#### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belgaum -590014, Karnataka.



# MOBILE APPLICATION DEVELOPMENT REPORT

# **B.M.S CLUB MANAGEMENT**

Submitted by

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Under the Guidance of Prof. M Lakshmi Neelima Assistant Professor, BMSCE

in partial fulfillment for the award of the degree of BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING



B.M.S. COLLEGE OF ENGINEERING
(Autonomous Institution under VTU)
BENGALURU-560019
April-2024 to July-2024

#### B. M. S. College of Engineering,

**Bull Temple Road, Bangalore 560019**(Affiliated To Visvesvaraya Technological University, Belgaum)

# Department of Computer Science and Engineering



#### **CERTIFICATE**

Signature of the Guide

This is to certify that the project work entitled "B.M.S CLUB MANGAMENT" carried out by Raghavendra N(1BM22CS213), PRAJWAL C(1BM22CS198), PRAJWAL K K(1BM22CS199) AND PRANAV R HEGDE(1BM22CS202) who are bonafide students of B. M. S. College of Engineering. It is in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of the Visvesvaraya Technological University, Belgaum during the year 2023-2024. The project report has been approved as it satisfies the academic requirements in respect of Mobile Application Development (23CS4AEMAD) work prescribed for the said degree.

Signature of the HOD

Assistant Professor, Dept. of CSE		Prof.& Head, Dept. of CSE
BMSCE, Bengaluru		BMSCE, Bengaluru
	External Viva	
Name of the Examiner		Signature with date
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# B.M.S. COLLEGE OF ENGINEERING DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



#### **DECALARATION**

Raghavendra N(1BM22CS213), PRAJWAL C(1BM22CS198), PRAJWAL K K(1BM22CS199) AND PRANAV R HEGDE(1BM22CS202), students of 4th Semester, B.E., Department of Computer Science and Engineering, B. M. S. College of Engineering, Bangalore, hereby declare that, this Mobile Application Development entitled "B.M. S CLUB MANAGMENT" has been carried out by usunder the guidance of M Lakshmi Neelima, Assistant Professor, Department of CSE, B. M. S. College of Engineering, Bangalore during the academic semester April-2024 to July-2024

We also declare that to the best of our knowledge and belief, the development reported here is not from part of any other report by any other students.

Signature

Raghavendra N (1BM22CS213) PRAJWAL C (1BM22CS198) PRAJWAL K K (1BM22CS199) PRANAV R HEGDE (1BM22CS202)

#### **Abstract**

B.M.S Club Management is an innovative project collaboration platform designed specifically for BMS College of Engineering students and Event coordinator. This platform addresses the unique challenges faced by students on being unaware on the ongoing events. Utilizing Firebase Authentication for robust security, the platform ensures that only authorized users can access the system. Student can join the interested club and also attend events. The Clubs can notice higher number of students enrolling to the events. With the integration of Firebase, all user and project data are securely stored and consistently managed, ensuring reliability and data integrity. B.M.S Club Management not only simplifies the process of connecting students to their interested clubs also shows the individual student performance in extra co-curricular activities. By addressing the specific needs of BMS College of Engineering, B.M.S Club Management emerges as a valuable tool for individual development and adding up in extra co-curricular activity points.

# **Chapter 2**

#### Introduction

Application development for "**B.M.S Club Management**" This B.M.S Club Management supports following users

- a. Student
- b. Event/Club coordinator

#### **Functionalities under Student login**

- i. Build Profile: First Student have to login or sign up for the app using their respective college mail id and a unique passcode.
- ii. Event Register: Then the Upcoming events will pop-up in-home page of the app, if the student interested can easily click on the register button the get register to the event directly.
- iii. Joining Club: The student can also join the interested club by going through the clubs based on the departments.

#### **Functionalities under Coordinator**

- **a)** App coordinator sends the remembering push mail to event coordinator on a weekly basis about updating further events to be conducted in their respective clubs.
- **b)** Event coordinator replies back to app coordinator back by mail about the upcoming event and will forward the all required details that needs to be presented in our app.
- **c**) App coordinator responds to the mail and will update the event information on our app as soon as possible.

