

**Mini Project Report On**  
**“The Modern Times”**

**Submitted in partial fulfillment of the requirements for the award of  
the degree of**

**BACHELOR OF ENGINEERING**  
**(Computer Engineering)**

**By**

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**UNDER THE GUIDANCE OF**  
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**PES's Modern College of Engineering, Pune-05**  
**2019-2020**



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***CERTIFICATE***

*This is to certify that the project entitled*

*“The Modern Times”*

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*is a bonafide account of the work done by him/her under our supervision.*

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**HOD**

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## **Abstract**

The Modern Times is a free platform designed specifically for the PES's Modern College of Engineering which allows the users to upload posts about the events happening in the college. This app brings together all the students and the faculty irrespective of the department they belong to. Users will be able to write a post (i.e. upload a post image from gallery, write a Title for the post and provide the Content (Description) of the post and then upload it to database). On successfully posting to database, the post will be shown on the homepage where other users can read the post.

### **FEATURES**

- 1 . This app features various tabs to choose from, including the Home Page, Clubs and Departments to enable an easy view for the posts made.
- 2 . Home Page features the latest posts. Clubs and departments section shows the posts sorted as per their source.
- 3 . Upload Posts helps to upload posts.

### **GET TO KNOW YOUR COLLEGE MORE**

This app makes it easy for the users to know about the events in the college as well as makes complete use of the information in line with their personal interest.

It creates an open forum and brings together all the students of any age groups providing a space for communication and enables the sharing of information regarding events in college. This application can become one step for students.

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## **Introduction**

In this project we built a Mobile Event App with Android Studio, which is a basic CRUD Application with MongoDB as the back-end database. The Modern Times is a free platform designed specifically for the PES's Modern College of Engineering which allows the users to upload posts about the events happening in the college. This app brings together all the students and the faculty irrespective of the department they belong to. Users will be able to write a post (i.e. upload a post image from gallery, write a Title for the post and provide the Content (Description) of the post and then upload it to database). On successfully posting to database, the post will be shown on the homepage where other users can read the post.

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## Objectives

1. There are many events, activities, technical and cultural fests that take place in colleges, the application helps in **effective communication of updates** among students of other colleges and within the college.
2. To **reduce the physical effort** to reach out to different colleges and **convey the information** regarding such events.
3. This application can play a major role in **increasing participation levels of students** in various events regardless of their college.

## **Methodology**

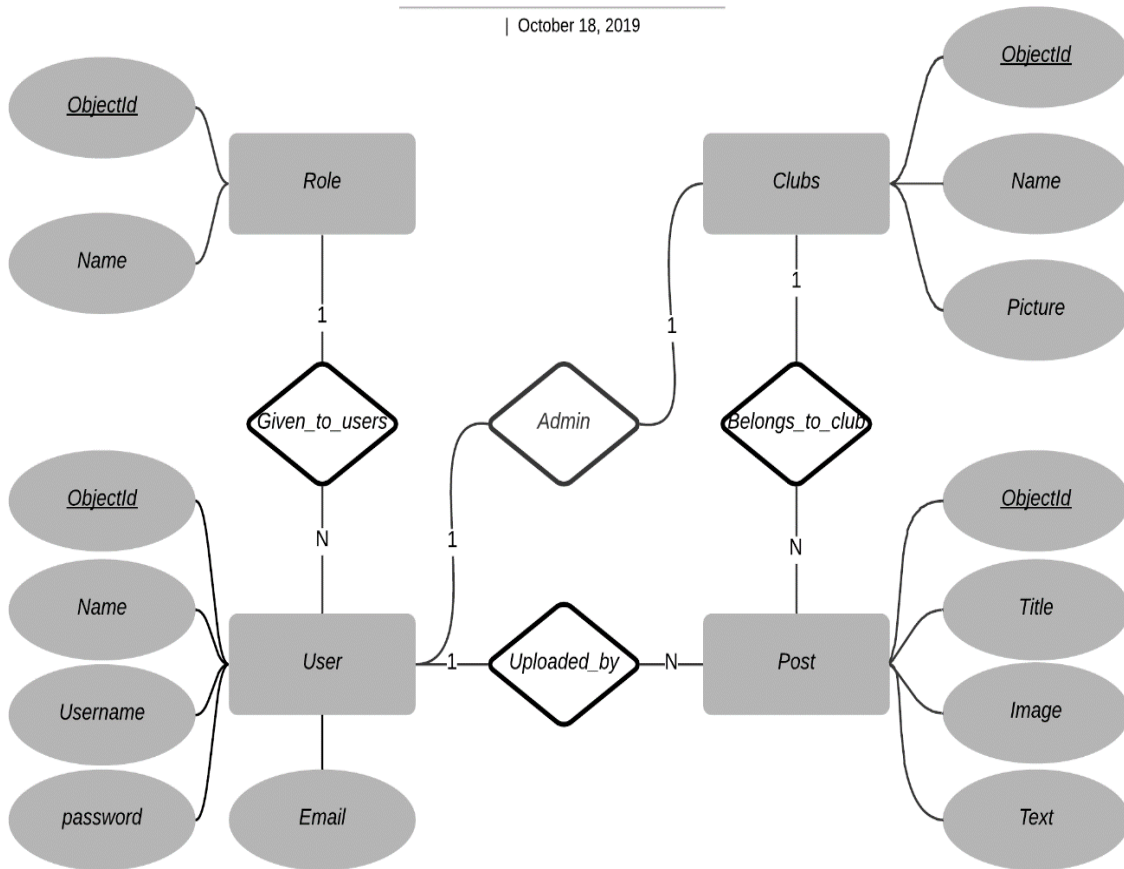
This project was developed due to the need in various clubs in college for a medium to share their content to every student of the college which was prior done using social media sites. The major drawback through that method is that students have to subscribe/follow each individual club and if they are not aware of a club, they do not subscribe to it and are deprived of that information. This product being a centralized system can be supplied to students and they can have access to all the clubs and any new addition to these college bodies will not increase any work on the students' behalf.

