

NUV Clubs

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The requirement for the degree of
Bachelor of Technology
(Computer Science and Engineering)*

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CERTIFICATE

This is to certify that the project report entitled “NUV Clubs” submitted by “Priyanshi Shah, Vidhi Babriya and Killol Rajgor” to School of Engineering and Technology (SET) of Navrachana University Vadodara, in partial fulfillment for the award of the degree of B. Tech in Computer Science and Engineering (CSE) department. This report is a bonafide record of work that has been carried out under my supervision during the academic year 2022-23. The contents of this report, in full or in parts, have not been submitted to any other Institution or University for the award of any degree or diploma.

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Declaration

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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LIST OF FIGURES

Sr. No.	Title	Page No.
Fig 1.1	Project Title	8
Fig 4.1	Entity Relation Diagram	20
Fig 6.1	Spiral Model	22
Fig 7.1	admininfo	24
Fig 7.2	moderatorinfo	24
Fig 7.3	club_relation	24
Fig 7.4	event_join	24
Fig 7.5	Event_table	25
Fig 7.6	Moderatorprofile	25
Fig 7.7	Notice_table	25
Fig 7.8	Studentinfo	25
Fig 7.9	message	26
Fig 7.10	Users	26
Fig 8.1	Data Flow Diagram (Level 0)	27
Fig 8.2	Data Flow Diagram (Level 1)	27
Fig 8.3	Data Flow Diagram (Level 2)	28
Fig 9.1	Architecture Diagram	29
Fig 10.1	UI Screenshot 1	30
Fig 10.2	UI Screenshot 2	30
Fig 10.3	UI Screenshot 3	31
Fig 10.4	UI Screenshot 4	31
Fig 10.5	UI Screenshot 5	32
Fig 10.6	UI Screenshot 6	32
Fig 10.7	UI Screenshot 7	32
Fig 10.8	UI Screenshot 8	33
Fig 10.9	UI Screenshot 9	33
Fig 10.10	UI Screenshot 10	34
Fig 10.11	UI Screenshot 11	34
Fig 10.12	UI Screenshot 12	35
Fig 10.13	UI Screenshot 13	35
Fig 10.14	UI Screenshot 14	35
Fig 10.15	UI Screenshot 15	36
Fig 10.16	UI Screenshot 16	36
Fig 10.17	UI Screenshot 17	37
Fig 10.18	UI Screenshot 18	37
Fig 10.19	UI Screenshot 19	38
Fig 10.20	UI Screenshot 20	38
Fig 10.21	UI Screenshot 21	39
Fig 11.1	Gantt Chart	40

Table 1.1 – List of Figures

LIST OF TABLES

Sr. No.	Title	Page No.
Table 1.1	List of Figures	4
Table 2.1	List of Tables	5
Table 3.1	Table of Content	7
Table 4.1	SRS Table of Content	11

Table 2.1 – List of Tables

ABSTRACT

NUV Clubs is a robust online platform designed for managing clubs and facilitating efficient communication among various user roles, including administrators, students, and moderators. This website provides an intuitive interface for users to engage in club-related activities, ensuring a seamless experience for all participants.

Administrators hold the highest authority and are responsible for overseeing the platform. They can create and manage clubs, post events, publish notices, and control user access. Additionally, administrators have the ability to assign and manage moderators, who act as club facilitators.

Moderators, appointed by the administrators, have specific club-level privileges. They can post events, publish notices, allow students to join their respective clubs, and generate reports on user participation in club events. This functionality allows moderators to effectively manage their clubs and monitor member engagement.

Students form the core user group and have access to a wide range of features. They receive timely notifications about events in the clubs they are part of, enabling them to stay updated. Furthermore, students can express their interest in joining any club by simply selecting the desired club through a checkbox. This action triggers a request simultaneously sent to both administrators and moderators, who can then review and approve the student's request.

In addition to the clubs management features, NUV Clubs also includes **NUV Chats**, a text-based communication system. This feature fosters interaction among users, administrators, and moderators. It provides a convenient platform for seeking assistance, discussing club-related matters, or addressing any queries or concerns.

Overall, NUV Clubs offers a comprehensive solution for clubs management, empowering administrators, moderators, and students with the necessary tools and features to streamline club activities, facilitate seamless communication, and enhance the overall club experience.

INDEX

Sr. no.	Title	Page no.
I	List of Figures	4
II	List of Tables	5
III	Abstract	6
1.	Title Page - Project Title, Scope and Definition	8
2.	Motivation	9
3.	Literature Review	10
4.	System Requirements for its Development and Production Environment.	11
5.	Stakeholders	21
6.	Approach/Methodology Used	22
7.	Data/Corpus/Data Dictionary	24
8.	Project/Data Flow Diagram / UML	27
9.	Architecture Diagram	29
10.	Fully Developed Implementation's Screenshot and live implementation	30
11.	Gantt Chart / Timeline	40
12.	Proposed Enhancement	41
13.	Conclusion	42
14.	References (In IEEE format only)	42

Table 3.1 – Table of Content

1. Title Page - Project Title, Scope and Definition

1.1. Project Title



Fig 1.1

1.2. Scope

The scope of the NUV Clubs management website includes the following features:

- User Roles: The website supports three types of users: admin, students, and moderators. Each user has specific authorities and functionalities within the system.
- Admin Functionality: The admin has the highest level of authority and can perform tasks such as posting events, creating clubs, managing moderators, posting notices, allowing students into different clubs upon request, and deleting events.
- Moderator Functionality: Moderators have authority within specific clubs. They can post events, post notices, allow users into their club upon request, and download reports of users joining events in their club.
- Student Functionality: Students can view events in the clubs they are a part of and receive notifications about upcoming events. They also have the option to join any club by simply clicking on a checkbox, which sends a request to the admin and moderators simultaneously.
- NUV Chats: The website includes a chat feature called NUV Chats, which allows users, admin, and moderators to interact with each other through text-based chats. This feature facilitates communication and collaboration among the users.

1.3. Definition

NUV Clubs is a web-based platform for efficient club management. It caters to administrators, students, and moderators. Admins can post events, create clubs, manage moderators, and handle requests. Moderators can post events, manage users, and download event reports. Students receive event notifications and can request club membership. NUV Clubs also includes NUV Chats for text-based communication among users. It aims to streamline club management, enhance communication, and improve the overall club experience.

2. Motivation

The motivation behind building the website for NUV Clubs stemmed from several observed issues and challenges during events. There was a significant lack of organization and mismanagement, with attendees needing to physically visit form-filling booths for event registration. Additionally, participants often faced confusion regarding the scheduling of their events.

Furthermore, a considerable number of students, particularly freshmen, were unaware of the diverse range of clubs available at our university. These observations prompted the development of a solution that could address these issues and provide a better experience for students.

The goal became clear: to create a user-friendly website where students could log in using their college ID. This platform would offer a comprehensive view of all the clubs within our college, allowing students to join any club of their choice. Moreover, it would keep them well-informed about current and upcoming events, ensuring they never miss out on any opportunities.

By developing such a website, we aimed to streamline event registration, eliminate confusion, and bridge the gap between students and the wide array of clubs offered by our university. The ultimate motivation was to enhance students' overall experience, foster engagement, and promote a sense of community within the university.

3. Literature Review

By examining relevant literature, this review aims to identify the benefits, challenges, and best practices associated with such platforms.

a) Club Management Platforms and Student Engagement:

- The role of technology in enhancing student engagement in extracurricular activities.
- The impact of club management platforms on fostering student participation and involvement.
- Benefits of web-based platforms for club management, including convenience, accessibility, and improved communication.

b) User Experience and Interface Design:

- Importance of user-centered design principles in developing club management platforms.
- Best practices for creating intuitive and user-friendly interfaces that encourage student adoption and engagement.
- The influence of platform usability on student satisfaction and continued usage.

c) Event Management and Registration:

- Challenges associated with traditional event registration methods and the need for streamlined processes.
- The role of online event management systems in improving efficiency and reducing administrative burden.
- The impact of event notifications and reminders on student attendance and participation.

d) Student-Club Interactions and Communication:

- The value of effective communication channels in promoting student-club interactions.
- The role of online chat features in facilitating collaboration, coordination, and support among administrators, moderators, and students.
- Best practices for fostering meaningful interactions and creating a sense of community within club management platforms.

e) Impact on Student Awareness and Club Diversity:

- The influence of club management platforms on increasing student awareness of available clubs and organizations.
- Strategies for promoting club diversity and inclusivity through the platform.
- The correlation between increased club participation and overall student satisfaction and success.

Conclusion:

The literature review highlights the significant potential of club management platforms, such as NUV Clubs, in enhancing student engagement, streamlining administrative processes, and fostering a vibrant club ecosystem within educational institutions. By understanding the existing research and best practices, administrators and developers can optimize the functionality and user experience of NUV Clubs, ultimately leading to improved student participation, communication, and overall satisfaction.

4. System Requirements for its Development and Production Environment.

Table of Contents	7
Revision History	7
4.1 Introduction.....	8
4.1.1 Purpose.....	8
4.1.2 Document Conventions	8
4.1.3 Product Scope and Intended Audience	8
4.1.4 References	8
4.2 Overall Description	8
4.2.1 Product Perspective.....	8
4.2.2 Product Functions	9
4.2.3 User Classes and Characteristics	9
4.2.4 Operating Environment	10
4.2.5 Design and Implementation Constraints	10
4.2.6 User Documentation	10
4.2.7 Assumptions and Dependencies	10
4.3 External Interface Requirements.....	10
4.3.1 User Interfaces	10
4.3.2 Hardware Interfaces	10
4.3.3 Software Interfaces	11
4.3.4 Communications Interfaces	11
4.4 Functional Requirements	11
4.4.1 Functional Requirement 1: User Registration	11
4.4.2 Functional Requirement 2: Camera	12
4.4.3 Functional Requirement 3: Search and Filter	12
4.4.4 Functional Requirement 4: Profile.....	12
4.4.5 Functional Requirement 5: Settings	13
4.4.6 Functional Requirement 6: Support	13
4.5 Other Nonfunctional Requirements.....	13
4.5.1 Performance Requirements	13
4.5.2 Safety and Security Requirements	14
4.5.3 Software Quality Attributes.....	14
4.5.4 Permision Requirements	15
Appendix A: Analysis Models.....	16
Conclusion	18

Table 4.1 – Table of Content (SRS)

4.1 Introduction

4.1.1 Purpose

The purpose of this document is to present a detailed description of the NUV Clubs. It will explain the purpose and features of the system, the interface of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli.

