

# **A MINI PROJECT REPORT**

**On**

**Meri Library**

**Submitted by**

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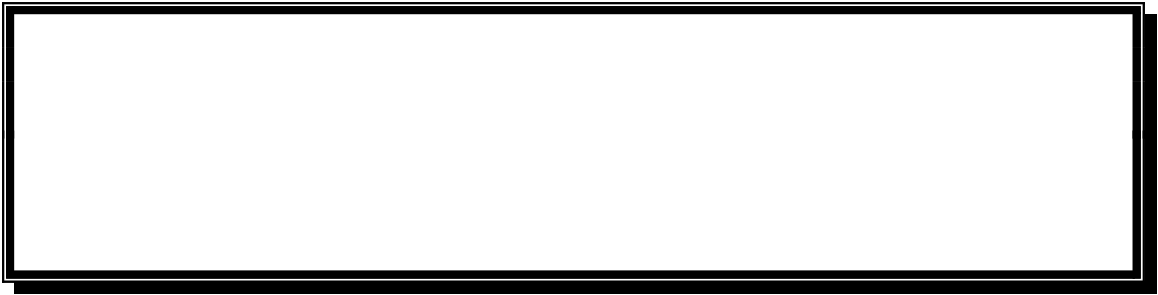
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Meri Library



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**GLA University, Mathura**

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### **Declaration**

We hereby declare that the work which is being presented in the Mini Project “**Meri Library**”, in partial fulfillment of the requirements for Mini-Project LAB, is an authentic record of our own work carried under the supervision of **Mr. Divyansh Bhardwaj**, Technical Trainer, GLA University, Mathura.

Akash

Signature

Anmol Singh

Signature

Mohit Saxena

Signature

Satyam Gupta

Signature

Meri Library



**Department of Computer Engineering and Applications**

**GLA University, Mathura**

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## **CERTIFICATE**

This is to certify that the project entitled “*Meri Library*” carried out in Mini Project – II Lab is a bonafide work done by *Akash(178420001)*, *Anmol Singh(188429006)*, *Mohit Saxena (188429028)* and *Satyam Gupta (178420006)* and is submitted in partial fulfillment of the requirements for the award of the degree Master in Computer Applications (Computer Science & Engineering).

**Signature with date**

**Name of Supervisor:**

**Mr. Divyansh Bhardwaj**

**Signature with date**

**Mr. Rakesh Kumar**

**(Mini Project Coordinator)**

**Date:**

## **ACKNOWLEDGEMENT**

It gives us a great sense of pleasure to present the report of the B. Tech Mini Project undertaken during B. Tech. Third Year. This project in itself is an acknowledgement to the inspiration, drive and technical assistance contributed to it by many individuals. This project would never have seen the light of the day without the help and guidance that we have received.

Our heartiest thanks to **Prof. (Dr.)Anand Singh Jalal**, Head of Dept., Department of CEA for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal.

We owe special debt of gratitude to **Mr. Divyansh Bhardwaj** , Technical Trainer Department of CEA, for his constant support and guidance throughout the course of our work. His sincerity, thoroughness and perseverance have been a constant source of inspiration for us. He has showered us with all his extensively experienced ideas and insightful comments at virtually all stages of the project & has also taught us about the latest industry-oriented technologies.

We also do not like to miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and cooperation during the development of our project. Last but not the least, we acknowledge our friends for their contribution in the completion of the project.

Akash

Anmol Singh

Mohit Saxena

Satyam Gupta

## **Abstract**

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Meri Library is an application to be used by students for reading the books. Meri Library application to be developed benefits greatly the student of the GLA University. The Application Provides e-books for GLA students. Admin can add or delete the books at any time. Meri Library provides online e-books for the students. In Meri Library application, students of MCA in GLA University have all the e-books of their certain semester. Admin can add and delete the books from the application. There are lots of books available in the digital format on the internet. We face very difficulty to find the relevant content. There is no solution made for MCA's students yet. We collect all relevant content and put it into the Android App in subject wise order so that student can find the desired book easily.

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## **References/Bibliography**

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# **Introduction**

## **Objective:**

There are lots of books available in the digital format on the internet. We face very difficulties to find the relevant content. There is no solution made for MCA's students yet. We collect all relevant content and put it into an Android App in subject wise order so that student can find the desired book easily.

## **Motivation and Overview:**

This is an Android app for MCA students. This app contains the complete syllabus and pdf books of all the subjects that are taught in MCA course in GLA University. A single app that contains all the books of the all the semesters of this course. This app is very helpful for MCA students. A student can read any subject anytime and anywhere. Students don't need to carry heavy weight books. Students don't need to search different books on Google. They waste their time while searching on internet, In this app all the books are arranged in semester wise order, So this app saves the time of searching. This app loads the book very fast and saves the time. A student can also download the book, so that he/she can read the book while internet is not connected. This app takes little space, so it can be install in all Android phones.

# Software Requirement Analysis

## 1.1 Purpose

Meri Library is an Android application which provides the various book for the MCA students of GLA University.

In GLA University, this application is very helpful because, there are many students who read the e-books. This app provides the e-books for the MCA students of the GLA University for all subjects.

## 1.2 Scope

- There are two basic user - **Students and Admin.**
- All user have their own profiles in Meri Library.
- Students can read all the subject book by using this android application.
- Admin can upload, delete and modify the book by using admin application.
- Admin has the authority to add/delete users.