Before developing this application, we did some research as to whether anyone has tried to implemented this type of system inside the college or anywhere else. This product was developed using RAD model for application development. Automatic code generation inside Android Studio aided the software development.

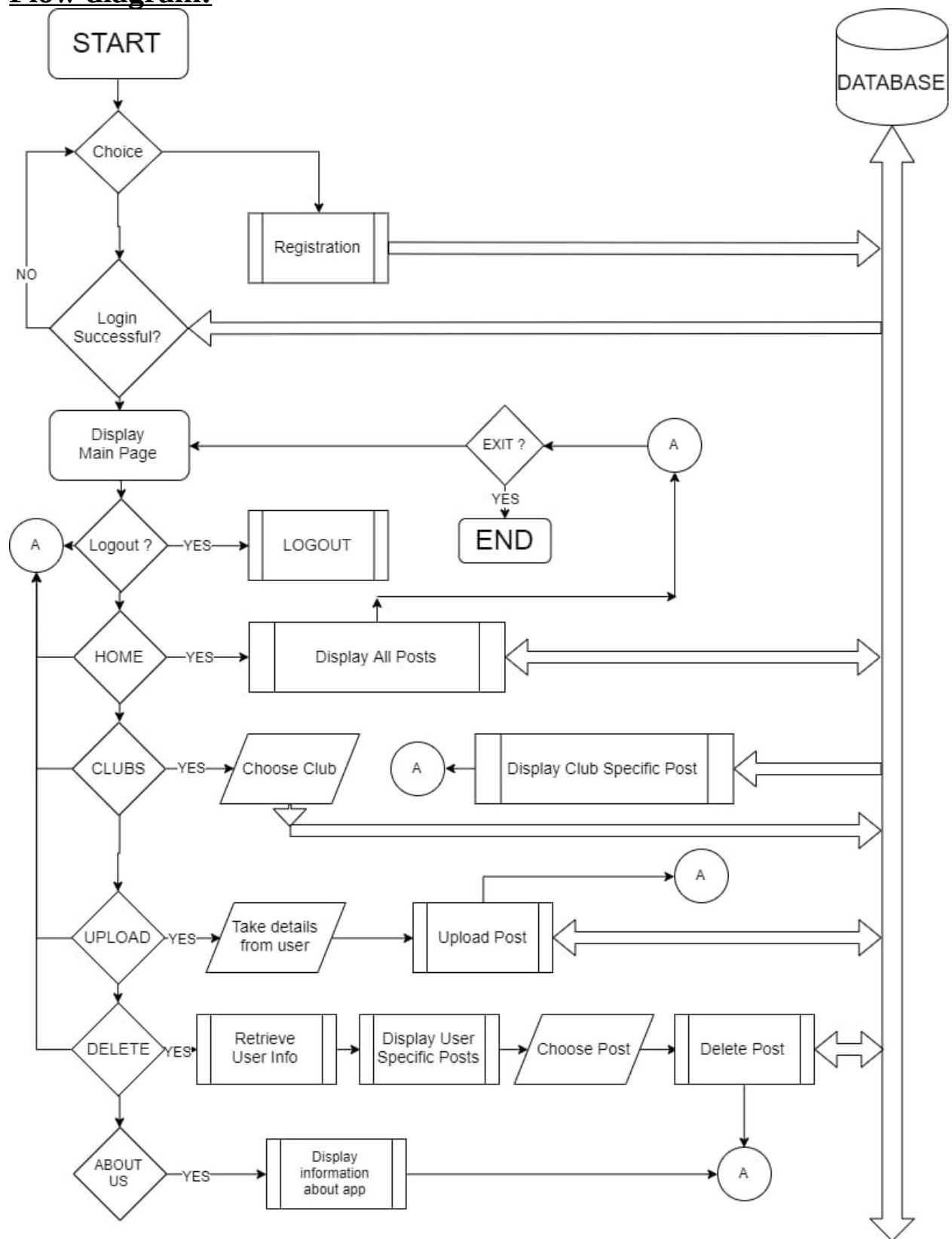


## ER Diagram for The Modern Times

| October 18, 2019



## Flow diagram:



## Implementation Details

Along the main functionalities, the following are the included features- Even after registration, before a user should gain access to our App, it is wise to sign them in properly via the Login Activity so we can achieve the functionality of tracking their activities as they navigate the app. Define a button with login text and set its Property. Define the function in the java file. Get the username and passwords text using and compare it with the login credentials.

### Registering and Signing in Users (Sign Up Activity)

fig.1

For an end user to be able to use the app, user is expected to have an account for the app. This use case scenario is achieved by registering the user in application database. For this we need to know certain details about the user. These details are as follows:

1. Name of the user
2. Username
3. Email-Id
4. Password

If this task is successful, we then check if the user is registered (exists) on our database. If the user is registered (exists in the database), we launch the homepage else, we create a Toast to let them know they are not registered.

### Create a Card-Based Layout (Single Post Activity)

This layout simply has an ImageView to hold the post image, two TextViews to hold the post Title and Description and a delete Button to delete the post. For an existing user to upload an event post, the user is expected to submit the following details of the event:

1. Title

2. Club name
3. Description
4. Image

The post can be viewed by any user who has successfully logged into the application.