4.1.2 Document Conventions

The Document was created based on the IEEE template for System Requirement Specification Documents.

Font Style - Times New Roman

Font Size –

- Headings – 14 (Underlined and **Bold**)
- Sub Headings – 12 (**Bold**)
- Sub-Sub Headings - 11 (**Bold**)
- Links – 12 (Underlined and **Blue**)
- Main Content- 12

4.1.3 Product Scope and Intended Audience

NUV clubs is an easy to use and interactive website that can be practically used by anyone but it is specially designed for Navrachana University Connecting all the students and faculties too on Non-Academic Ground. Hence, it can contribute on holistic development of students rather than only focusing on the Academic approach. Intended Audience are mainly Students of NUV who could cultivate a world besides there Academics and promote the culture of innovation & creativity.

4.2 Overall Description

4.2.1 Product Perspective

This Portal is developed on the base that students take initiatives to share, create & implement their own ideas on a non-academic platform. Students will be encouraged to develop their own clubs and communities which also promote the culture of team work & ethics among the students.

4.2.2 Product Features

4.2.2.1 Credential based entry

- NUV Students & Faculties will be provided with their login credentials from the University Officials. The idea is straightforward, and it is provided in a few steps:
 - a) If the user is not from NUV then he/she has to create his/her account by registering with NUV clubs
 - b) If the user is from NUV then he/she has to login with the credentials provided by University.
 - c) Whenever the user logs into their account again they can view their profile score.
 - d) The app checks with the database for the log In Id that was stored earlier while creating the account and if matched lets the user access their account.

4.2.2.2 Club Moderators

- Club Moderators are those who own a club and have the privilege operate & control various activities of their club. Club moderators have various activities in hand:-
 - a) To admit the members who wish to join their club.
 - b) To post the events organized by their club.
 - c) To keep track of members of club and actively communicate with them through chat sections

4.2.2.3 Events Dashboard

- Posting events on the dashboard makes the event exposed to all the students of university which eliminates the need of emailing everyone to inform for the same:-
 - a) If anyone wants to join a particular event of any club he just needs to do two simple things:-
 - Search for the event he/she wants to participate in
 - Click on the Event post on Dashboard and request to join the event if required.
 - b) The portal also has the payment facilities in case any event registration or participation complies to it.

4.2.3 User Classes and Characteristics

This Application is designed for Fitness Enthusiast and people who want to exercise at the Home or Gym without the need of a Trainer. The user class is General User.

4.2.4 Operating Environment

The hardware, software and technology used should have following specifications:

- Ability to connect to the Wi-Fi or mobile network.
- Ability to exchange data over the network.
- Touch screen for convenience or Keypad (in case touchpad not available)
- Ability to take input from user
- Functional on any of the platform i.e. iOS, Android, Windows.

4.2.5 Design and Implementation Constraints

- Log into NUV clubs account by entering given credentials only.
- If credentials doesn't match prompt error message "Invalid Credentials"
- In case of network not available
- Same username should not be allowed.
- If not able to exchange data over network, prompt error message "Connection not available"

4.2.6 User Documentation

For more information related to the App visit (*Our Git Hub Link*) to get details on how the software was designed and what are the steps to doing so.

4.2.7 Assumptions and Dependencies

- Network and data availability
- Power supply
- Better connection for exchanging data over network
- Availability of mobile or desktop services

4.3 External Interface Requirements

4.3.1 User Interfaces

The NUV clubs user interface should be intuitive & attractive, such that 99% of all NUV clubs users are able to use the portal without any obstacles.

4.3.2 Hardware Interfaces

The hardware should have following specifications:

- Ability to read gallery
- Ability to exchange data over network
- Touch screen for convenience
- Keypad (in case touchpad not available)
- Continuous power supply
- Ability to connect to network
- Ability to take input from user
- Ability to validate user
- Ability to differentiate different class of Users. (Students, Moderators & Administrator)
- Should be user friendly

4.3.3 Software Interfaces

The software interfaces are specific to the target other user's NUV clubs portal. The portal is most compatible to following Operating Systems.

- a) IOS
- b) Android
- c) Windows

4.3.4 Communications Interfaces

The Communication Interfaces required by NUV Clubs are as follows:-

- Serial Communication
- Program to Program Communication
- Mobile Network/ Wi-Fi
- Gallery access
- Camera Access

4.4 Functional Requirements

There are various functional requirements that the app requires in order to work its best efficiency NUV clubs Interface requires the following:-

4.4.1 Functional Requirement 1: User Registration or Log In

4.4.1.1 Input

- Click on signup button if not from NUV or enter given credentials.

4.4.1.2 Processing State

- Validate user data, verify credentials; if all conditions are met, assign the account to this new user with all new user information, if existing User, verify the credentials.

4.4.1.3 Output

- Post login or sign up NUV clubs Home page will be visible.

4.4.2 Functional Requirement 2: Gallery Access

4.4.2.1 Description

- It allows users to upload pictures or videos from their gallery when needed

4.4.2.2 Input

- The pictures or videos to be uploaded are supposed to be selected from the gallery by clicking on the icon given on the interface.

4.4.2.3 Output

- The clicked picture or video gets uploaded at the respective page on the portal.

4.4.3 Functional Requirement 3: Search and Filter

4.4.3.1 Description

- This module allows users to view different clubs and communities & their events across the portal and also helps them to access any club with required permissions. The User can also filter clubs according to their interest.

4.4.3.2 Input

- Click on the Discover Button on the interface and type some Keywords.

4.4.3.3 Output

- View various clubs, Communities & their respective events.

4.4.4 Functional Requirement 4: Profile

4.4.4.1 Description

- This module allows users to view their own profiles and gives them a provision to edit their profile.

4.4.4.2 Input

- Click on the icon on the top left corner of the screen.

4.4.4.3 Output

- Access your profile and change your username, and profile picture and phone number (with OTP verification only)

4.4.5 Functional Requirement 5: Settings

4.4.5.1 Input

- Sensitive user information can be added/updated/deleted. Moreover Website theme could chosen according to user's convenience.

4.4.5.2 Processing State

- New data is captured and updated in the database.

4.4.5.3 Output

- Changes to the user data are made successfully. Functions like change password, theme selection etc. are available in settings.

4.4.6 Functional Requirement 6: Support

4.4.6.1 Description

- NUV Clubs support webpage has everything what a user needs.

4.4.6.2 Input

- User will input queries in the 'What can we help you with?' text box.

4.4.6.3 Processing State

- NUV clubs will try to match all keywords with those recorded in the database and display related queries. In case of 0 matches, it would provide an option to directly contact Administrator of NUV clubs.

4.4.6.4 Output

- Related queries are displayed or contact us page will open.

4.5 Other Non-functional Requirements

4.5.1 Performance Requirements

4.5.1.1 Scalability

- NUV Clubs should be able to provide instant services to multiple users at any given time.

4.5.1.2 Robustness

- In case user's device crashes, a backup of their activities history must be stored on remote database servers to enable recoverability.

4.5.1.3 Performance

- Application must be lightweight and must provide video feed and service without lagging or slowing down.

4.5.1.4 Speed

- Portal's processing speed should be high so that there is no delay in executing user's instructions. Also, the portal should not crash repeatedly.

4.5.1.5 Cache Memory

- The app shall not consume more cache memory. Even if it does, it must provide a choice to the user to clear app cache manually.

4.5.2 Safety and Security Requirements

Keep your password safe and don't share it with any other people, applications, or websites under any circumstances. Other requirements are as followed:-

4.5.2.1 Privacy

- NUV Clubs should provide the users with the benefit of customizing their privacy settings. Hence, they shall make the best use of these settings.

4.5.2.2 Report Spam

- In case of irrelevant, inappropriate content, or issues, NUV Clubs users are free to report a complaint to NUV Clubs. Efficient action shall then be taken against anything that's been reported spam.

4.5.2.3 Backup and Restore

- This feature is the most important. Today, we exchange devices like crazy and thus there's no guarantee of us using the same device for forever. So NUV Clubs provides a backup and automatic restore facility relating to the online cloud database which back up all your data (upon given your permission) and all the backed up information can be easily restored later.

4.5.3 Software Quality Requirements

4.5.3.1 Reliability

- It is very important that the portal is reliable as 7k+ users use NUV Clubs simultaneously. All data collected by NUV Clubs shall be preserved safely and should follow data hiding.

4.5.3.2 Maintainability

- NUV Clubs has to have maintenance on loop and should keep updating.

4.5.3.3 Portability

- It can be used on any apple or android phones and tablets.

4.5.3.4 Support

- Good software is one which listens to its customers' feedback and helps them whenever they need

something. NUV Clubs has all supportive help documentation ready.

4.5.3.5 User Friendly

- This portal is user-friendly, meaning to say even if one just uses it for the first time; they'd find it easy to operate.

4.5.3.5 Feedback\Write a Review

- People can rate the app accordingly and can openly share his thoughts since NUV Clubs always welcomes opinioned suggestions.

4.5.4 Permission Requirements

The following permissions need to be granted in order to access all the features of the portal

1. **Read phone status and identity:** Auto fill your credentials when you register for NUV Clubs, for your convenience.
2. **Receive text messages (SMS):** Auto fill the SMS code that NUV Clubs sends you during phone number verification, for your convenience.
3. **Upload pictures and videos:** Use your gallery to upload pictures & videos.
4. **Record audio:** Use your microphone to record audio while using the Chatbot.
5. **Modify or delete the contents of your USB storage:** Save videos and pictures to your device's photo gallery, send photos and videos directly on social media platforms with just a few clicks, and more. NUV Clubs also uses your device's storage to save settings and cache content you send and receive.
6. **Read the contents of your USB storage:** NUV Clubs automatically loads settings that you've previously saved.
7. **Full network access:** Send and receive data.
8. **View Network Connections:** NUV Clubs optimizes Video feed delivery based on the strength of your internet connection.
9. **Control vibration:** Allows you to enable vibration for NUV Clubs notifications.
10. **View Wi-Fi Connections:** NUV Clubs optimizes Feed quality based on the strength of your Wi-Fi connection.
11. **Notifications:** Receive notifications when new content is added on the portal and for other important events.
12. **Clipboard:** Allow NUV Clubs to access your clipboard so you can attach links quickly with the Paperclip tool and get better search results and a better experience with the app.