### 1.3 Definitions, Acronyms, and Abbreviations

- **Admin:** Admin stands for Administrator. he has the authority to add/delete the books, users.
- **Student:** Student is the main user for that application because, student read the books add by the admin in the application.
- **FB:** FB stands for Firebase, this is the database platform to maintain records of students, admin and books.
- **XML:** XML stands for Extensible Markup Language, it is a text based format that let developers describe, deliver and exchange structured data between a range of applications to client for display and manipulation.
- **UML:** UML stands for Unified Modeling Language, it is a standard language for writing software blueprints. The UML may be used to visualize, specify, construct and document.
- **Java:** Java is use to create the business logic of the android application.

### 1.4 References

- [www.javatpoint.com](http://www.javatpoint.com)
- [www.tutorialpoint.com](http://www.tutorialpoint.com)
- Java Complete Reference By Herbert Schildt
- Android Apps for Absolute Beginners
- Android App Development For Dummies

## **2. General Description**

### **2.1 Product Perspective**

- Meri Library is an application to be used by students for reading the books.
- Meri Library application to be developed benefits greatly the student of the GLA University.
- The Application Provides e-books for GLA students.
- Admin can add or delete the books at any time.

### **2.2 Product Functions**

- Meri Library provides online e-books for the students.
- In Meri Library application, students of MCA in GLA University have all the e-books of their certain semester.
- Admin can add and delete the books from the application.

### **2.3 User Characteristics**

Every user should be comfortable of working with android mobile smartphone. He must have the basic knowledge of android application too.

### **2.4 General Constraints**

- GUI is only in English.
- Login and password is used for identification of user and there is no facility for guest.

## Meri Library

- Only MCA GLA University students will be authorized for this application.
- Smartphone must have an active internet connection for this application.

### 3. Specific Requirements

#### 3.1 External Interface Requirements

##### 3.1.1 User Interfaces

**GUI:** Describes the graphical user interface if present. This section should include a set of screen dumps or mockups to illustrate user interface features.

##### 3.1.2 Hardware Interfaces

- Android Smartphone
- RAM: 2gb or more
- Android Version 5.5 or more

##### 3.1.4 Communications Interfaces

The Customer must connect to the Internet to access the Application.

#### 3.2 Functional Requirements

##### **Administrator login:**

- In login screen, the authorized administrator will login to the system using username and password.
- Administrator can add or remove the user.
- Administrator also can add or remove the e-books.

### **User Login:**

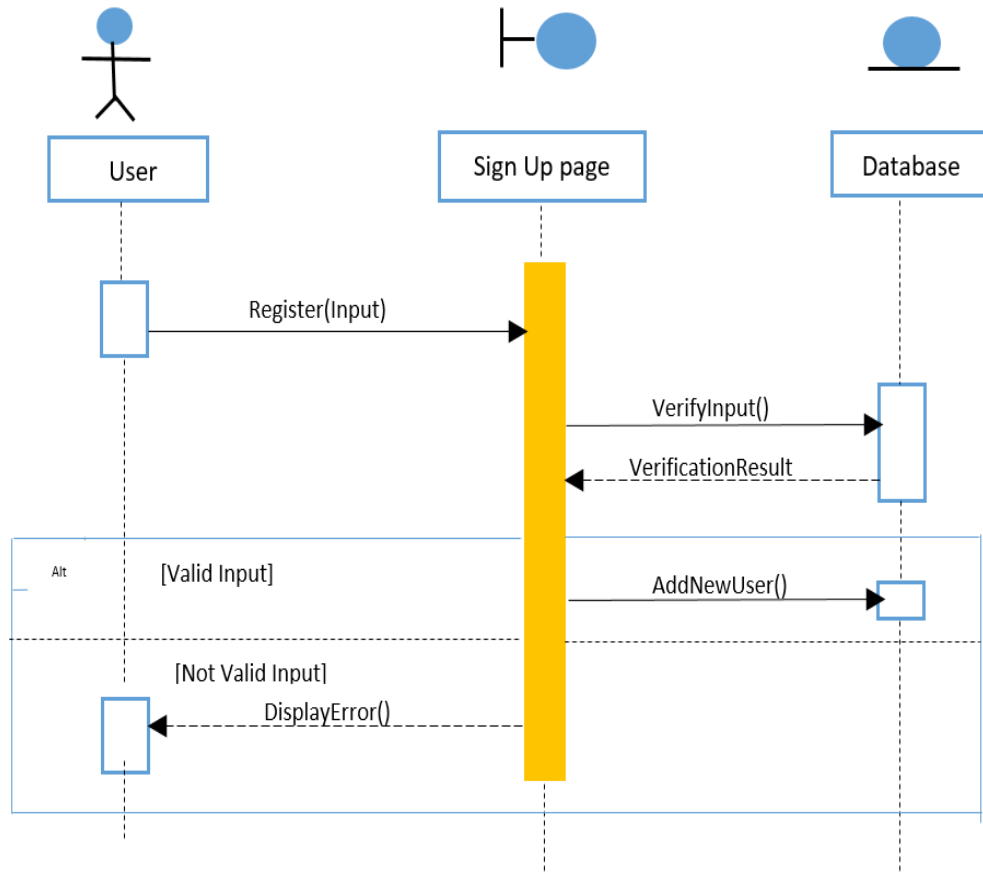
- In login screen, the authorized users will login to the system using username and password.
- User can view the e-books according to their semester.