(a) All the posts appear in the **Home** section.

### **Creating Home Activity (RecyclerView)**

**fig. 3**

Home Page features the latest posts. Clubs and departments section shows the posts sorted as per their source. We created a CardView layout that will contain the contents of the post made by the user for the purpose of showing it to other users. To achieve this, create a RecyclerView layout where the user will be posting the individual Cards (populating the RecyclerView layout with the CardView layout).

(b) Posts appear in the **Clubs** section according to their club name.

### **Creating Clubs Activity (GridView)**

**fig. 4**

The GridView shows items in two-dimensional scrolling grid (rows & columns) and the grid items are having a ImageView (displaying Club logo) as well as TextView (displaying Club name). Users can then select any grid item by clicking on it. Toast is provided for user to show the clicked item. Thus, we can associating Posts with respective owners.

### **Posting details and image (Upload Post Activity)**

**fig.5**

Users will be able to write a post (i.e. upload a post image from gallery, write a Title for the post and provide the Content (Description) of the post and then upload it to database). On successfully posting to database, the post will be shown on the homepage where other users can read the post.

**Logging out signed-in Users (Logout Option)**

The user is expected to logout so as to successfully end the application session.

**Software Requirements for development:**

Operating System	:	Windows 8 or above or Linux
Development environment	:	Android Studio
Programming Language	:	Java
Database	:	MongoDB over Parse-server
Database Connectivity	:	Parse-server API

**Client Side deployment:**

Operating System	:	Android 4.0.3+
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**Server Side deployment:**

Operating System	:	Ubuntu 16.04 LTS
Deployed Platform	:	Parse-server
Deployed at location	:	AWS ec2 t2.micro instance
Programming Language	:	NodeJs with javascript