Appendix A: Analysis Models

- Entity Relationship Diagram

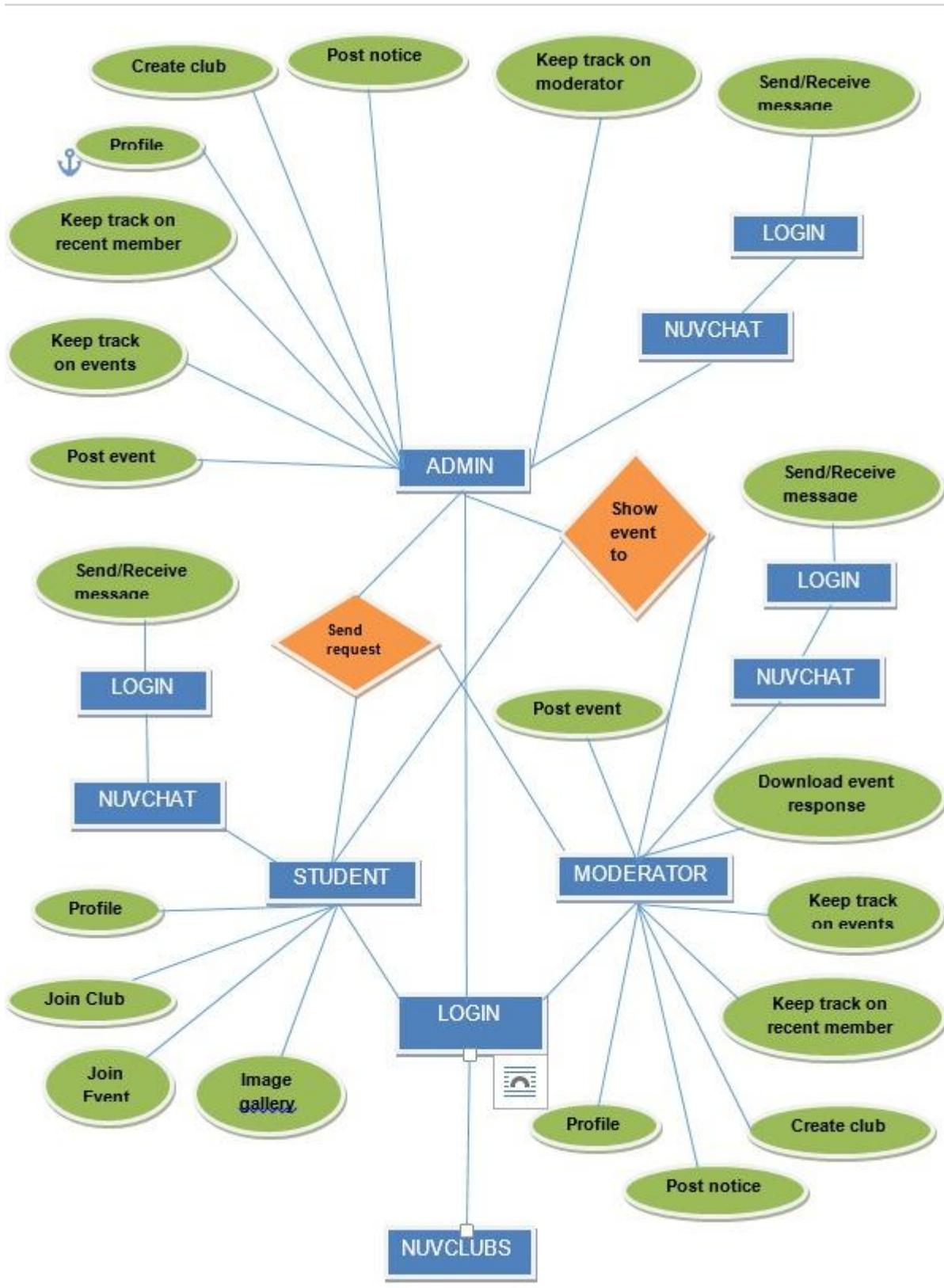


Fig 4.1

5. Stakeholders

When considering potential stakeholders for NUV Clubs, it's important to identify individuals, groups, or organizations that may have an interest or be affected by the club's activities. Here are some potential stakeholders for NUV Clubs:

- **Students:** The primary stakeholders of NUV Clubs would be the students who participate in the clubs. They are directly involved and impacted by the club's activities, events, and initiatives.
- **Faculty and Staff:** The faculty and staff members of the university or educational institution where NUV Clubs are established are important stakeholders. They may provide guidance, support, and resources to the clubs, and their involvement can significantly impact the success of the clubs.
- **University Administration:** The university administration plays a crucial role as stakeholders in NUV Clubs. They may oversee the establishment, funding, and overall management of the clubs. Their support and approval are necessary for the clubs to operate within the institution.
- **Alumni:** Alumni of the university or educational institution may be potential stakeholders, especially if they have a strong connection to a particular club or if they want to contribute to the development and success of the clubs. They may provide mentorship, networking opportunities, or financial support.
- **Sponsors and Partners:** External organizations, businesses, or individuals who sponsor or partner with NUV Clubs can be important stakeholders. They may provide funding, resources, expertise, or other support to the clubs. These stakeholders often have a vested interest in the club's activities and outcomes.
- **Community Members:** Depending on the outreach efforts and community engagement of NUV Clubs, local community members can also be stakeholders. They may benefit from the club's initiatives or be affected by their activities, particularly if the clubs organize events or projects that involve the community.

6. Approach & methodology

We have used spiral model approach here as we are creating different phases at each step of our website so lets understand what is a spiral model?

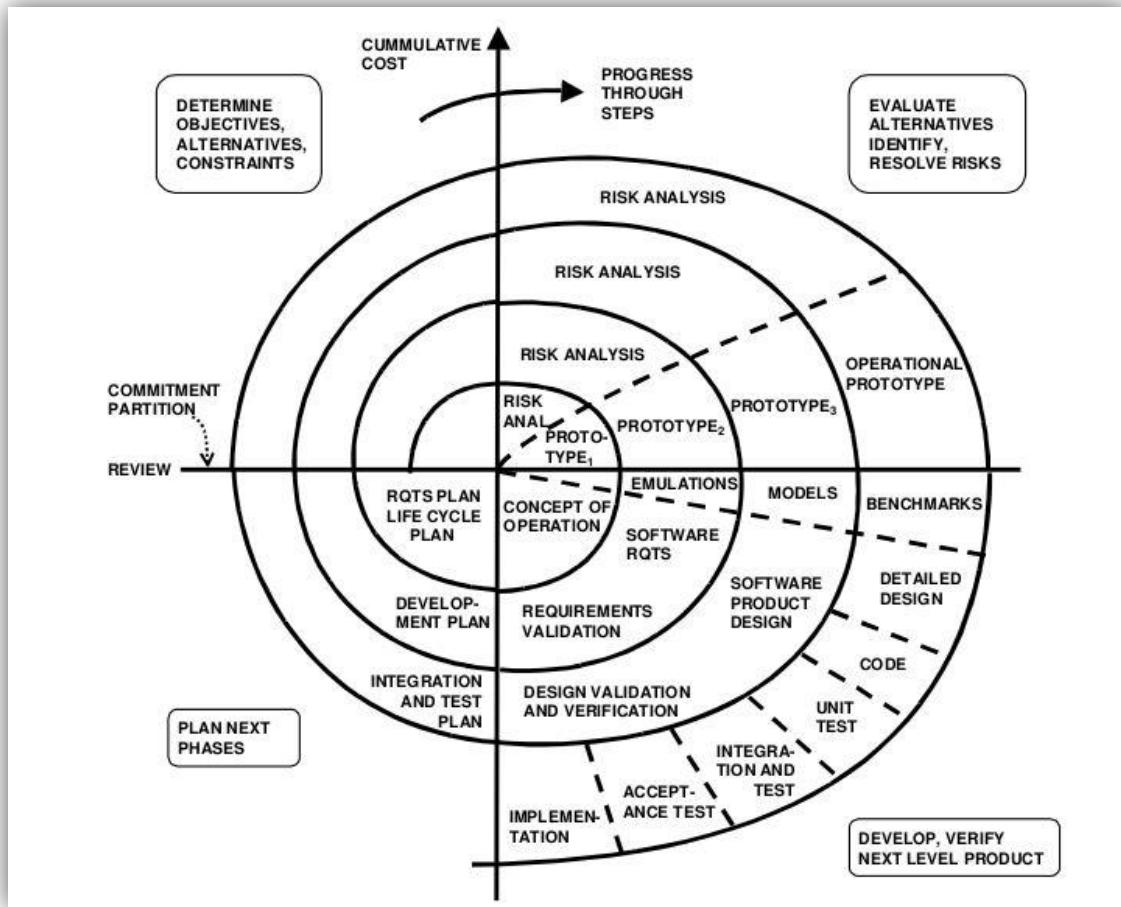


Fig 6.1

Spiral model:

- Spiral model is one of the most important Software Development Life Cycle models, which provides support for Risk Handling. In its diagrammatic representation, it looks like a spiral with many loops. The exact number of loops of the spiral is unknown and can vary from project to project. Each loop of the spiral is called a Phase of the software development process. The exact number of phases needed to develop the product can be varied by the project manager depending upon the project risks. As the project manager dynamically determines the number of phases, so the project manager has an important role to develop a product using the spiral model.
- The Radius of the spiral at any point represents the expenses (cost) of the project so far, and the angular dimension represents the progress made so far in the current phase.
- Each phase of the Spiral Model is divided into four quadrants as shown in the above figure. The functions of these four quadrants are discussed below-

- Objectives determination and identify alternative solutions: Requirements are gathered from the customers and the objectives are identified, elaborated, and analyzed at the start of every phase. Then alternative solutions possible for the phase are proposed in this quadrant.
- Identify and resolve Risks: During the second quadrant, all the possible solutions are evaluated to select the best possible solution. Then the risks associated with that solution are identified and the risks are resolved using the best possible strategy. At the end of this quadrant, the Prototype is built for the best possible solution.
- Develop next version of the Product: During the third quadrant, the identified features are developed and verified through testing. At the end of the third quadrant, the next version of the software is available.
- Review and plan for the next Phase: In the fourth quadrant, the Customers evaluate the so far developed version of the software. In the end, planning for the next phase is started.

