M.B.M. ENGINEERING UNIVERSITY, JODHPUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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Submitted To

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Submitted By

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A Project Report on

“MBM Login Page”

Submitted in partial fulfillment of the degree

of

Master of Computer Applications

IIIrd Semester

Submitted by

Shubham Dhoot (Roll No. 21MCA10014)

Under the Supervision of

Mr. Abhishek Gour

Certificate

This is to certify that the work contained in this report entitled **"MBM login page**" is submitted by Shubham Dhoot (Roll No: 21MCA10014) to the Department of Computer Science & Engineering, M.B.M. Engineering university, Jodhpur, for the partial fulfillment of the requirements for the degree of **Master of Computer Application**.

They have carried out their work under my supervision. This work has not been submitted else- where for the award of any other degree or diploma.

The project work in my opinion, has reached the standard fulfilling of the requirements for the degree of Master of Computer Application in accordance with the regulations of the Institute.

Mr. Abhishek Gour
Assistant Professor
Faculty of Computer Science

DECLARATION

I **Shubham Dhoot** hereby declare that this project title **" MBM Login Page** "is a record of original work done by me under the supervision and guidance of **Mr. Abhishek Gour.**

I further certify that this work has not formed the basis for the award of the degree or similar recognition to any candidate of any university and no part of this report is reproduced as it is from any other source without appropriate reference and permission.

Shubham Dhoot
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We thank the almighty for giving us the courage and perseverance in completing the project. This project itself is acknowledgements for all those people who have given us their heartfelt co-operation in making this project a grand success. I am greatly indebted to project guide Mr. Abhishek Gour, Assistant Professor, for providing valuable guidance at every stage of this project work. I am profoundly grateful towards the unmatched services rendered by him. Our special thanks to all the faculty of Computer Science and peers for their valuable advises at every stage of this work. Last but not least we would like to express our deep sense of gratitude and eamest thanks giving to our dear parents for their moral support and heartfelt cooperation doing the main project.

Contents

Abstract

The humanization design, friendly user experience shall be very important for mobile phone interface. The mobile interface design shall be such an important direction for the research of human-computer interaction techniques.

The main purpose of this Project is to discuss the design principles, methods and design process for login with MBM system.

In this, it has expounded how to judge the APP needs registration and login functions, and then gave the brief elaboration on several commonly-used registration and login methods.

Finally, it discusses how to design APP registration and login functions accordingly.

INTRODUCTION

MBM Login page is a system which present in login page in form of button element. It increases the user interaction and save user time because it through user not need to enter data manually and not need to remember email id and password of multiple accounts.

When user use application they need to login her account, that why go to login page to login her account. And it is not possible to remember all applications email and password.so that's why we provide alternative solution which is login with MBM button. Which use to user can login here account directly just click on button (Login with MBM). After click on that button, login with MBM page open and here users need to select her MBM email and go further to enter password and give access permission. Once user give these access permission user account is opened in that application.

❖ Need of Project:-

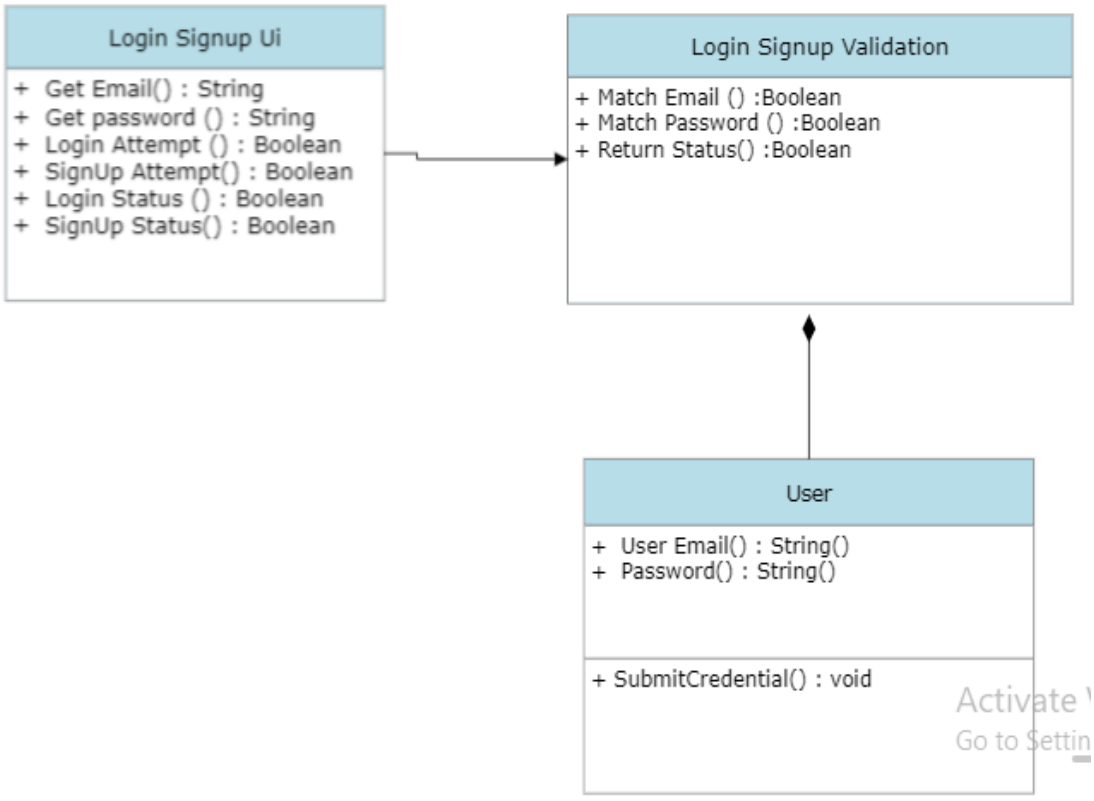
- **Save user Time:** By using Login with MBM user don't need to enter data manually. User needs to just click on Login with MBM button and after they entered in app.
- **Increase user interaction:** User doesn't have the time to fill details by using it users just click on button and not need to enter data in login form.
- **Not need to remember Email and password:** They don't want to remember huge number of user email, id and password. So using it, help user just a single click of button.
- **Security:** User not enters with multiple accounts. And it maintain unique id because every user has a unique MBM id.
- On return visits sign in automatically or with one click across an entire site.