### **3.3 Non-Functional Requirements**

- 
- **Availability:** 24\*7 availability is provided.
- **Security:** All the information in the library database and the transaction is secured, authentication is provided to all the users, only authenticated users can use the application.
- **Performance:** All the components are simple with all the features and services, thus there is no complication and complexity in the design which enhances the performance.

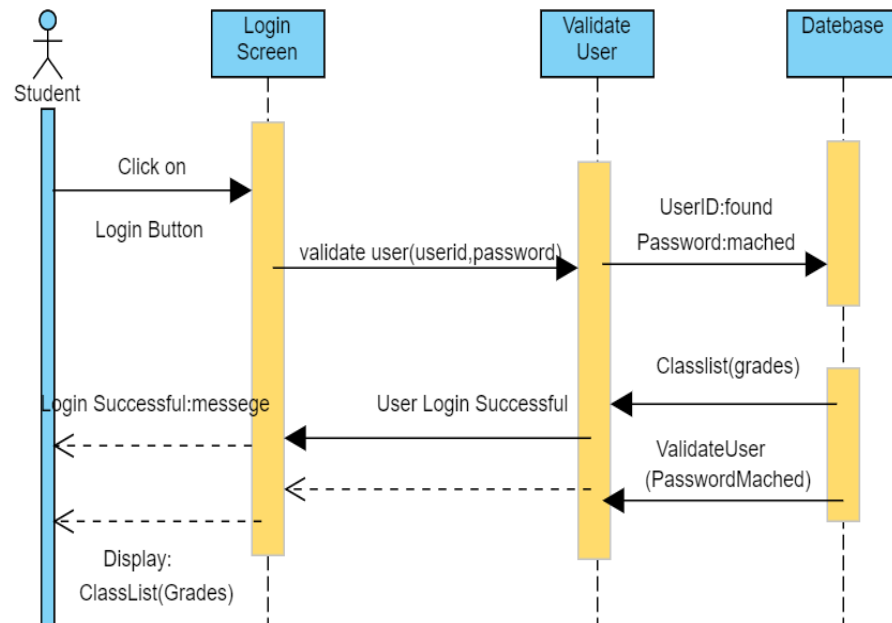