Risk Handling in Spiral Model:

- A risk is any adverse situation that might affect the successful completion of a software project. The most important feature of the spiral model is handling these unknown risks after the project has started. Such risk resolutions are easier done by developing a prototype. The spiral model supports coping up with risks by providing the scope to build a prototype at every phase of the software development.

Advantages of Spiral Model:

Below are some advantages of the Spiral Model.

- **Risk Handling:** The projects with many unknown risks that occur as the development proceeds, in that case, Spiral Model is the best development model to follow due to the risk analysis and risk handling at every phase.
- **Good for large projects:** It is recommended to use the Spiral Model in large and complex projects.
- **Flexibility in Requirements:** Change requests in the Requirements at later phase can be incorporated accurately by using this model.
- **Customer Satisfaction:** Customer can see the development of the product at the early phase of the software development and thus, they habituated with the system by using it before completion of the total product.

Disadvantages of Spiral Model:

Below are some main disadvantages of the spiral model.

- **Complex:** The Spiral Model is much more complex than other SDLC models.
- **Expensive:** Spiral Model is not suitable for small projects as it is expensive.
- **Too much dependability on Risk Analysis:** The successful completion of the project is very much dependent on Risk Analysis. Without very highly experienced experts, it is going to be a failure to develop a project using this model.
- **Difficulty in time management:** As the number of phases is unknown at the start of the project, so time estimation is very difficult

7. Data / corpus / data dictionary

7.1 Database (CLUB)

id	email	username	name	gender	password	avatar
1	admin@nuv.ac.in	0000-000-0	Admin	Male	123456	admin.png

Fig 7.1 admininfo

club_ID	club_Name	moderator	moderator_ID
1	FinFun	Moderator1	1111-111-1
2	GDSC	Moderator2	1111-111-2
3	Neofolks	Moderator3	1111-111-3

Fig 7.2 moderatorinfo

id	club_ID	club_Name	user_ID	status
117	1	FinFun	20-12403-7	Y
118	3	Neofolks	20-12407-3	Y
120	2	GDSC	20-12407-3	Y
121	2	GDSC	20-12406-8	Y
122	1	FinFun	20-12407-3	N

Fig 7.3 club_relation

id	event_ID	club_ID	joined_Member_ID	show_Event
8	15	2	20-12406-8	Y

Fig 7.4 event_join

id	event_head	event_detail	venue	capacity	date	time	event_img	club_ID
15	Hackathon	Join Now Using the Link -	Auditorium	120	19-08-2023	01:00	1684926935GDSC.jpg	2
16	Inauguration	Do join us on this auspicious occasion!!	Amphitheatre	150	16-07-2023	12:00	1684927060FinFun.jpg	1
18	Inauguration	Do join us on this auspicious occasion!!	Amphitheatre	150	16-07-2023	12:00	1684927060FinFun.jpg	3
20	Tinkerthon, Derby Race and Tech Talks	To Register fill out the form - https://forms.gle/...	Auditorium	150	30-05-2023	01:00	1684960808Frame 2.jpg	3

Fig 7.5 event_table

d	email	user_ID	Name	Club_ID	Club_Name	Gender	Password	Date_Time	Avatar
8	moderator3@nuv.ac.in	1111-111-3	Moderator3	3	Neofolks	male	123456	2023-05-24 15:48:36	moderator.png
9	moderator1@nuv.ac.in	1111-111-1	Moderator1	1	FinFun	male	123456	2023-05-24 15:52:38	moderator.png
10	moderator2@nuv.ac.in	1111-111-2	Moderator2	2	GDSC	male	123456	2023-05-24 16:33:09	moderator.png

Fig 7.6 moderatorprofile

id	notice	time_date	posted_by	club_ID
1	Hi Welcome to the Club	2023-05-26 14:12:11	Admin	3
2	Get to know your Friends Guys	2023-05-26 14:12:32	Admin	1
3	Get to know your Friends Guys	2023-05-26 14:12:32	Admin	2
4	Get to know your Friends Guys	2023-05-26 14:12:32	Admin	3

Fig 7.7 notice_table

email	username	clubname	name	dept	semester	gender	dob	admissionyear	phone	password	avatar	is_active	dateTime	clubID	show_Event
1 20124073@nuv.ac.in	20-12407-3	Neofolks	Killol Rajgor	Engineering	Spring	male	3/Sep/2002	2020	9328369974	123456	1518101539FB_IMG_1487270137432.jpg	Y	2022-02-08 21:52:20	3	Y
2 20124068@nuv.ac.in	20-12406-8	GDSC	Vidhi Babariya	Engineering	Fall	female	24/Jan/2002	2020	9428302002	123456	1518104191FB_IMG_1487270044522.jpg	Y	2022-02-08 21:55:23	2	Y
3 20124037@nuv.ac.in	20-12403-7	FinFun	Priyanshi Shah	Engineering	Fall	female	30/Nov/2002	2020	8849145895	123456	1518104191FB_IMG_1487270044522.jpg	Y	2022-02-08 22:00:01	1	Y

Fig 7.8 studentinfo

7.2 Database (Chatapp)

msg_id	incoming_msg_id	outgoing_msg_id	msg
1	1023149036	1291923063	Hi
2	1291923063	1023149036	Hello
20	1023149036	285395960	hi

Fig 7.9 message

user_id	unique_id	fname	lname	email	password	img	status
1	1023149036	Killol	Rajgor	20124073@nuv.ac.in	e10adc3949ba59abbe56e057f20f883e	16848294071.jpg	Active now
4	1291923063	Priyanshi	Shah	20124037@nuv.ac.in	e10adc3949ba59abbe56e057f20f883e	16848299795.png	Offline now
5	285395960	Admin	NUV	admin@nuv.ac.in	e10adc3949ba59abbe56e057f20f883e	16848408172.jpg	Active now
6	863226967	Vidhi	Babriya	20124068@nuv.ac.in	e10adc3949ba59abbe56e057f20f883e	16849216934.jpg	Offline now