- **Scope of project:** - This system aimed to providing the Login with MBM functionality. This system can be used by end user to perform/complete login task. From an application, to verify the identity of a user and get basic profile information about the user, such as their email or picture. Different pieces of user information are often stored across a number of online resources. Often, new applications will want to make use of the information that has already been created in an online resource. To do so, the application must ask for authorization to access this information on a user's behalf.

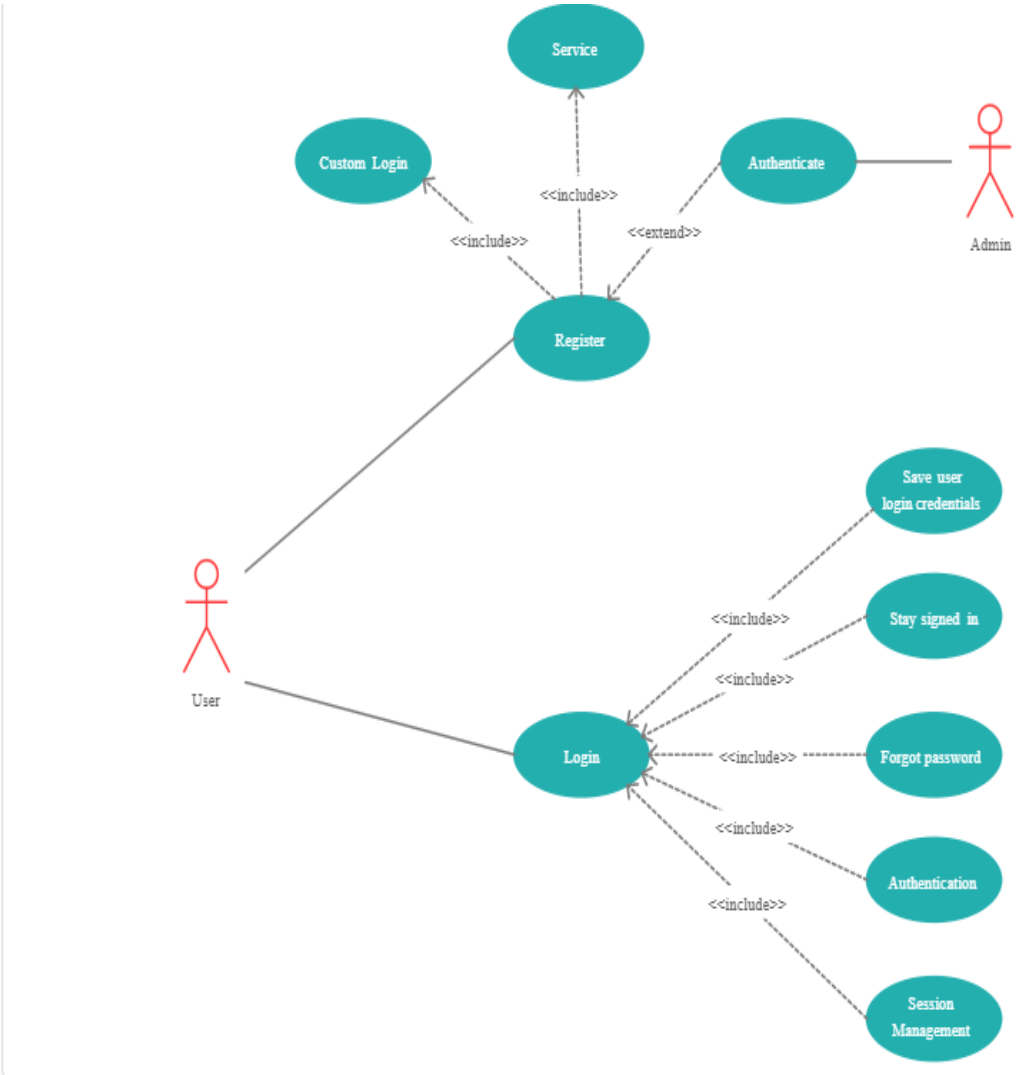
- **System Requirement:**
  - **Nonfunctional requirement:**
    - **USABILITY REQUIREMENT:** The system is designed for a user friendly environment so that student and staff of mbm can perform the various tasks easily and in an effective way.
    - **EFFICIENCY REQUIREMENT:** When this system will be implemented user easily and fast way to login because not needs to remember data.
    - **RELIABILITY REQUIREMENT:** The system should accurately perform registration, login, and validation tasks.
  - **Functional requirement:**
    - **USER LOGIN:** This feature used by the user to login into system. They are required user to login with MBM and give access permission. The user must be able to logout after they finished using system.
    - **REGISTER NEW USER:** This feature can be performed by all users to register new user to create account. System must be able to verify information .System must be able to delete information if information is wrong.

Architectural Design

❖ **Class Diagram: -** The class diagram depicts a static view of an application. It represents the types of objects residing in the system and the relationships between them. A class consists of its objects, and also it may inherit from other classes. A class diagram is used to visualize, describe, document various different aspects of the system, and also construct executable software code.



❖ **Use Case Diagram:-** A use case diagram is used to represent the dynamic behavior of a system. It encapsulates the system's functionality by incorporating use cases, actors, and their relationships. It models the tasks, services, and functions required by a system/subsystem of an application. It depicts the high-level functionality of a system and also tells how the user handles a system.



Data Design Diagram

ER Diagram: - An entity relationship diagram shows the relationships of entity sets stored in a database. An entity in this context is a component of data. In other words, ER diagram illustrate the logical structure of databases.

