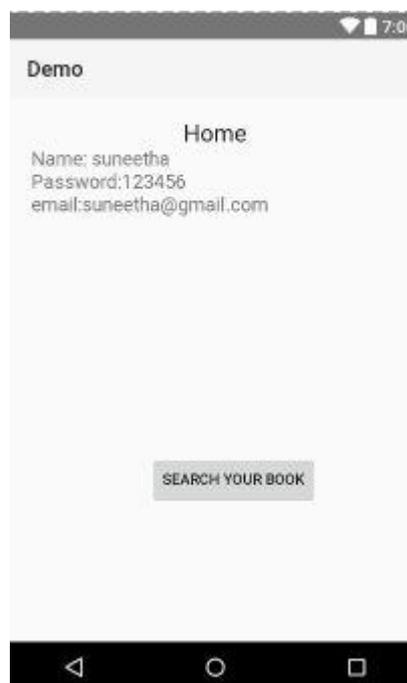
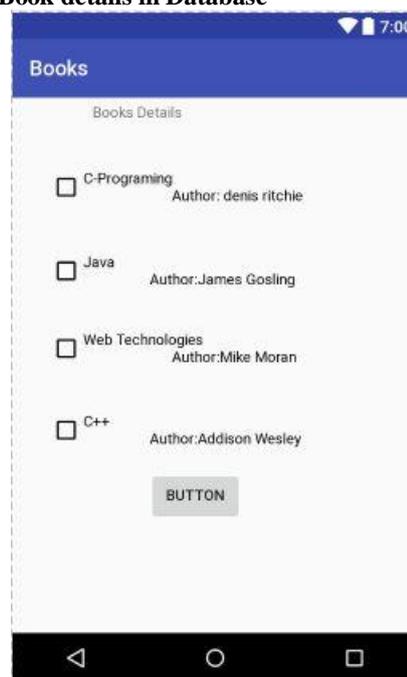


Fig 6.4 Book details in Database



● **Message Alert:**

When a book is available, it sends message to the user as “YOUR BOOK IS BLOCKED FOR ONE HOUR”.

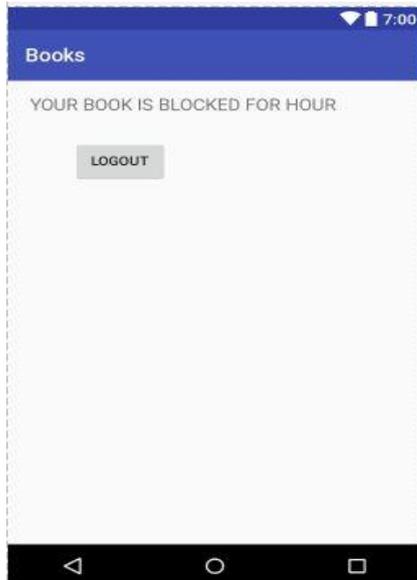


Fig:6.5 Message Alert sent to User

7. Conclusion and Future Enhancement

Whenever any faculty/student takes and reads a book and if they may not keep it in the same position as before it may lead to confusion. By utilizing this application individuals will have the capacity to look as in which position of the book is available and furthermore the status of the book (accessible/not accessible). At last this application gives administrators to refresh new books and essentially individuals can enter the book name and writer name and can get the correct area of book. Along these lines remembering the imperfections of the current framework, the proposed framework is by all accounts much better and proficient as far as innovation and reconciliation perspective. Application is anything but difficult to utilize, efficient and effective to discover a book in a library, for example, British library.

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The sites which were used while doing this paper