Fig 7.10 users

8. Data flow diagrams

Level 0

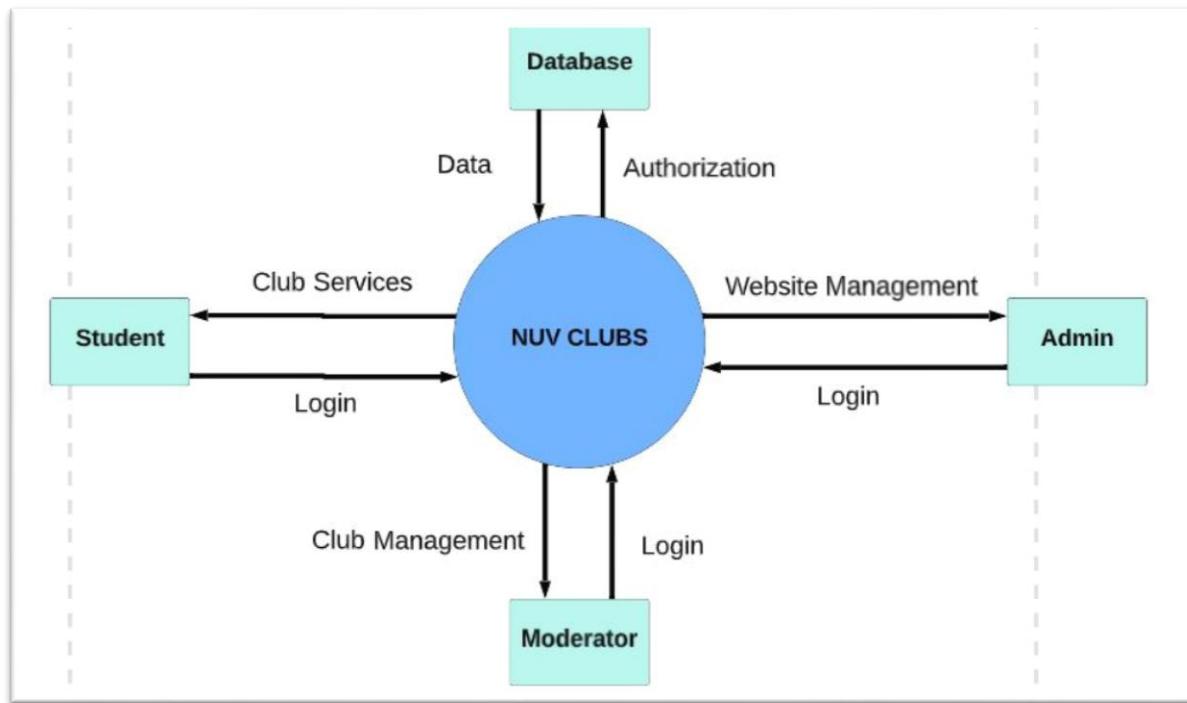


Fig 8.1

Level 1

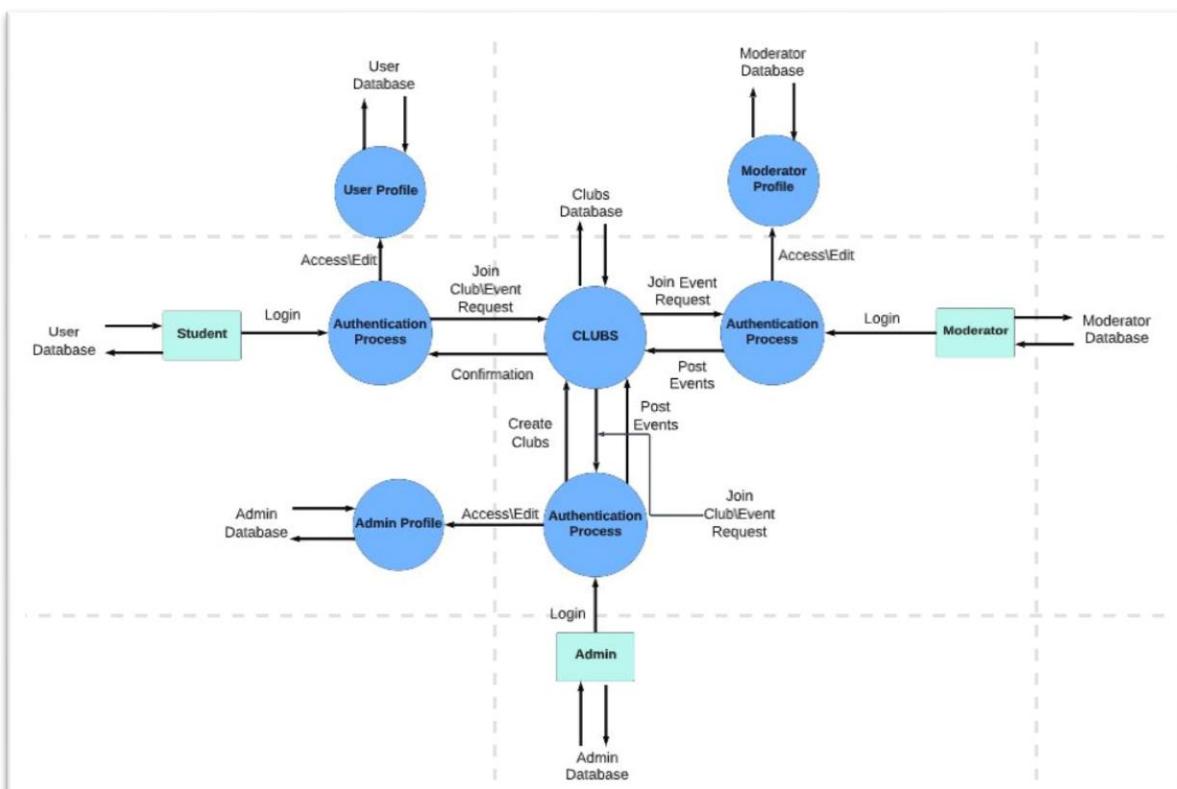


Fig 8.2

Level 2

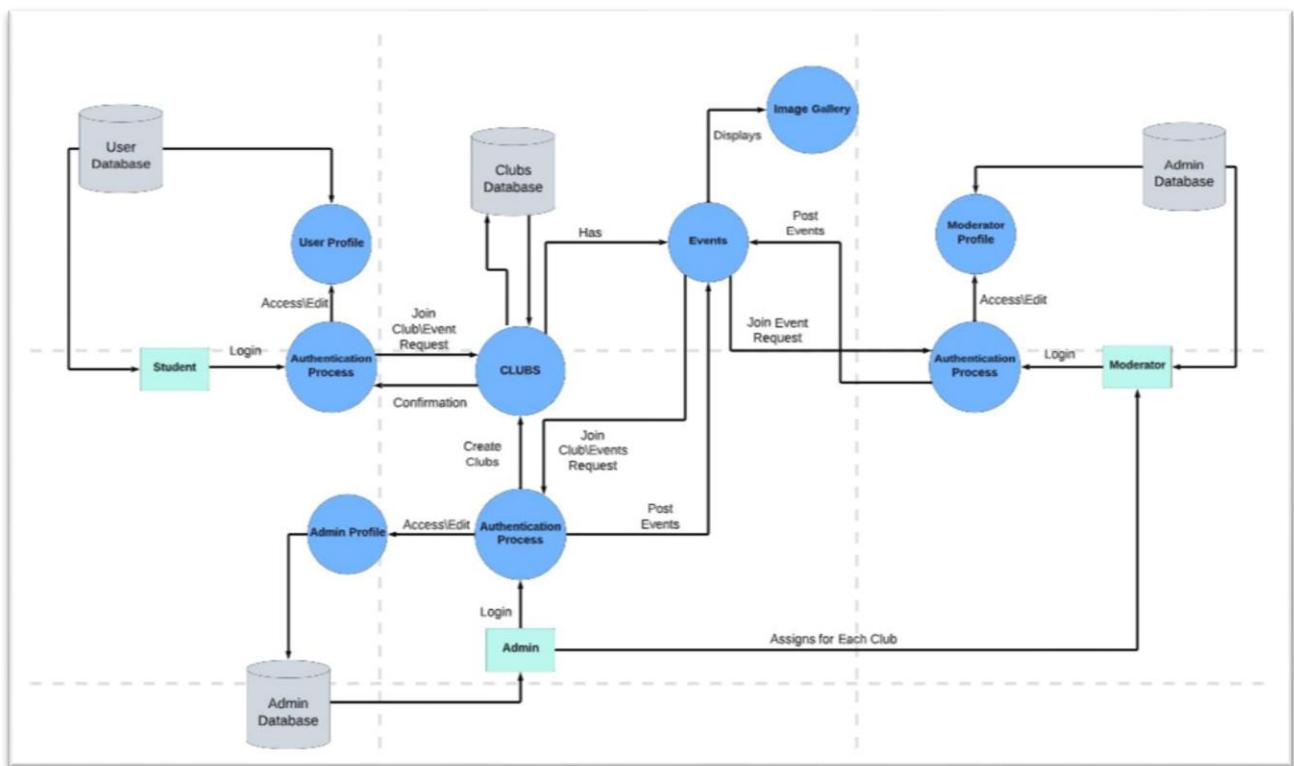


Fig 8.3

9. Architecture diagram

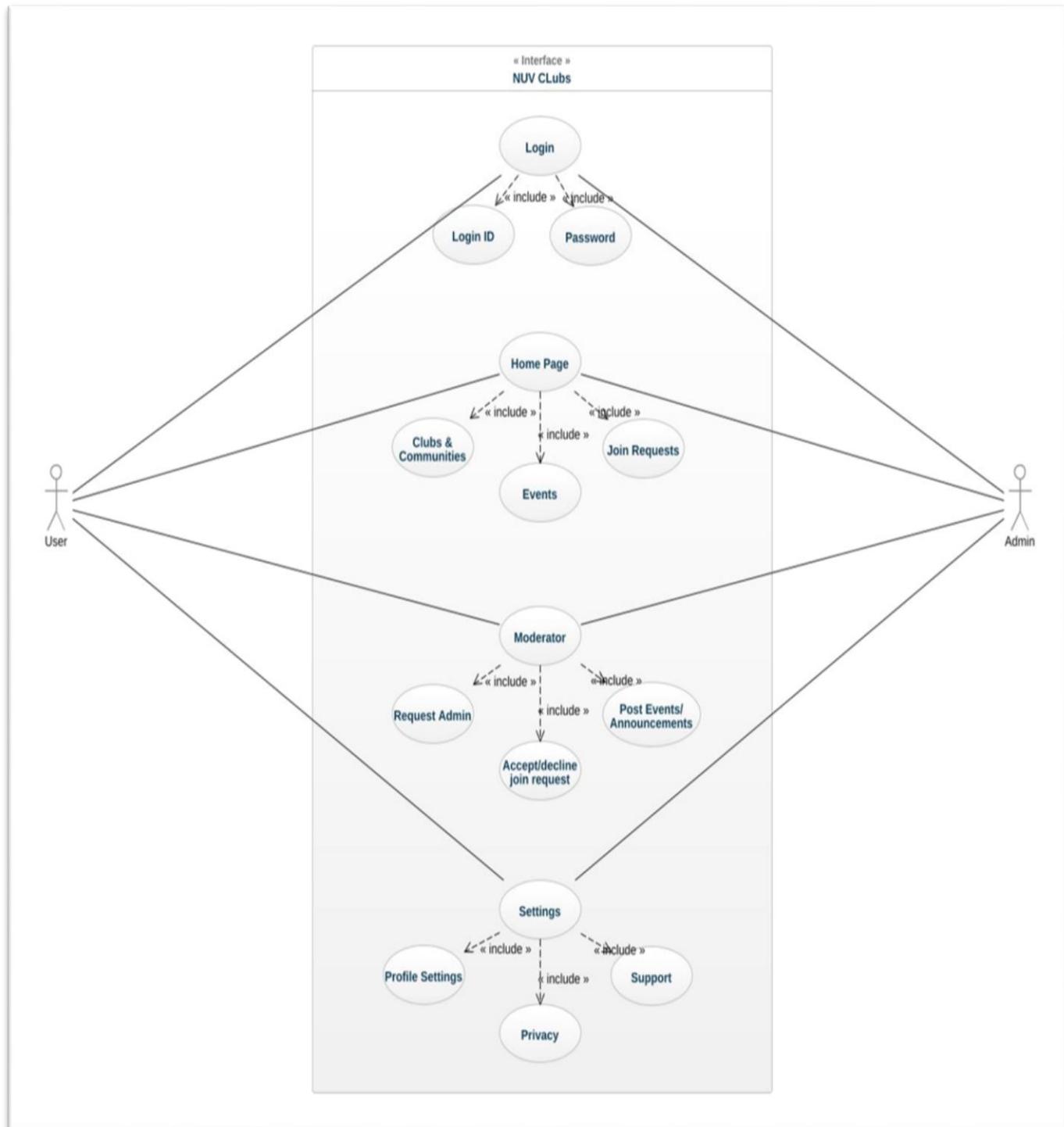


Fig 9.1

10. IMPLEMENTATION SCREENSHOTS

10.1 Admin

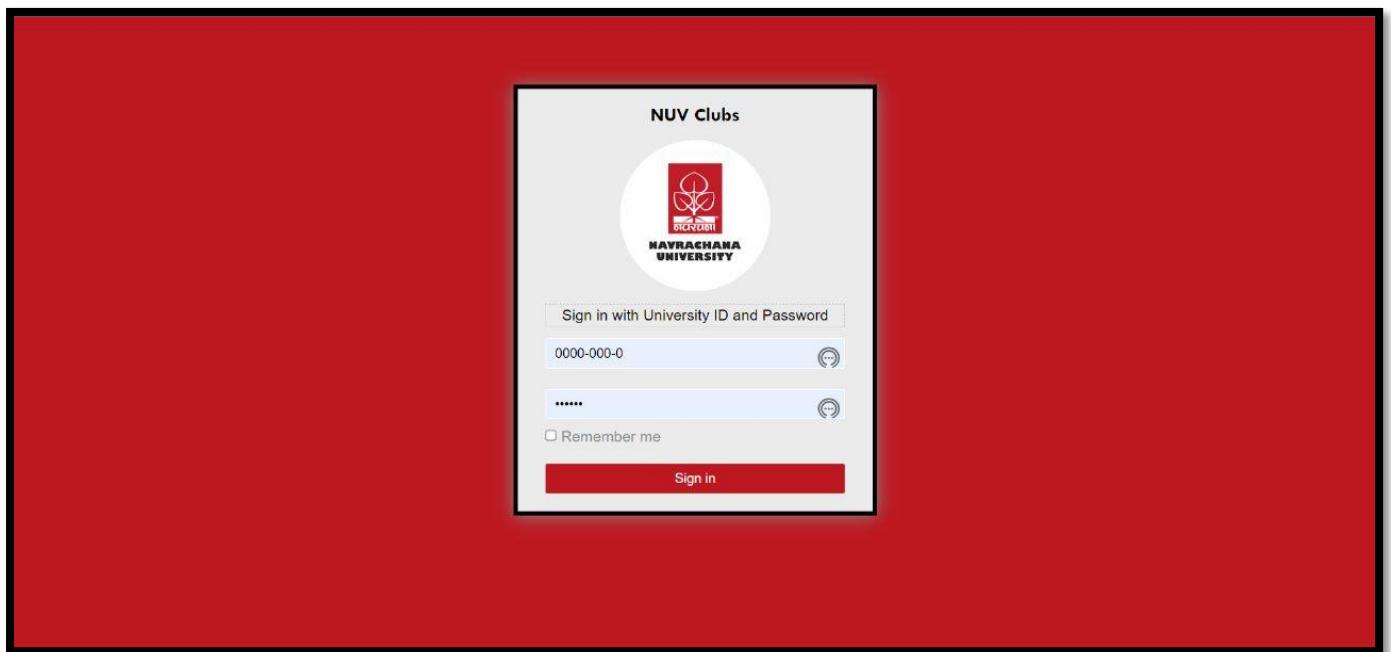


Fig 10.1

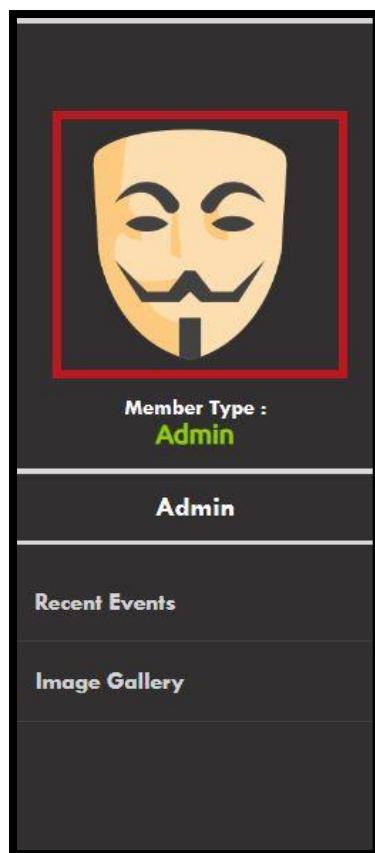


Fig 10.2

Welcome ADMIN

NUV Clubs

Events :

Select Image : Choose File No file chosen

Write Event Header

Write Event Detail here

Venue

Capacity

Date : Day Month Year

Time : 01:00

Create Club

Manage Moderators

Send Message

Fig 10.3

Notice :

Club Name	Notice	Time/Date	Posted by	Delete
Neofolks	Hi Welcome to the Club	2023-05-26 14:12:11	Admin	X
FinFun	Get to know your Friends Guys	2023-05-26 14:12:32	Admin	X
GDSC	Get to know your Friends Guys	2023-05-26 14:12:32	Admin	X
Neofolks	Get to know your Friends Guys	2023-05-26 14:12:32	Admin	X

Event List

Club ID	Club	Name	Detail	Venue	Date	Time	Capacity	Edit	Delete
2	GDSC	Hackathon	Join Now Using the Link -	Auditorium	19-08-2023	01:00	120		X
1	FinFun	Inauguration	Do join us on this auspicious occasion!!	Amphitheatre	16-07-2023	12:00	150		X

Fig 10.4

Management Zone

Club Request :

New club join request(s)!			
Club Name	ID	State	Accept/Reject
FinFun	20-12407-3	N	✓ ✘

Recently Joined Members :

Club Name	ID	Name	Request Date	State	Delete
FinFun	20-12403-7	Priyanshi Shah	2022-02-08 22:00:01	Y	✗
GDSC	20-12406-8	Vidhi Babariya	2022-02-08 21:55:23	Y	✗
Neofolks	20-12407-3	Killol Rajgor	2022-02-08 21:52:20	Y	✗