## 4. Analysis Models

### Sequence Diagram Of Sign Up Page

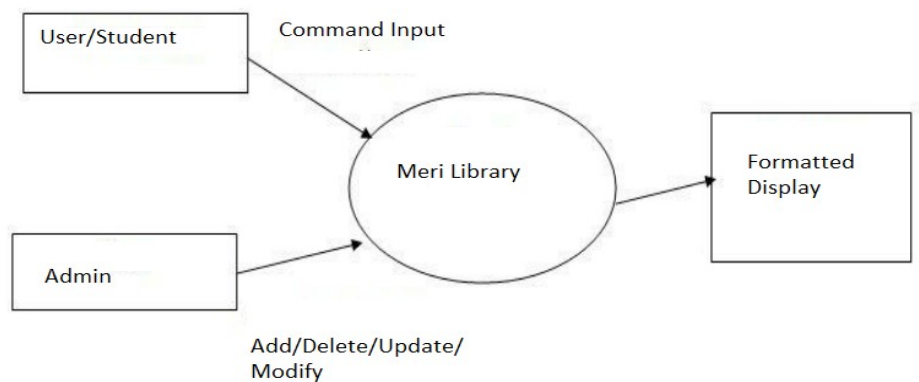


## Meri Library

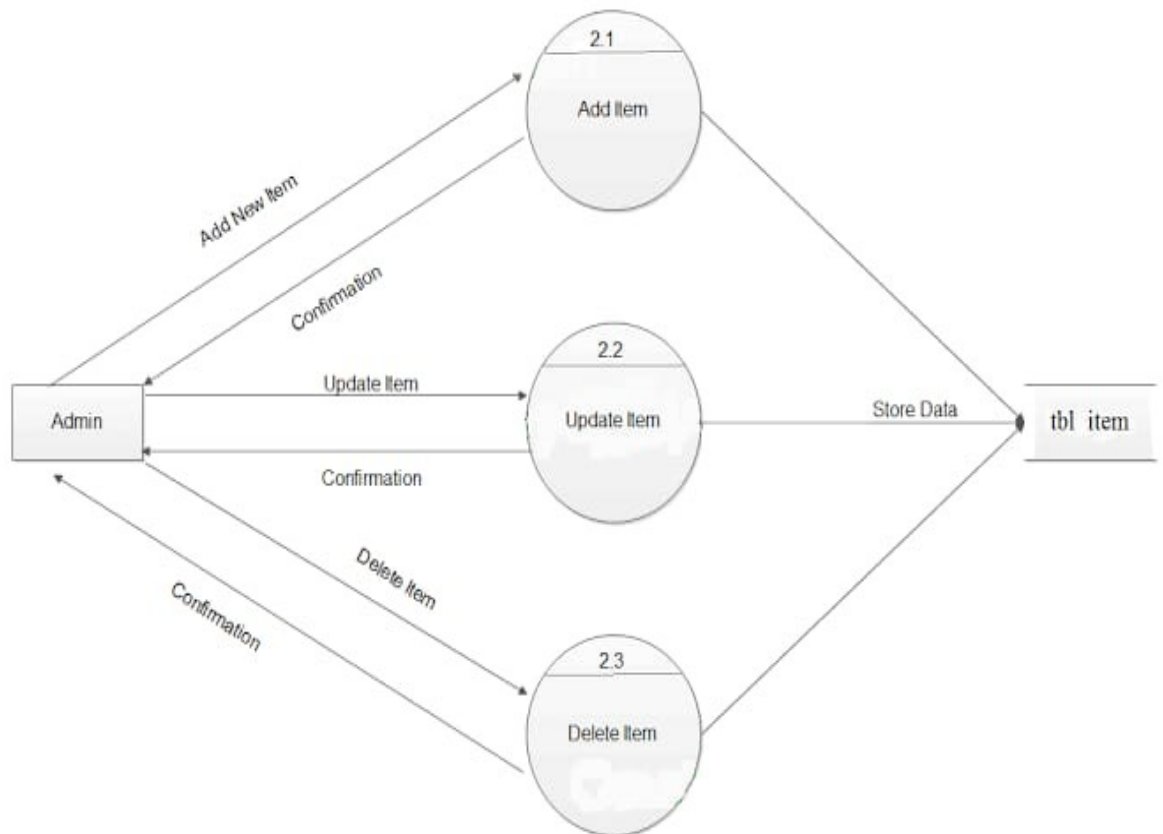
### Sequence Diagram Of Login Page



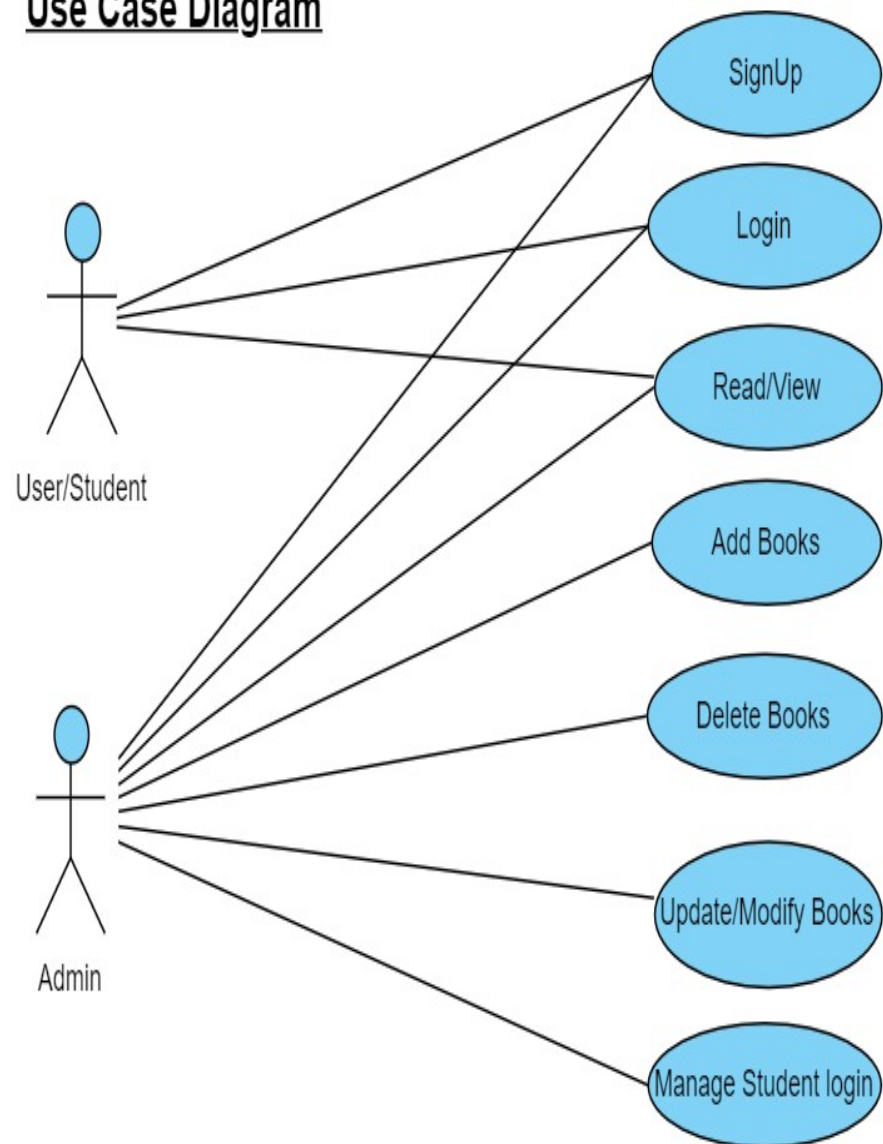
### DFD 0-Level



**DFD 1-Level for Admin**

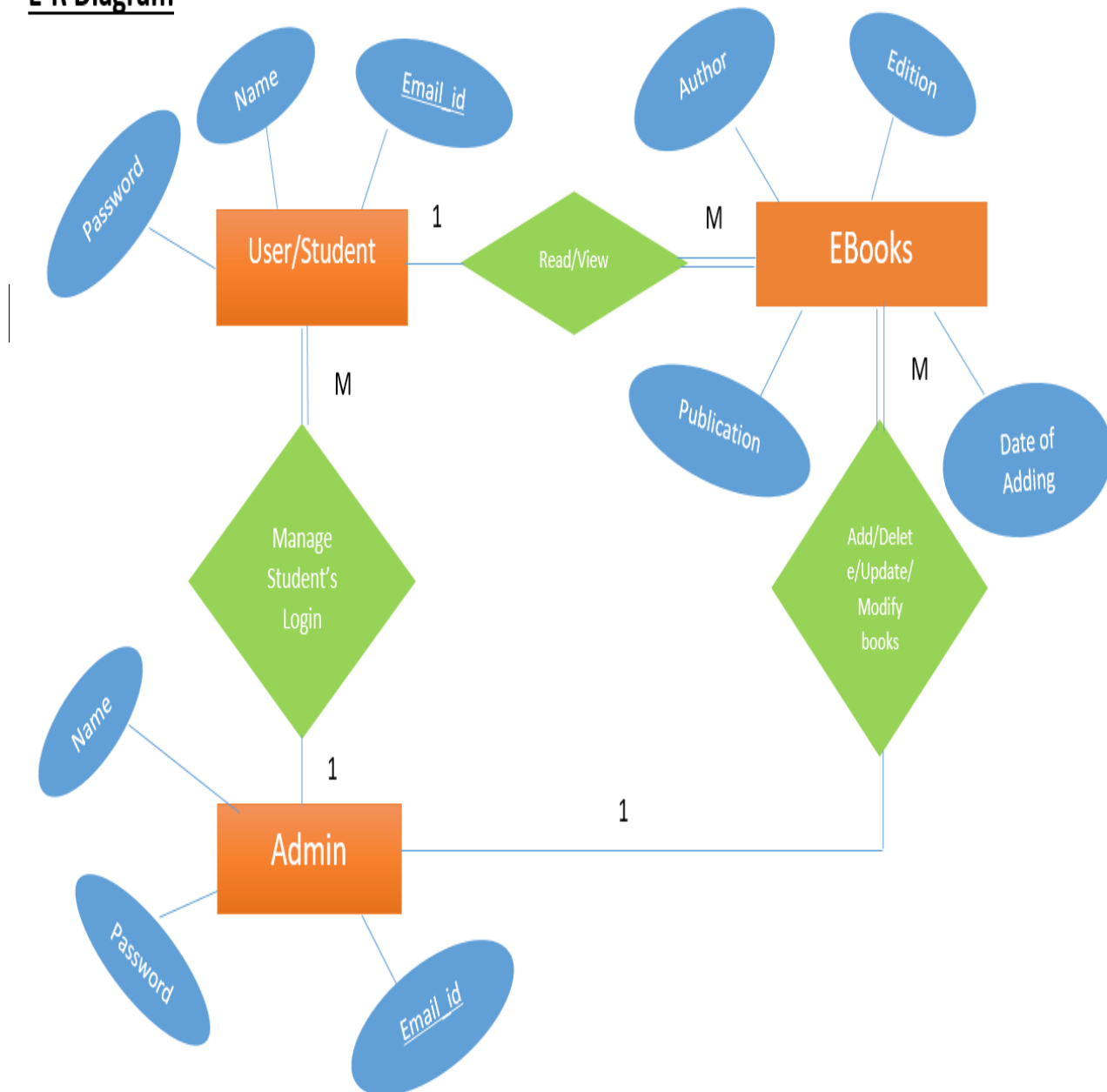


## Use Case Diagram





## E-R Diagram



### **Features of Meri Library**

- Light weight application
- Portability
- Supports in more than 80% mobile phones.
- Easy to access
- Attractive UI
- Relevant content