Constructing an ERD:

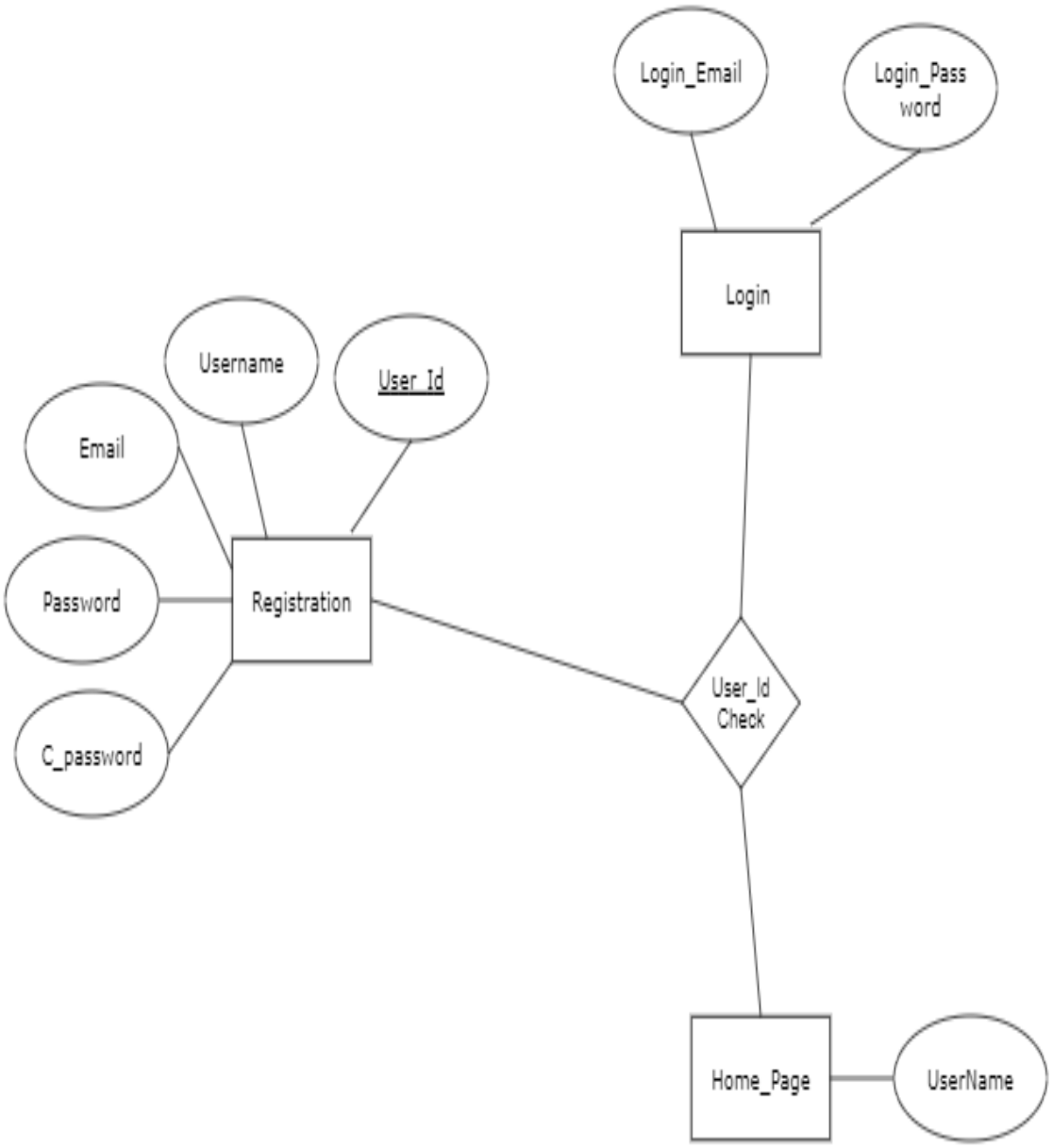
Identify the entities: The first step in making an ERD is to identify all the entities we will use. An entity is nothing more than a rectangle with a description of something that our system stores information about. This could be a customer, a manager, an invoice, a schedule, etc.

Identify the relationship: Are two entities related to each other if so, draw a solid line connecting the two entities.

Describe the relationship: How are the entities related? Draw an action diamond between the two entities on the line we just added. In the diamond write a brief description of how they are related.

Add attributes: Any key attributes of entities should be added using oval shaped symbols.

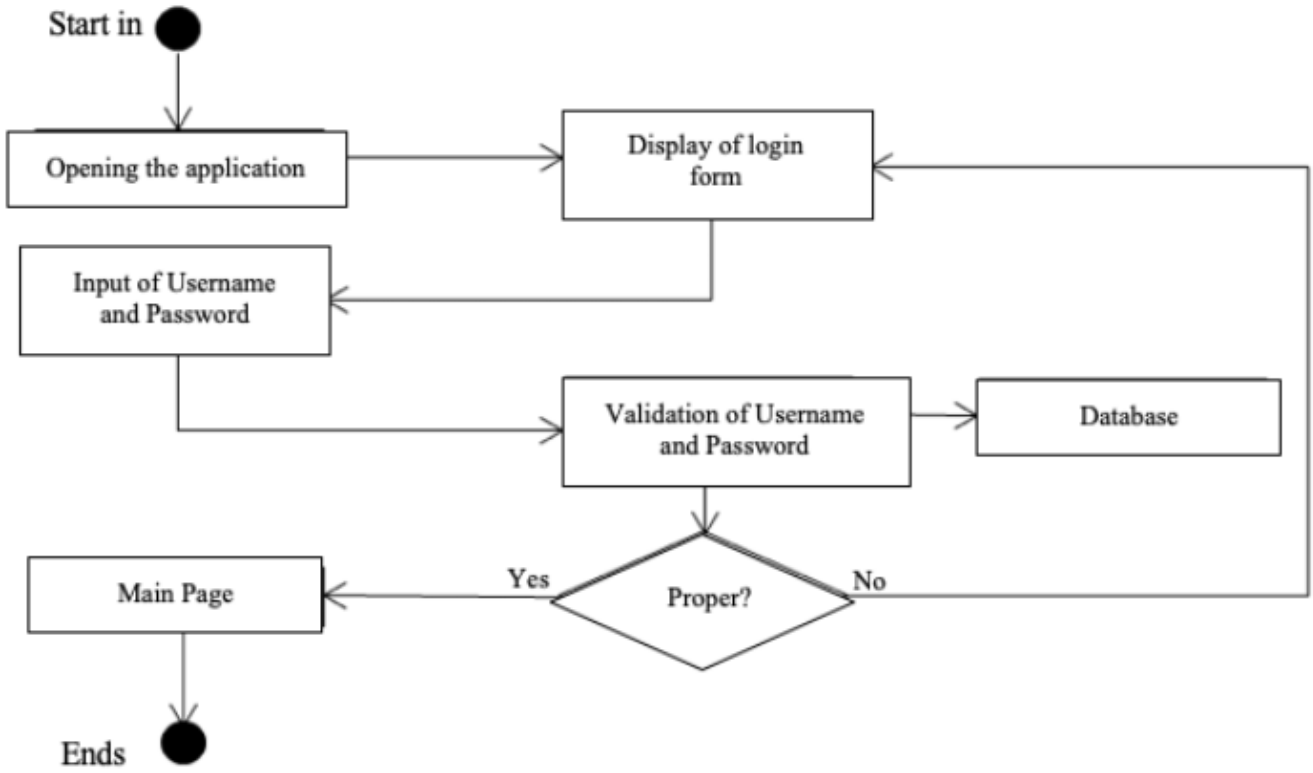
Complete the diagram: Continue to connect the entities with the lines, and adding diamonds to describe each relationship until all relationships have been described. Each of our entities may not have multiple relationships.