[Delete All](#)

[See All](#)

Fig 10.5

Create Club

Existing Clubs

Club ID	Club Name	Total Members	Delete
1	FinFun	1	<input type="checkbox"/>
2	GDSC	1	<input type="checkbox"/>
3	Neofolks	1	<input type="checkbox"/>

[Delete](#)

Fig 10.6

Club Info Table

Club ID	Club Name	Assigned Moderator	Moderator ID
1	FinFun	Moderator1	1111-111-1
2	GDSC	Moderator2	1111-111-2
3	Neofolks	Moderator3	1111-111-3

Fig 10.7

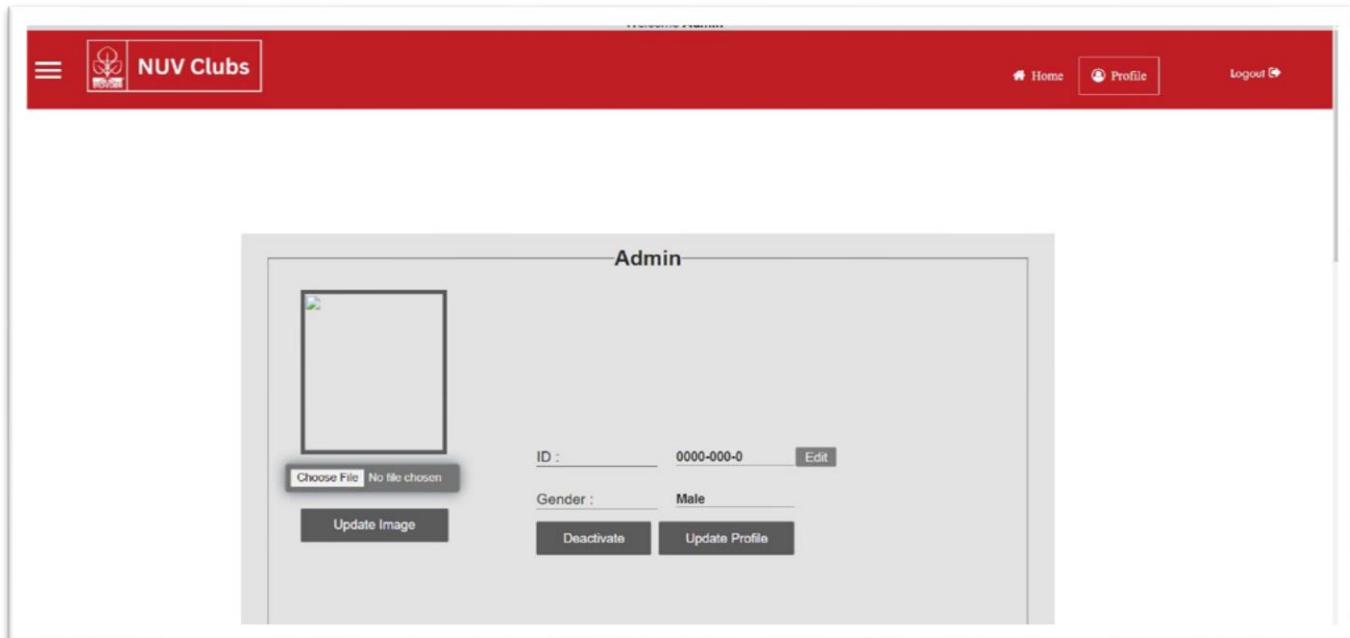


Fig 10.8

10.2 Moderator

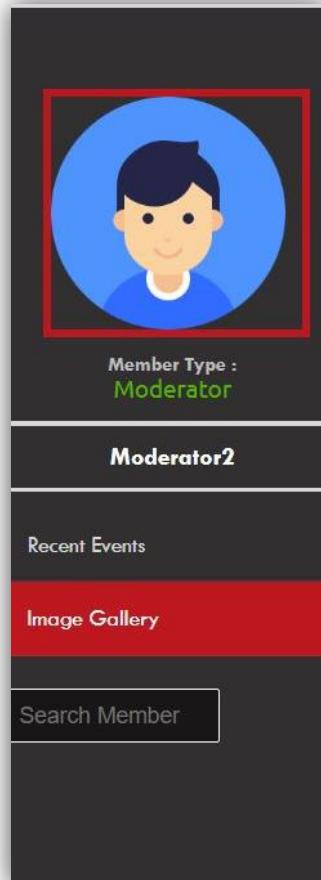


Fig 10.9

The screenshot shows the NUV Clubs application interface. At the top, there is a red header bar with the logo and text "NUV Clubs". On the right side of the header are links for "Home", "Profile", and "Logout". Below the header, there is a dark gray rectangular area labeled "Events :". Inside this area, there are several input fields and dropdown menus:

- "Select Image : Choose File" (No file chosen)
- "Write Event Header" (empty input field)
- "Write Event Detail here" (empty input field)
- "Venue" (empty input field)
- "Capacity" (empty input field)
- "Date : Day Month Year" (dropdown menus for Day, Month, and Year)
- "Time : 01:00" (dropdown menu for Time)

On the right side of the "Events" section, there is a red button labeled "Send Message".

Fig 10.10

The screenshot shows the NUV Clubs application interface. At the top, there is a red header bar with the logo and text "NUV Clubs". Below the header, there is a dark gray rectangular area labeled "Post Notice :". Inside this area, there is an input field labeled "Write Notice here" and a red button labeled "Post Notice".