# **Chapter 3**

# **Hardware and Software Requirements**

#### 2.1 Hardware Requirements

#### **Development Machines:**

- Processor: Intel Core i3/ i5, Qualcomm Snapdragon
- RAM: 8GB minimum (16GB recommended)
- Storage: SSD with at least 256GB (512GB recommended)
- Graphics: Integrated GPU (IRIS Xe) is sufficient, but a dedicated GPU can be beneficial for faster rendering
- Display: Full HD (1920x1080) resolution screen

#### 2.2 Software Requirements

#### **Operating Systems:**

• Windows 10/11

#### **Development Tools:**

- Flutter and Dart SDK: Flutter 3.22, Dart SDK Version 3.4.4
- Android Studio: For Android development and emulator (Version 2024.1.1)
- Visual Studio Code: Preferred code editor with Flutter and Dart extensions (Version 1.91)
- Git: Version control system (Version 2.42.2)

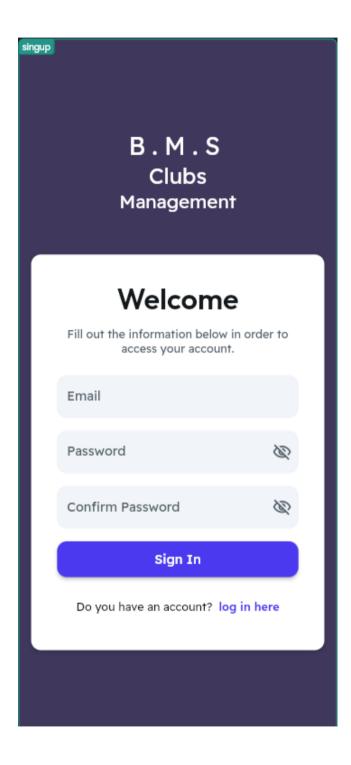
#### **Backend Development:**

- Firebase SDKs: Version 33.1.2
- Firebase CLI: For managing Firebase projects.

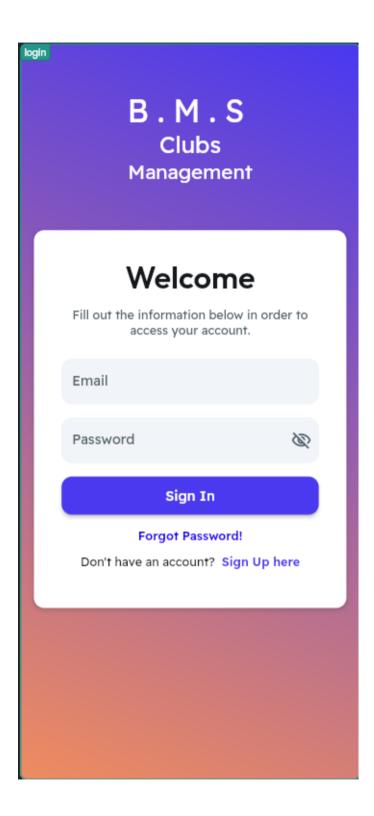
#### **Collaboration Tools:**

• GitHub: Repository hosting services.

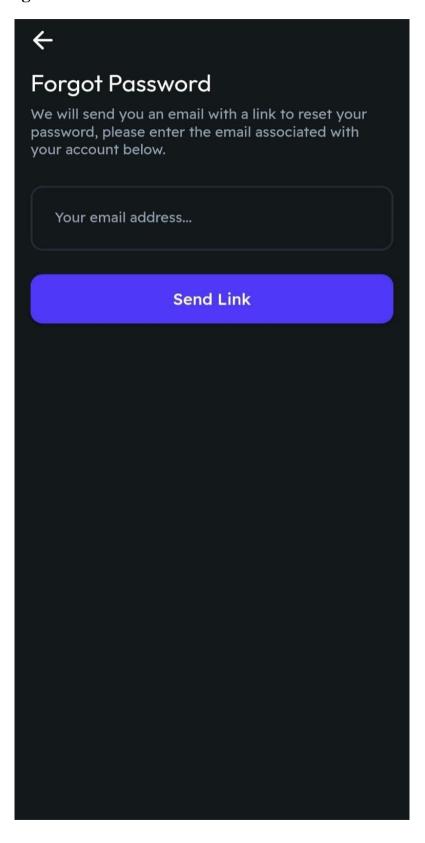
# Chapter 3 Design Layouts: Screen Shots of Mobile App / Webpages 3.1: Sign In/Out