Login_Email
Login_Pass word
Login
Username
User_Id
Email
Password
Registration
C_password
User_Id Check
Home_Page
UserName

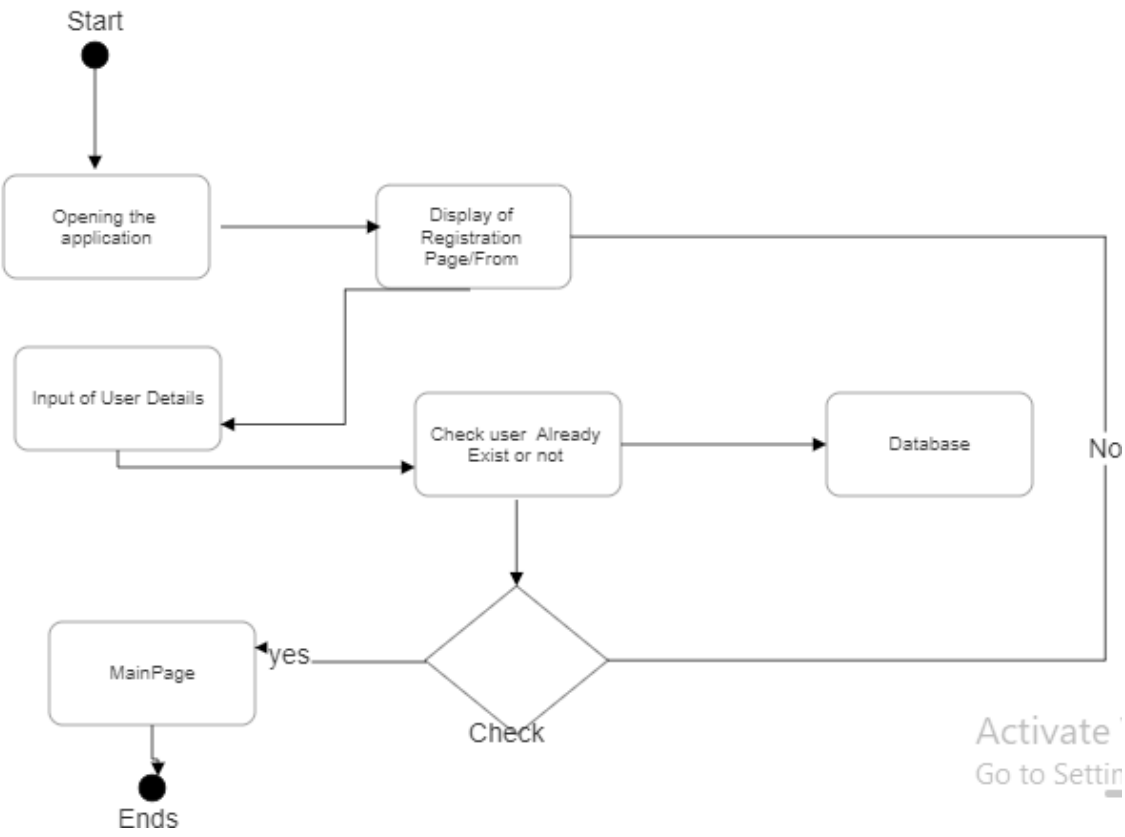
Process Design

- **<u>Activity Diagram</u>:-** Activity diagram is used to demonstrate the flow of control within the system rather than the implementation. It models the concurrent and sequential activities. The activity diagram helps in envisioning the workflow from one activity to another. It put emphasis on the condition of flow and the order in which it occurs. The flow can be sequential, branched, or concurrent, and to deal with such kinds of flows, the activity diagram has come up with a fork, join, etc.