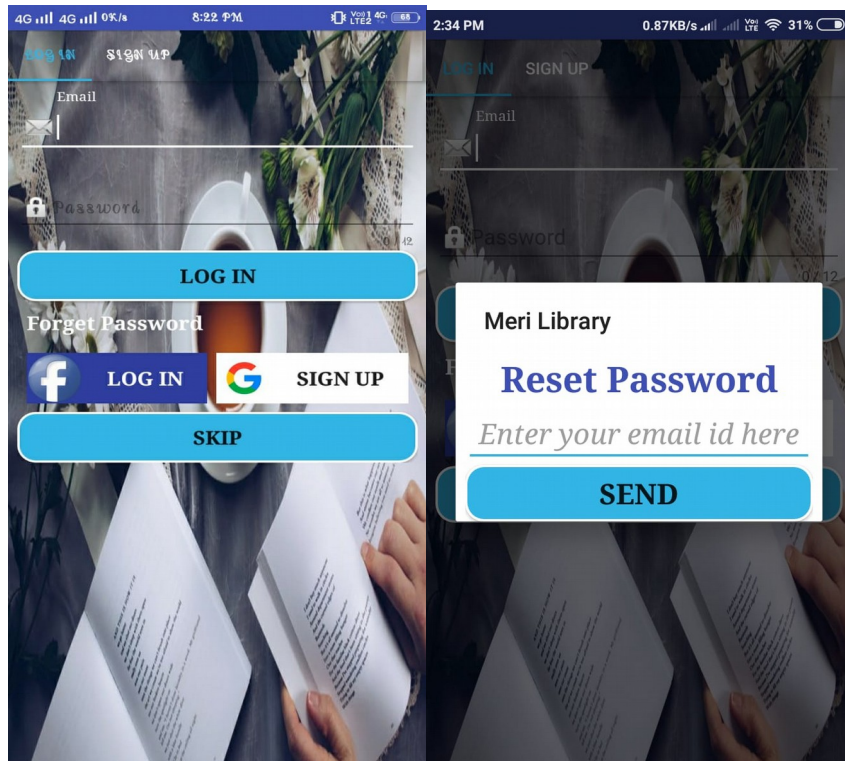
### **Applications of Meri Library**

- A student can read any subject anytime and anywhere.
- This app contains the complete syllabus and pdf books of all subjects that are teaches in MCA course in GLA University.
- Students don't need to carry heavy weight books.
- This app saves the time of searching. This app loads the book very fast and saves the time.
- A student can also download the book, so that he/she can read the book while internet is not connected.