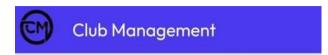
# 3.2: Login Page



# 3.2: Login Page



#### 3.3: Home Screen



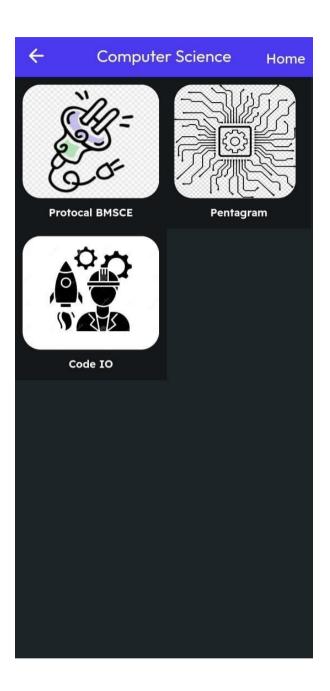




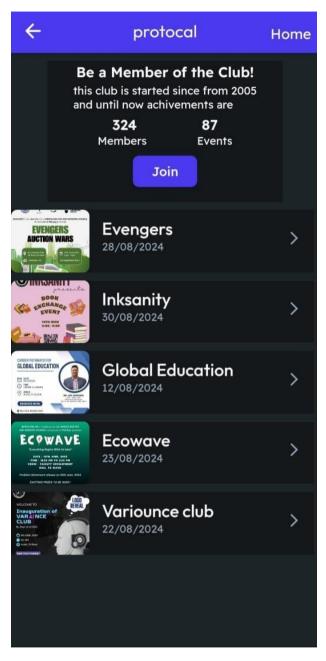


100Rs registration fee

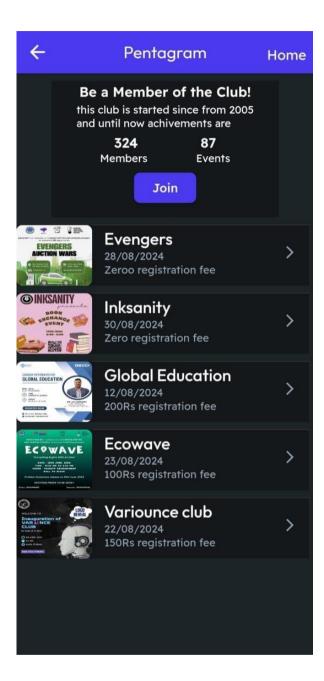
# 3.4. Club Details



# 3.8: Club Home Page



# 3.9: Club Home Page



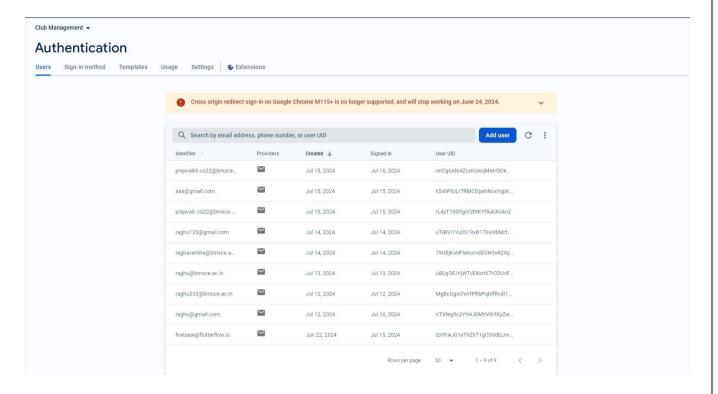
# 3.6 Event Page

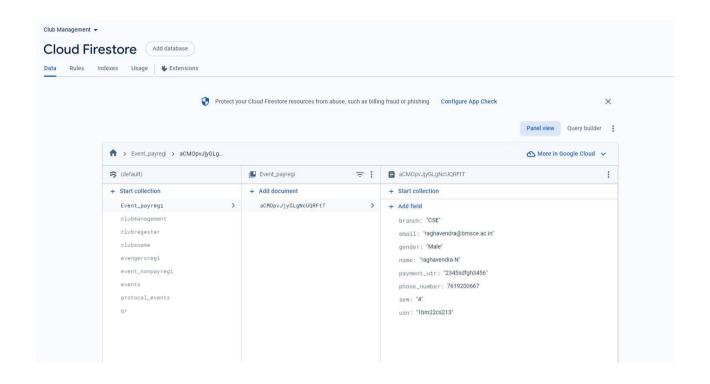


# Chapter 4

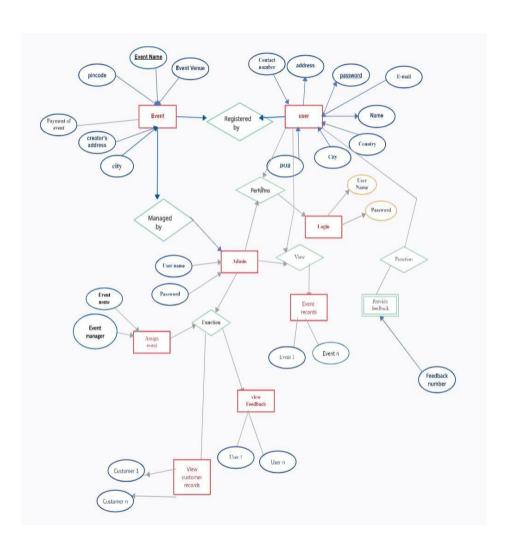
# **Database Table Screen shots**

# 4.1.1. Login users: data

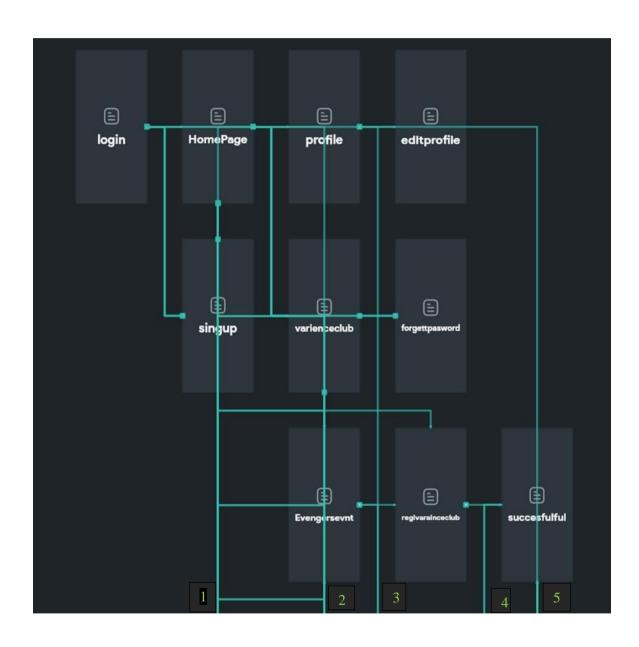




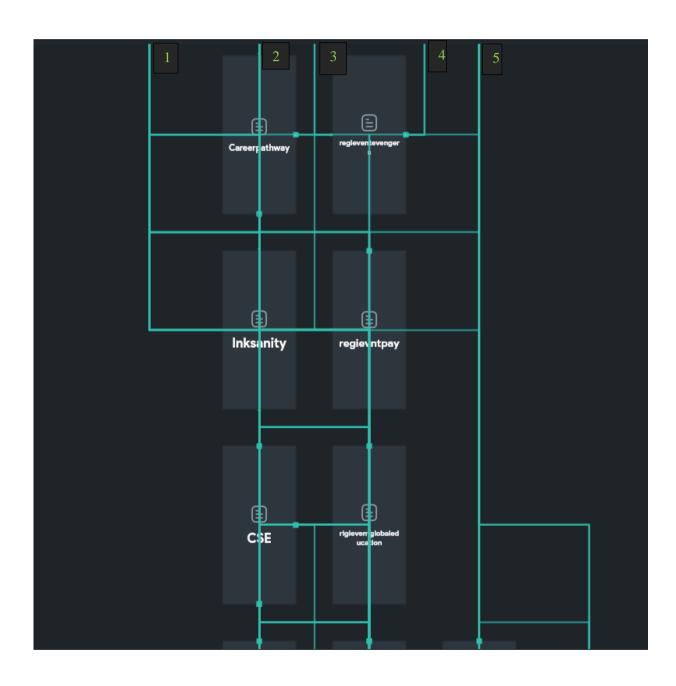
# 4.2.1. ER Diagram



# 4.2.16 DESIGN LAYOUT



# 4.2.17 DESIGN LAYOUT



#### **Conclusion and Future Work**

B.M.S Club Management effectively resolves the challenges of student collaboration with B.M.S Clubs. The platform provides secure, efficient, and user-friendly functionalities for both Club management and students. Key features include event registration, club joining and profile building, all of which foster a productive academic and professional environment. The successfulintegration of Firebase Authentication and Fire store demonstrates the potential of modern technologies in enhancing project management and collaboration.

#### **Future Work**

- 1. Enhanced Communication Tools: Add live video conferencing.
- 2. **AI and Machine Learning**: Implement AI for event recommendations and improve user experience.
- 3. **Adding Event Coordinator Sign in/Login Page:** Implement the Event Coordinator Login Page.
- **4. One Click Registration:** Adding a single button on registration for respective events.

# References

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