Below this, there is a red horizontal bar labeled "Manage Zone". Underneath the "Manage Zone" bar, there is another dark gray rectangular area labeled "Member List :". This area contains a table with the following data:

Club Name	ID	Name	Request Date	State
GDSC	20-12406-8	Vidhi Babariya	2022-02-08 21:55:23	Y

At the bottom of the "Member List" area, there is a red button labeled "View All Info".

Fig 10.11

The screenshot displays a web-based application interface. At the top, there is a 'Notice' panel with a single entry: 'Get to know your Friends Guys' posted by 'Admin' on '2023-05-26 14:12:32'. Below this is an 'Event List' panel showing a single event named 'Hackathon' with details: 'Join Now Using the Link -', 'Venue: Auditorium', 'Date: 19-08-2023', 'Time: 01:00', and 'Capacity: 120'. The final panel is 'Event Joined Member List', which shows one member: 'Vidhi Babariya' from the 'Hackathon' event with Member ID '20-12406-8'. A 'Download Report' button is present at the bottom of this panel.

Fig 10.12

data.xlsx - Microsoft Excel (Product Activation Failed)																				
Home																				
Font																				
A1																				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
1	Id	event_ID	club_ID	joined_Meet	Event															
2	8	15	2	20-12406-Y																
3																				

Fig 10.13

10.3 Student

The screenshot shows a website for 'Google Developer Student Clubs' at 'Navrachana University'. The header includes a navigation menu, a logo, and links for 'Home', 'Profile', 'Go To The Clubs', 'Message', and 'Logout'. The main content area features a banner for 'Mentoring our next Lead' with a date of 'Thursday April 14 | 6:00pm EST' and a venue of 'Google meet'. It also mentions an announcement for tomorrow and a link in the bio. To the right is a graphic of a lightbulb and a globe. At the bottom, there are navigation arrows and a 'Member List' button.

Fig 10.14

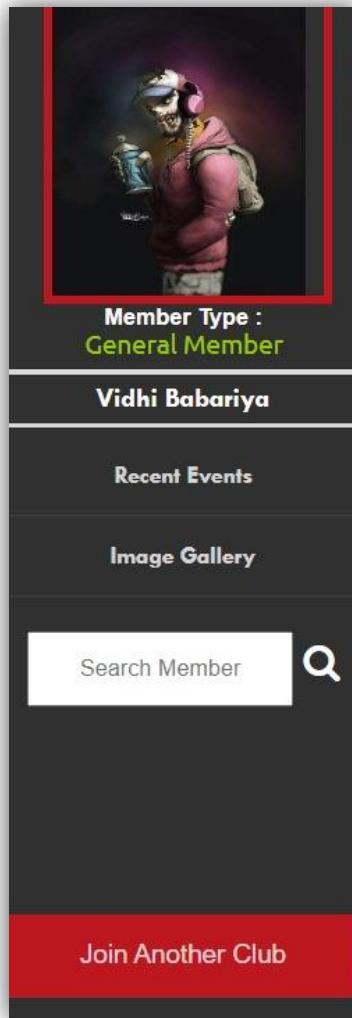


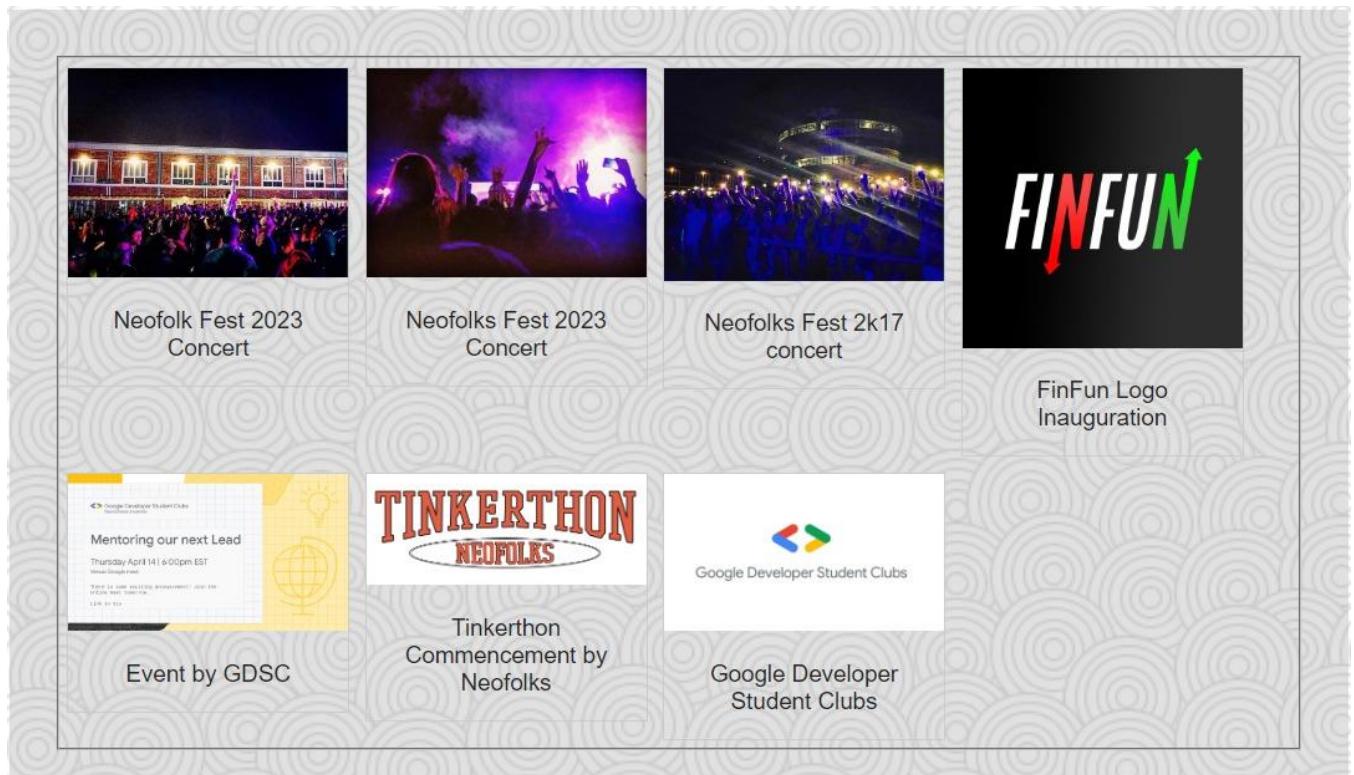
Fig 10.15

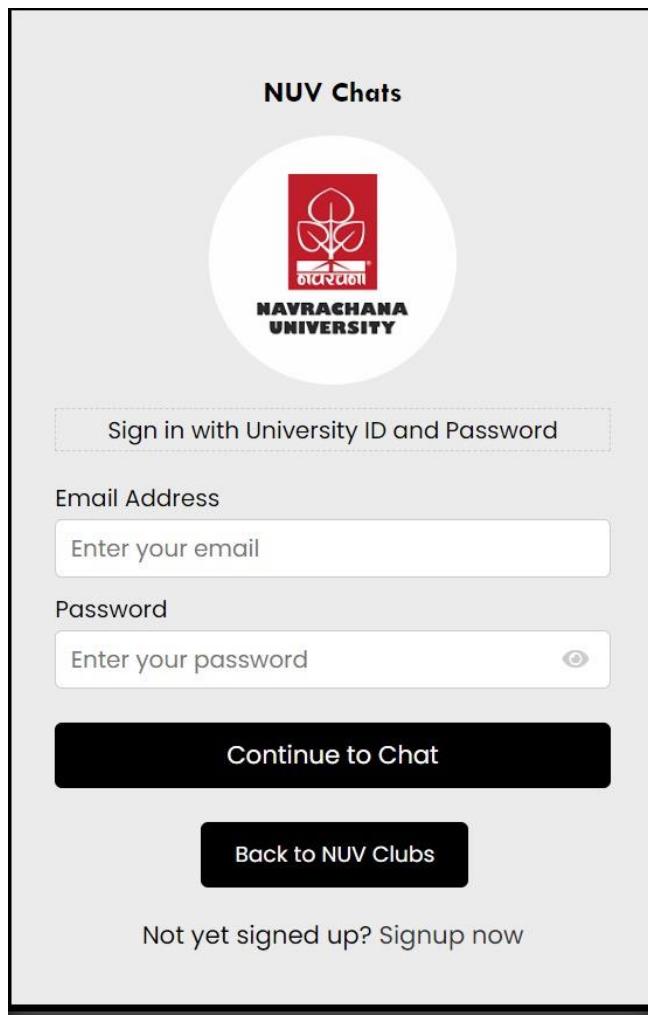
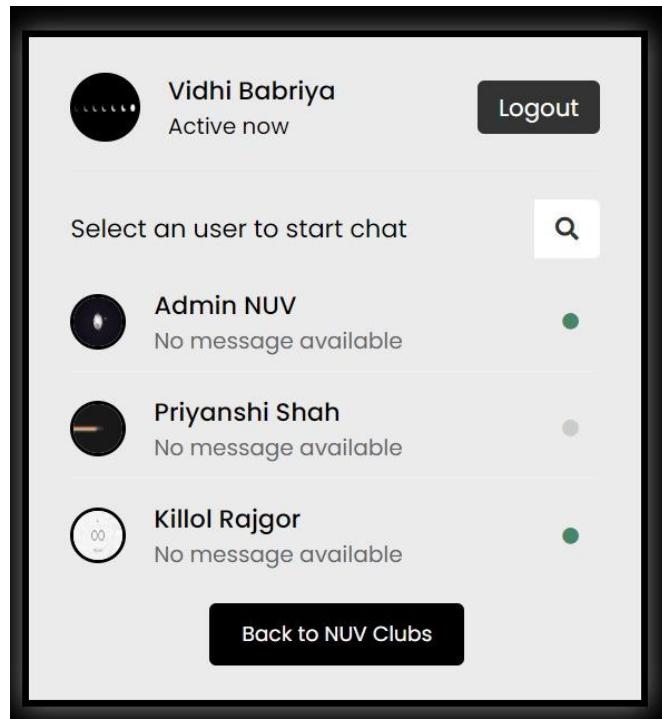
A mobile application interface for a notice board. At the top is a red header bar with a notice pin icon and the word "Notice". Below the header is a yellow card containing the text "Hello" and a timestamp "Date/Time : 2023-05-26 14:17:58". To the right of the timestamp is the text "Posted by : Admin". Below the yellow card is a red header bar with a grid icon and the word "Join Events". Below this header is a message "No event available." followed by a red button labeled "View Details".