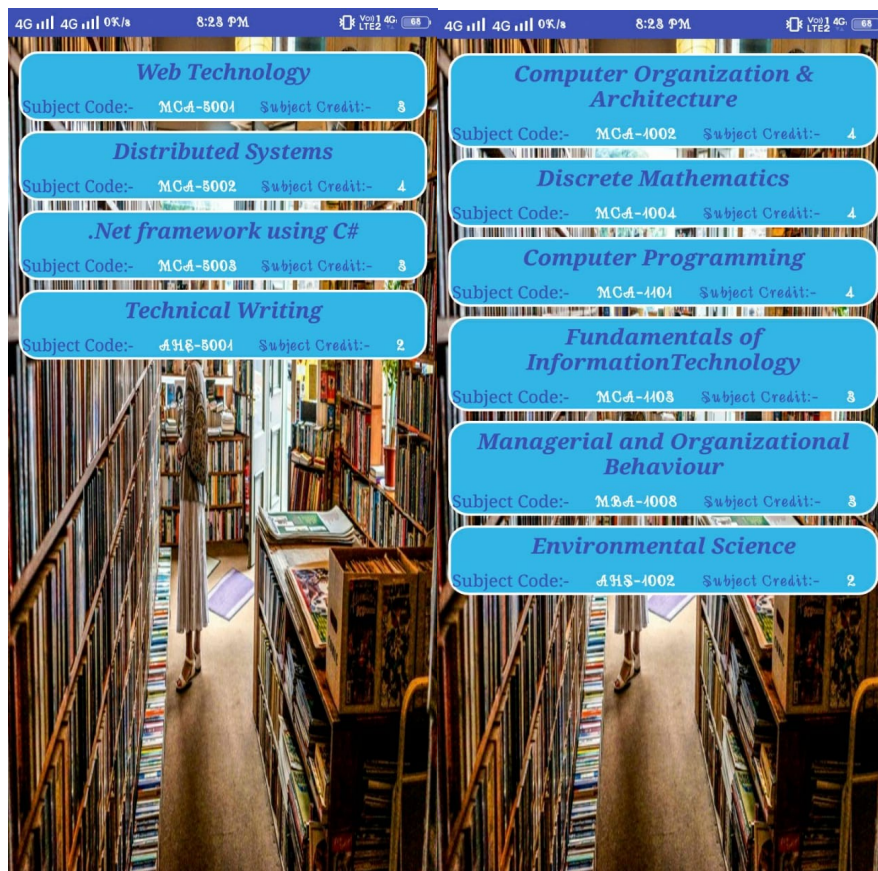
### **Future Enhancement**

- Currently we develop and design this app for MCA students, but in future we will launch the next version of it that will for all CS students like- B.tech, M.tech, MCA, BCA etc.
- Then we will launch another next version for the all engineering students like- electronics, electrical, mechanical, civil etc.
- Then we may will develop the next version for the management students like- BBA, MBA.