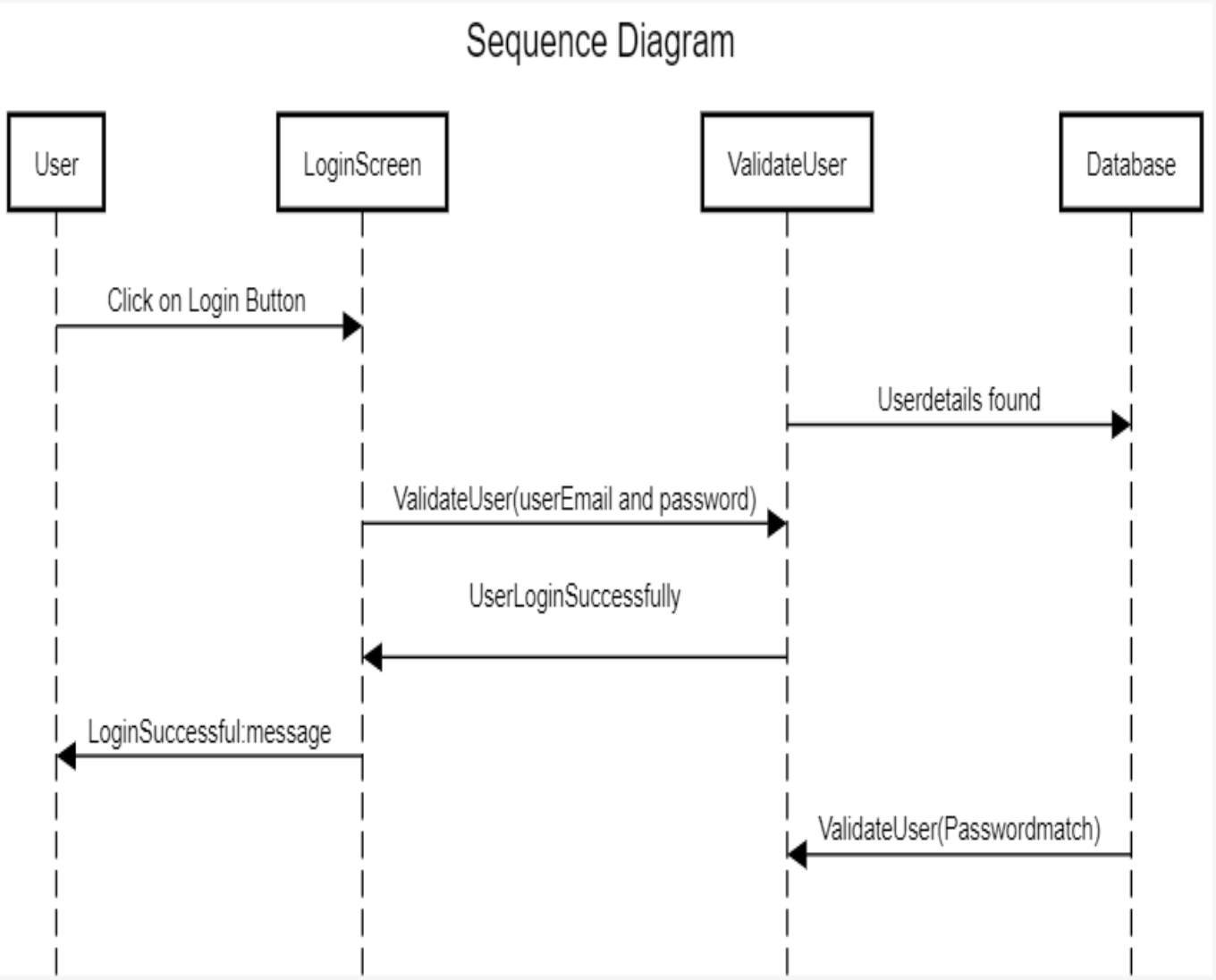
Login Page

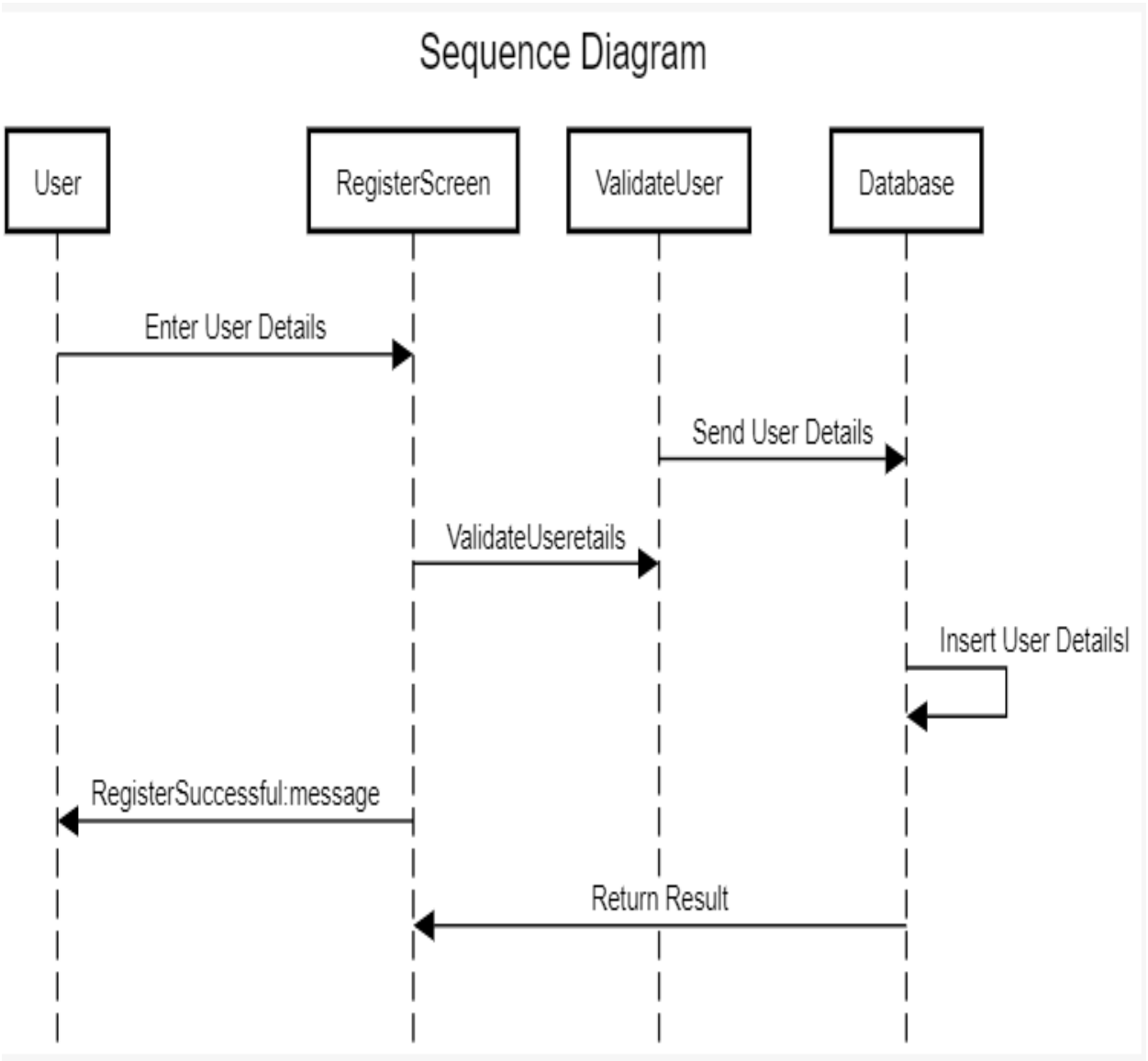


Registration Page

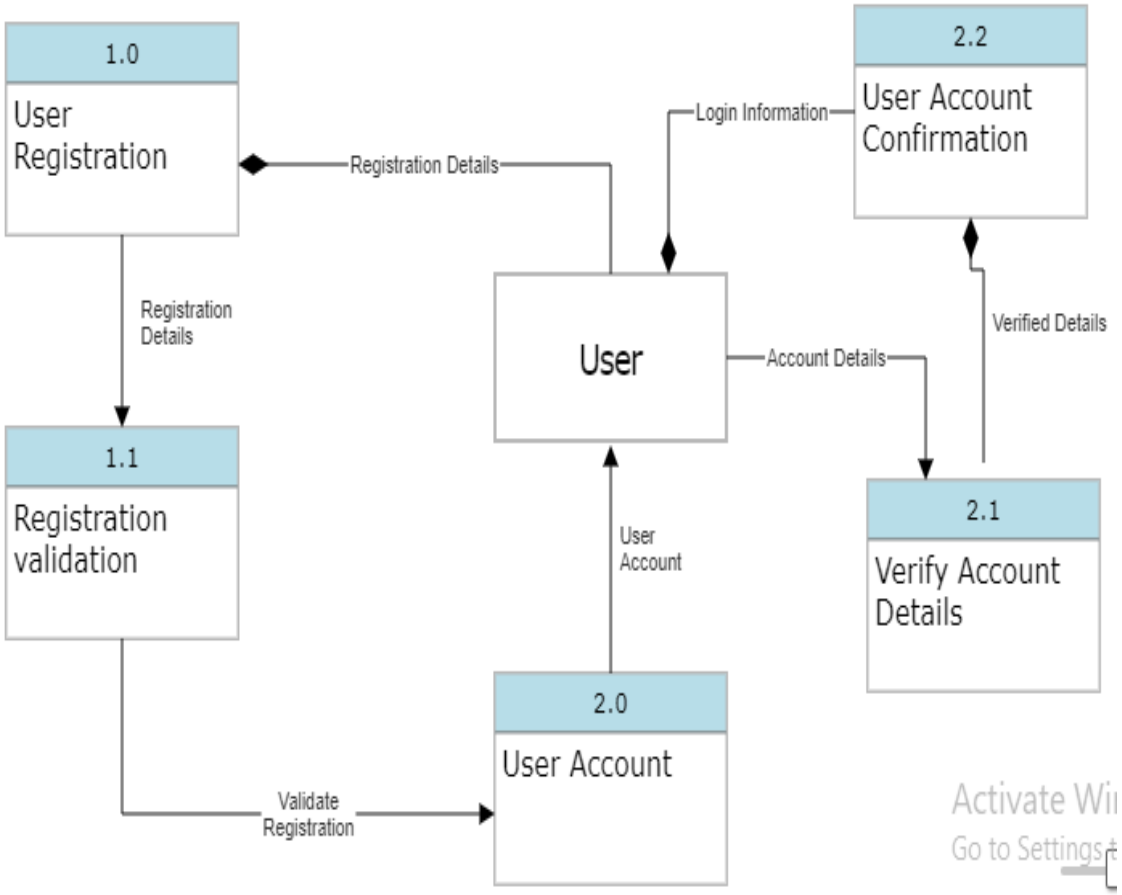


- **Sequence Diagram:** The sequence diagram represents the flow of messages in the system and is also termed as an event diagram. It helps in envisioning several dynamic scenarios. It portrays the communication between any two lifelines as a time-ordered sequence of events, such that these lifelines took part at the run time. In UML, the lifeline is represented by a vertical bar, whereas the message flow is represented by a vertical dotted line that extends across the bottom of the page. It incorporates the iterations as well as branching.




Sequence Diagram
User
RegisterScreen
ValidateUser
Database
Enter User Details
Send User Details
ValidateUseretails
Insert User Detailsl
RegisterSuccessful:message
Return Result

- **<u>Data Flow Diagram</u>**: A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both.



System Implementation

- **Technology Stack:-** A technology stack comprises all the technologies, tools, and frameworks we will use during mobile app development. This will include programming languages, development platforms (e.g., Android), data storage, security management, and user interface design tool, among other services.