Fig 10.16

Vidhi Babariya

	ID : <u>20-12406-8</u> Edit Joined Club(s) : <u>GDSC</u> Department : <u>Engineering</u> Joined Semester : <u>Fall</u> Admission Year : <u>2020</u> Gender : <u>female</u> DOB : <u>24/Jan/2002</u> Phone : <u>9428302002</u> Email : <u>20124068@nuv.ac.in</u>
Choose File <input style="display: inline-block; width: 100px; height: 15px; vertical-align: middle;" type="file"/> No fi...sen	
Update Image	
Deactivate Update Profile	

Fig 10.17**Fig 10.18**

10.4 NUV Chats**Fig 10.19****Fig 10.20**

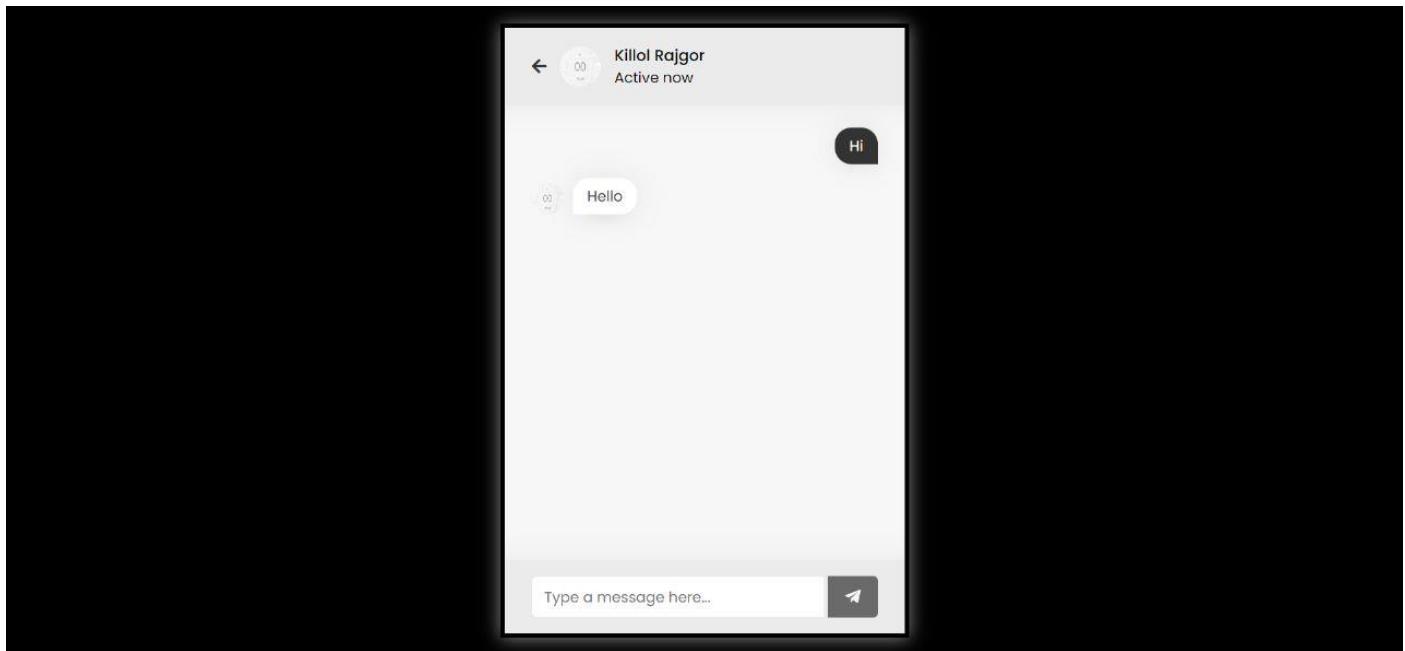


Fig 10.21

11. Gantt chart / timeline

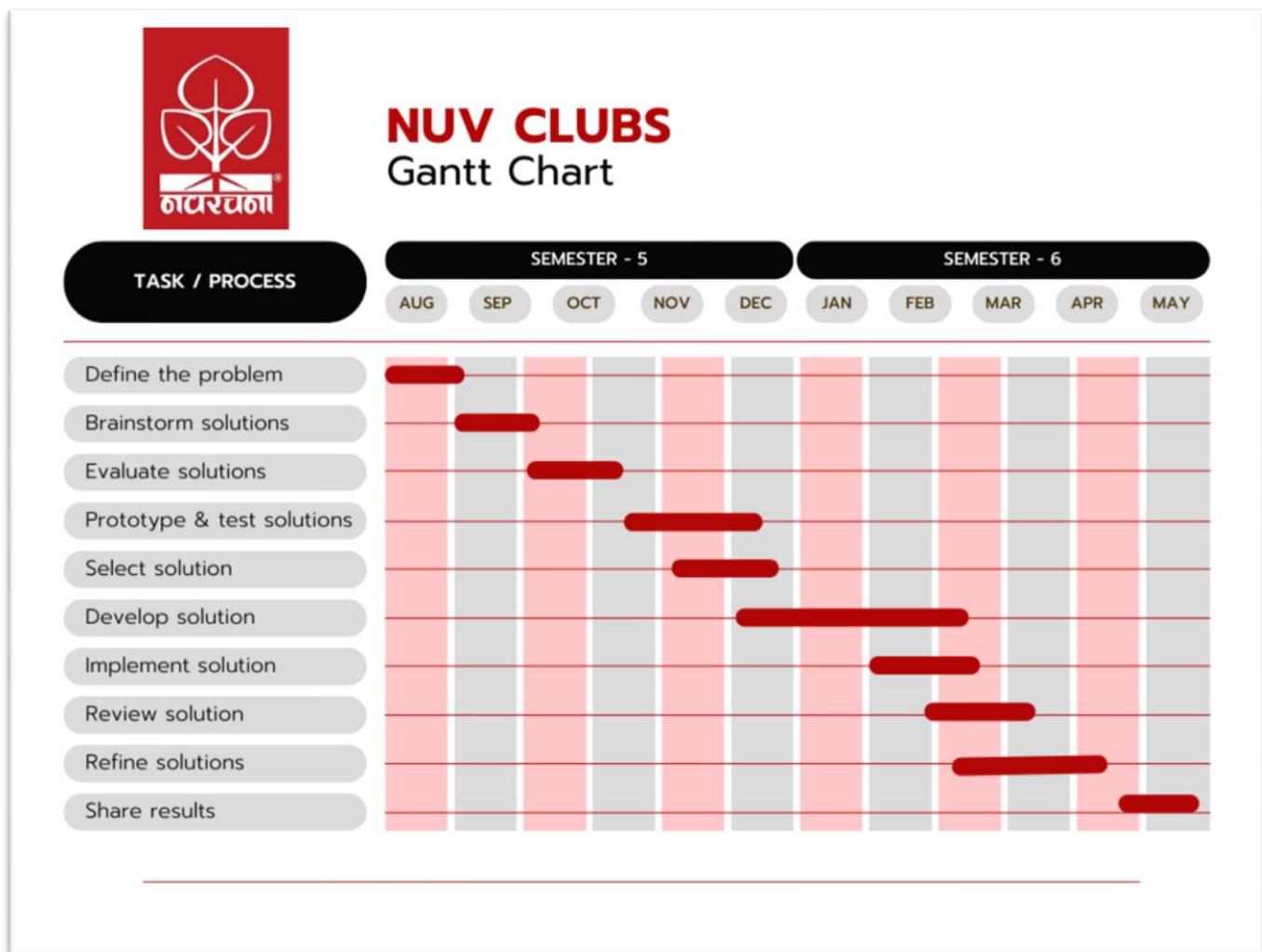


Fig 11.1

12. Proposed enhancement

In addition to the existing features, several enhancements can be proposed for NUV Clubs to further improve user experience and functionality:

- **Integration of an AI Chatbot:** Implementing an AI-powered chatbot can greatly enhance user engagement and support. The chatbot can assist users in finding relevant information, answering common queries, providing event suggestions, and offering real-time assistance.
- **UI/UX Improvements:** Enhancing the user interface and user experience design can make the website more intuitive and visually appealing. Streamlining navigation, improving layout, incorporating modern design principles, and optimizing the overall user flow will contribute to a more seamless and enjoyable user experience.
- **Email Notifications:** Implement a system to send email notifications to users, including students, administrators, and moderators. This way, users can receive important updates, such as event reminders, club approvals, and other relevant information directly in their email inbox.
- **Integration of Payment Gateway (Razorpay):** Introducing a secure payment gateway, such as Razorpay, can enable online payment options for club subscriptions, event registrations, or any other transactions within the platform. This feature will provide convenience to users and simplify the payment process.
- **Deployment for College:** Once all the enhancements and modifications have been made, the final version of the website can be deployed specifically for the college, ensuring it is accessible to the intended audience and can cater to the club management needs of the college community.

By implementing these proposed enhancements, NUV Clubs can further elevate its functionality, user experience, and convenience, making it an even more comprehensive and valuable platform for club management within the college environment.

13. Conclusion

In conclusion, NUV Clubs is a comprehensive clubs management website that caters to the needs of various users, including administrators, students, and moderators. The platform offers different levels of authority, with administrators having the ability to create clubs, post events, manage moderators, post notices, allow students into clubs upon request, and delete events. Moderators, on the other hand, can post events, post notices, allow users into their specific clubs, and download reports on user participation in club events. Students benefit from the website by receiving notifications about events in the clubs they are part of and having the option to join any club by simply clicking a checkbox, which sends a request to both the admin and moderator simultaneously. Additionally, the inclusion of NUV Chats enables seamless communication among users, administrators, and moderators through text-based chats. Overall, NUV Clubs provides a comprehensive platform for efficient club management and enhanced user engagement.

14. References

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