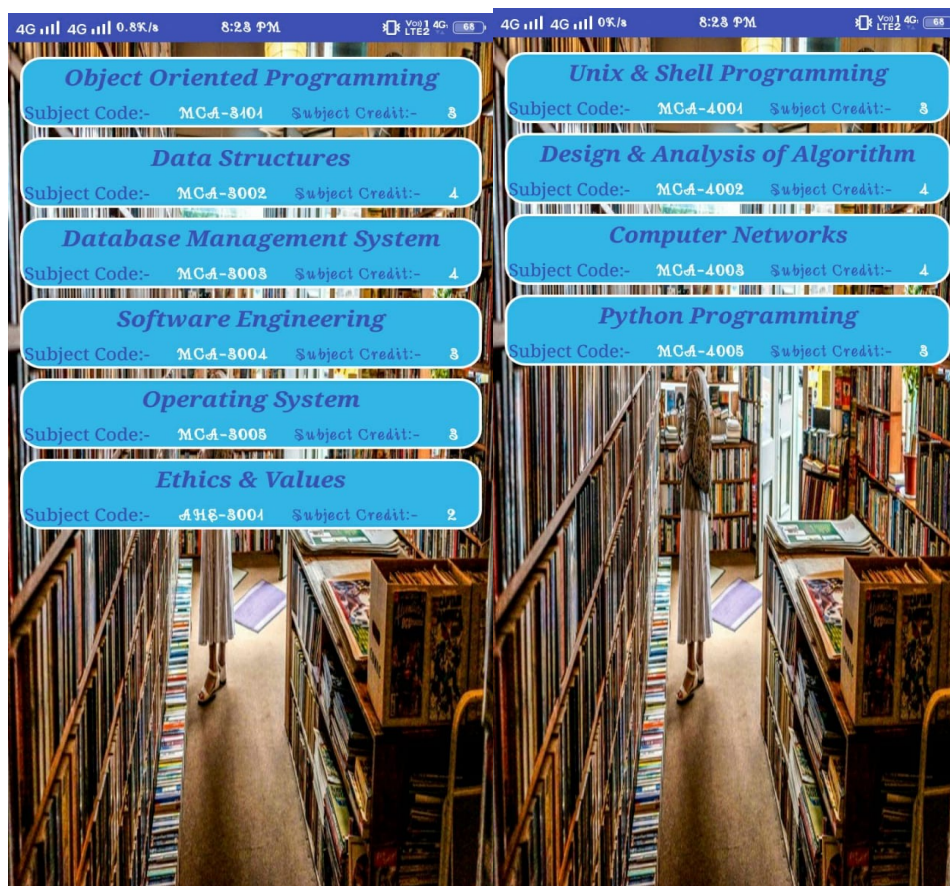
## Application Screen Shots



## Meri Library

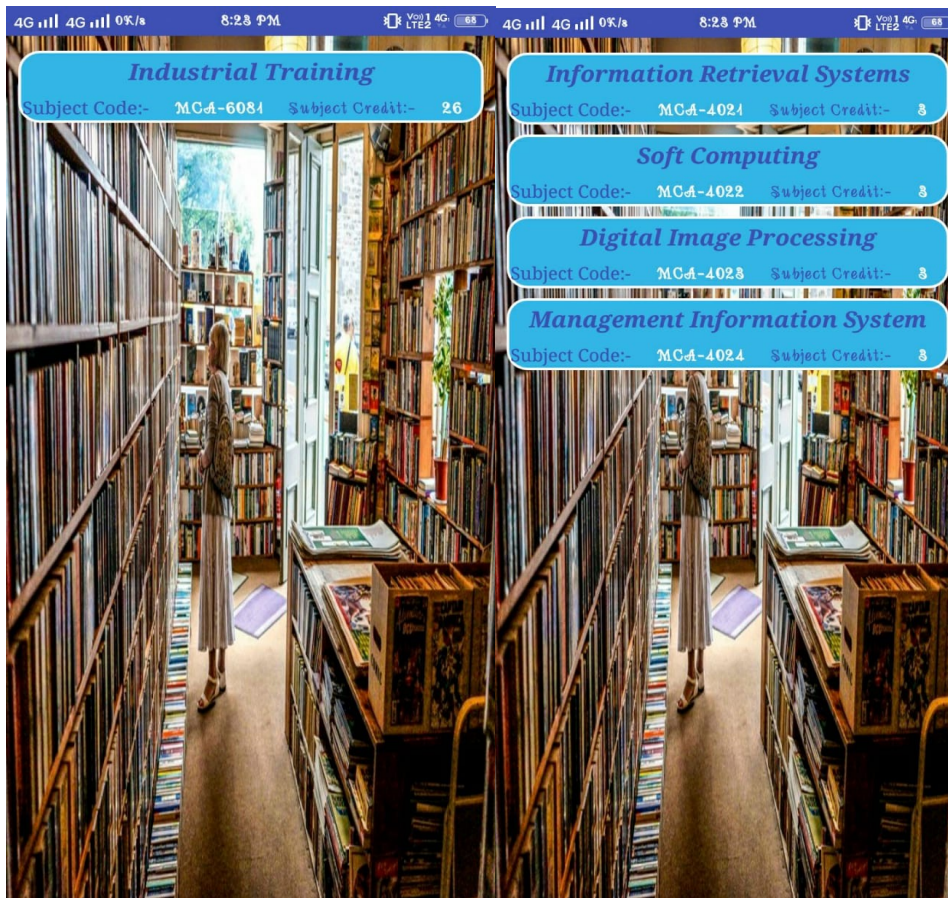


## Meri Library

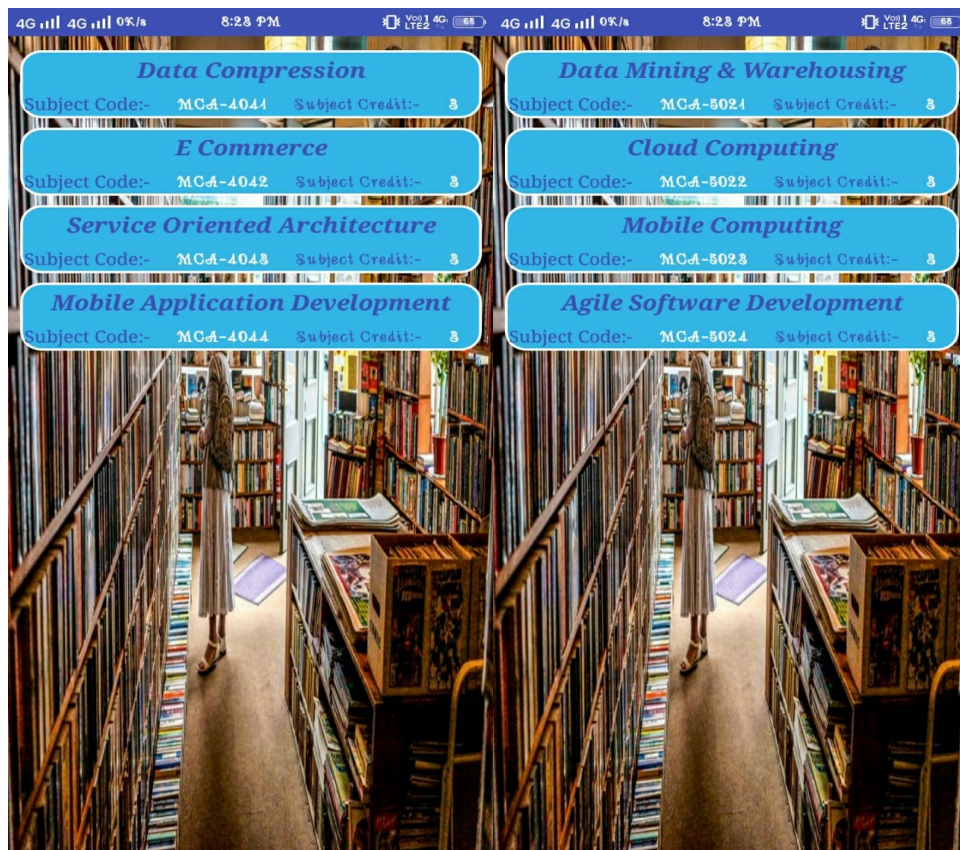




## Meri Library



## Meri Library





**Manual Testing**

S.NO	Action	Actual Output	Expected Output	Test result
<b>Open Meri Library Android Application</b>				
1	Open the Android Application	Show logo for 10 sec	show logo for 10 sec	pass
<b>Sign Up Module</b>				
1	Enter Detail in sign up page and click on REGISTER button	Generate toast for successful sign up	Generate toast for successful sign up	pass
2	Click on REGISTER without any fill detail	Generate Error	Generate Error	pass
<b>Login Module</b>				
1	Enter Valid Email and Password and click login button	Enter into home page Activity	Enter into home page Activity	pass
2	Enter Invalid Email or Password and click login button	Generate Error	Generate Error	pass
3	Click on Login without any fill detail	Generate Error	Generate Error	pass
4	Click on Forget Password	Ask for Enter Email ID	Ask for Enter Email ID	pass
5	Enter Wrong Email id in Forget Password (Not in application DB)	Generate Error	No Error	fail
6	Enter Right Email id in Forget Password (Not in application DB)	Send Recovery Email to email id	Send Recovery Email to email id	pass
7	Click Facebook on Login	Ask for facebook login detail	No action	fail
8	Click on Gmail signup	login with default gmail use for device	No action	fail
9	Click on Skip	Enter into home page Activity	Enter into home page Activity	pass

## Meri Library

S.NO	Action	Actual Output	Expected Output	Test result
<b>SEM I Module</b>				
1	Click on SEM I	Enter into SEM I Activity and show the 1 <sup>st</sup> semester books	Enter into SEM I Activity and show the 1 <sup>st</sup> semester books	pass
2	Select any book	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	pass
<b>SEM II Module</b>				
1	Click on SEM II	Enter into SEM II Activity and show the 2 <sup>nd</sup> semester books	Enter into SEM II Activity and show the 2 <sup>nd</sup> semester books	pass
2	Select any book	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	pass
<b>SEM III Module</b>				
1	Click on SEM III	Enter into SEM III Activity and show the 3 <sup>rd</sup> semester books	Enter into SEM III Activity and show the 3 <sup>rd</sup> semester books	pass
2	Select any book	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	pass