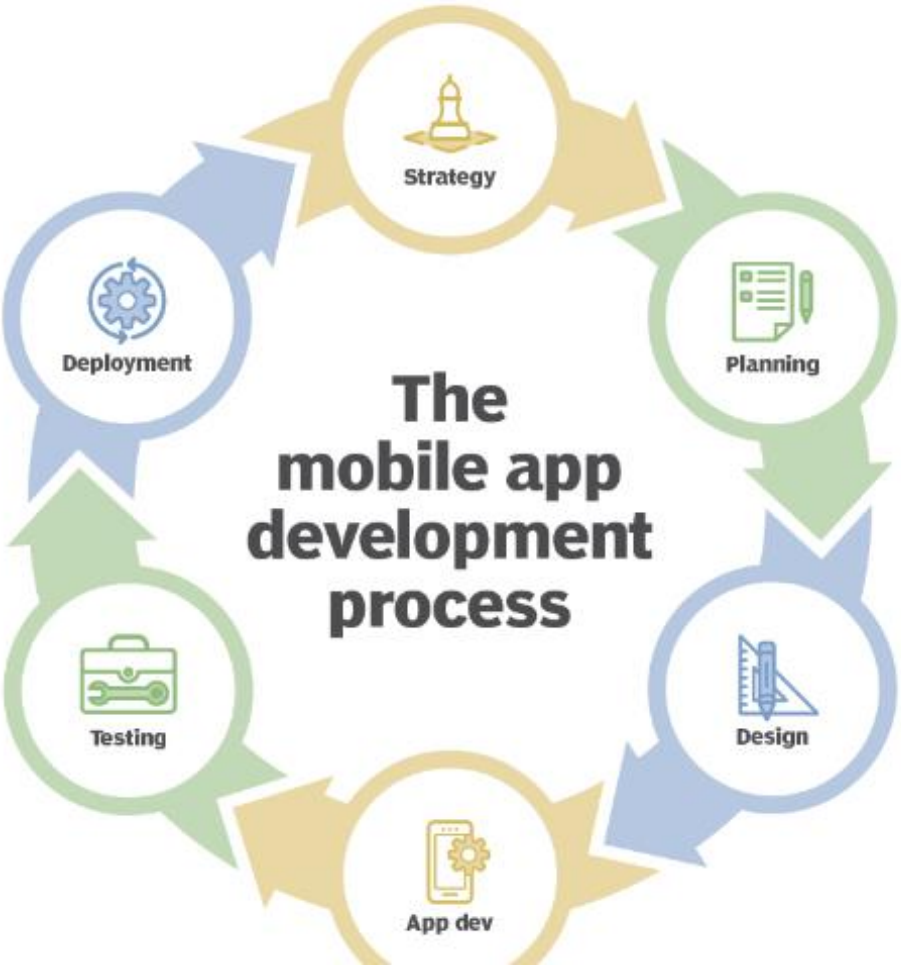
  - **Programming Languages:-**
    - **Java**: - Java is arguably the most popular language for building Android app. Thanks to its usage by major companies, the language is well-supported and has great scalability. You'll have a wide option of tools and libraries to choose from, plus they're mostly open-source. It's relatively easy to learn, stable, and simple to use.

  - **Android App Development tools:-**
    - **Android Studio**: - It is the official development platform for Google's Android app. Android Studio is built upon Jetbrain's technology, and it provides an intuitive interface for developers to build Android apps.

  - **Database:-**
    - **Firebase**: It is a Backend-as-a-Service (Baas). It provides developers with a variety of tools and services to help them develop quality apps, grow their user base, and earn profit. It is built on Google's infrastructure. Firebase is categorized as a NoSQL database program, which stores data in JSON-like documents.

- **UI Framework:**
  - **Android UI:** - Android provides pre-built templates that are handy for developers to build user interfaces quickly. And give some tools for drag and drop element and component.

- **Development Environment:-** the development environment is a workspace with a set of processes and programming tools used to develop the source code for an application or software product. Development environments enable developers to create and innovate without breaking something in a live environment.
  - **IDE:-** is one in which the processes and tools are coordinated to provide developers an orderly interface and a convenient view of the development process -- or, at least, the processes of writing, testing and packaging code for use.
    - **Android Studio:-** is the official Integrated Development Environment (IDE) for android application development. Android Studio provides more features that enhance our productivity while building Android apps.


Strategy
Planning
Design
App dev
Testing
Deployment
The mobile app development process

System Testing

The aim of the system testing process was to determine all defects in our project .The program was subjected to a set of test inputs and various observations were made and based on these observations it will be decided whether the program behaves as expected or not. Our Project went through two levels of testing.

1. Unit testing
2. Integration testing

- **Unit Testing:-** Unit testing is undertaken when a module has been created and successfully reviewed .In order to test a single module we need to provide a complete environment i.e. besides the module
  - **Test for login module**:
    - **Test for login Form-**This form is used for login of Student .In this we enter the email and password if all these are correct. Home page will open other wise if any of data is wrong it will get redirected back to the login page and again ask for email and password.

  - **Test for register module**:
    - **Test for account creation-** This form is used for new account creation when student does not fill the form completely it asks again to fill the whole form when he fill the form fully it gets redirected to home page which show his data with logout button.

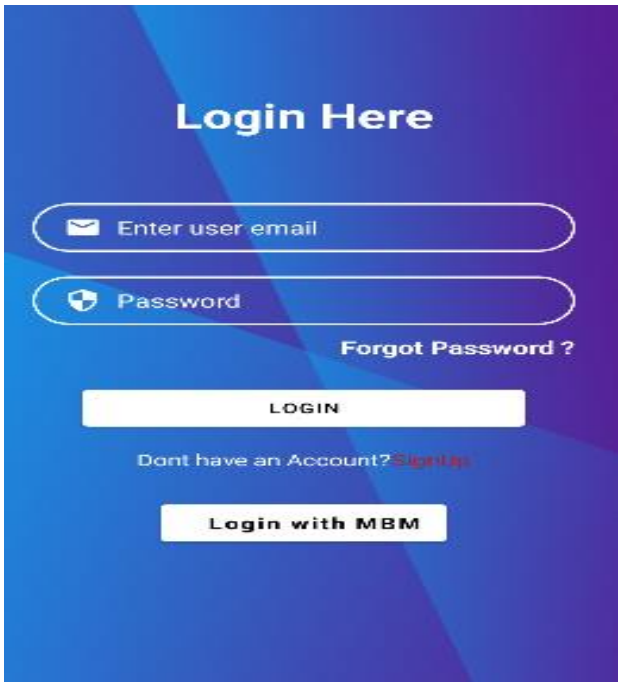
  - **Test for logout module:** This is use when user finish all work and want to go outside then user click on logout button and go to login page again.