<b>SEM IV Module</b>				
1	Click on SEM IV	Enter into SEM IV Activity and show the 4 <sup>th</sup> semester books	Enter into SEM IV Activity and show the 4 <sup>th</sup> semester books	pass
2	Select any book	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	pass

S.NO	Action	Actual Output	Expected Output	Test result
<b>SEM V Module</b>				
1	Click on SEM V	Enter into SEM V Activity and show the 5 <sup>th</sup> semester books	Enter into SEM V Activity and show the 5 <sup>th</sup> semester books	pass
2	Select any book	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	pass
<b>SEM VI Module</b>				
1	Click on SEM VI	Enter into SEM VI Activity and show the Industrial Training tab	Enter into SEM VI Activity and show the Industrial Training tab	pass
2	Select Industrial Training tab	Ask for select an Account (If there are more then 1 Account) and show the Industrial Training detail in Google Drive	Ask for select an Account (If there are more then 1 Account) and this detail in not available in Google Drive	fail
<b>ELECTIVE Modules</b>				
1	Click on any Elective	Enter into Elective Activity and show the elective books	Enter into Elective Activity and show the elective books	pass
2	Select any book	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	Ask for select an Account (If there are more then 1 Account) and open that book in Google Drive	pass

S.NO	Action	Actual Output	Expected Output	Test result
<b>Miscellaneous</b>				
1	click go back form home activity and open application again (Without closing application)	Automatic logout and open login activity	Automatic logout and open login activity	pass
2	click home button form any activity of the application and open it again (Without closing it)	Continue form activity where home button click	Continue form activity where home button click	pass
3	Run Application in Landscape mode	Run application on landscape size of device and change layout according to size	Run application on landscape size of device and change layout according to size	pass
4	Run Application on different size of device	Run Application same as other device	Font size change in different size of device	fail
5	Run Application in Lolipop or above	Install and run perfect	Install and run perfect	pass
6	Run Application in below lolipop version	Not install	Not Install	pass

Meri Library

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