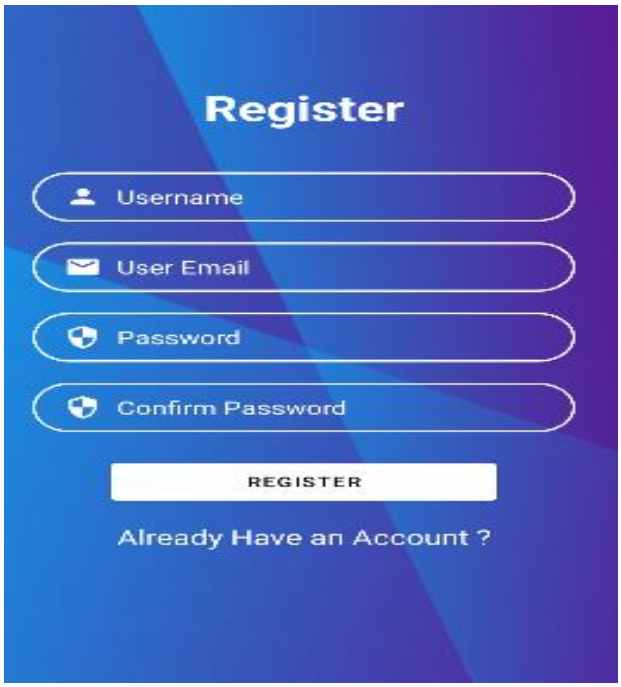
- **Integration Testing:** Integration test cases focus mainly on the **interface between the modules, integrated links, data transfer** between the modules as modules/components that are already unit tested.

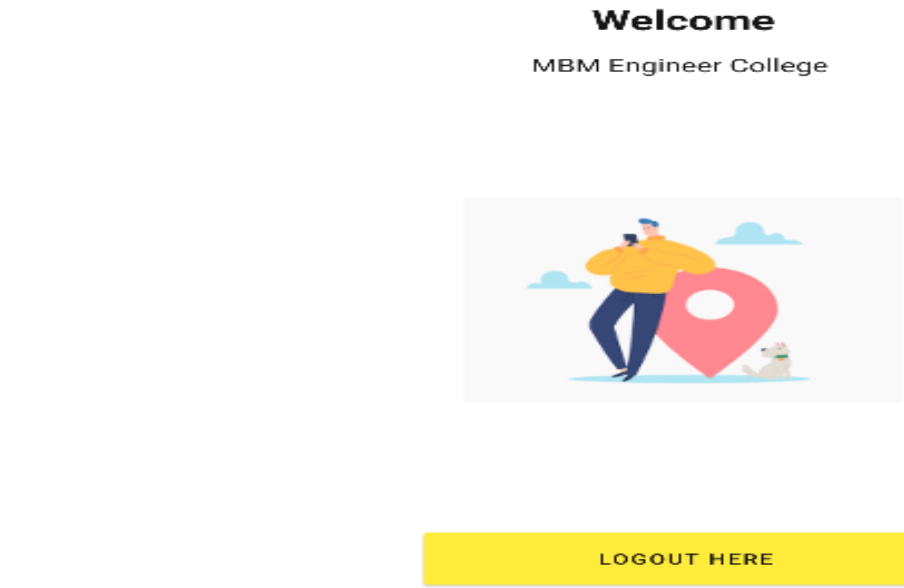
  - Verifying the interface link between the login page and the home page i.e. when a user enters the credentials and logs it should be directed to the homepage.
  - Verifying the interface link between the Registration page and the Home page.
  - Verifying the interface link between the home page and the Login page.
  - Verifying the interface link between the Login with MBM page and the Home page.

Project Design (Screenshots)

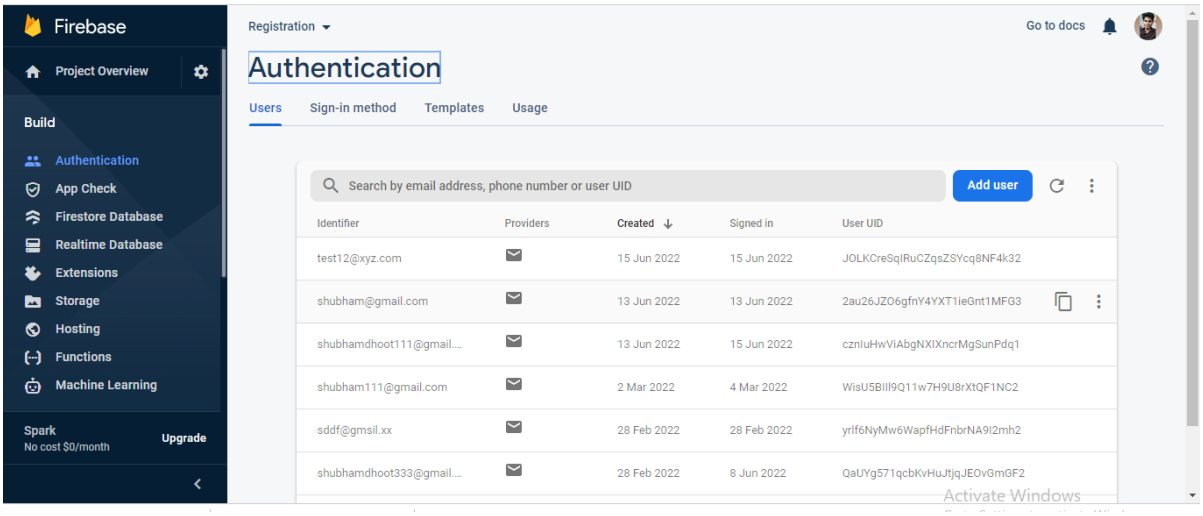
❖ User interface:







Firebase(Database)



Conclusion and Future Scope

This system provide user to avoid manually enter details and free user to remember emails and password for all application. It is make application interactive and user-friendly to user .It is beneficial for both organizational and user point of views.

- Easy to implement and integrate.
- Easy to apply with login page.
- Safe and secure.
- Save user time and efforts.

This is future scope of this facility that many more feature such as we can specify different type of users and we can provide different features according to user profile and performance. We make a group of different choice and types of users. .