## Screenshots:

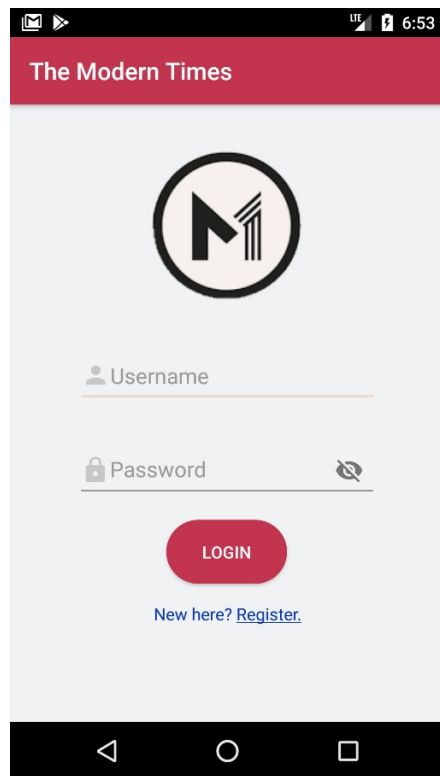


Fig.1

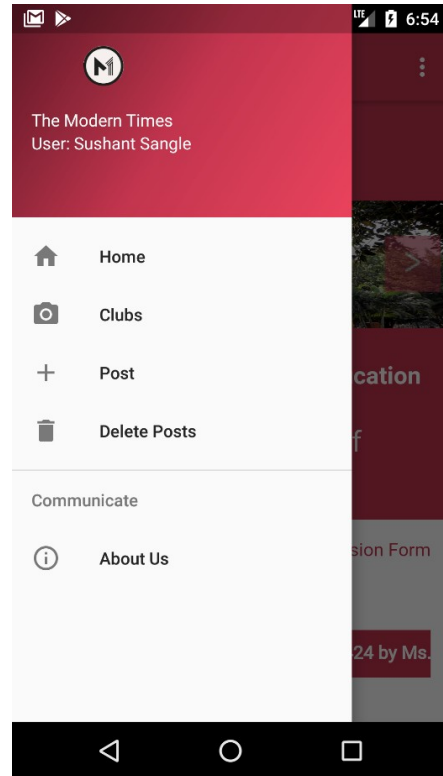


Fig.2

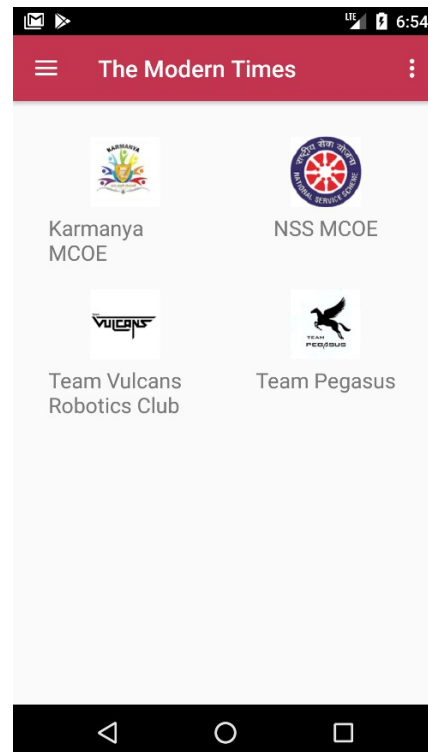
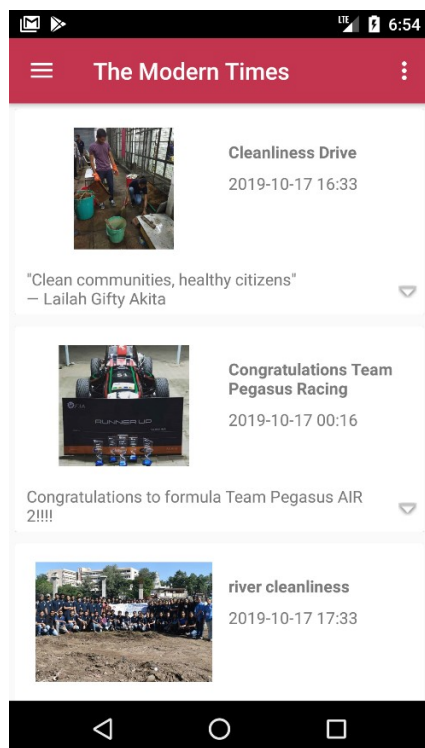


Fig.3

The screenshot shows a mobile app interface with a red header bar containing a back arrow and the text 'The Modern Times'. Below the header, the text 'Event Details:' is followed by a note '(Only Club admins can upload a post)'. There are three input fields: 'Title', 'Club Name', and 'Description'. Below these fields is a large grey rectangular area with a camera icon, indicating a photo upload section. At the bottom of the form is a red button labeled 'SUBMIT'. The Android navigation bar is visible at the very bottom.

Fig.5

Fig.4

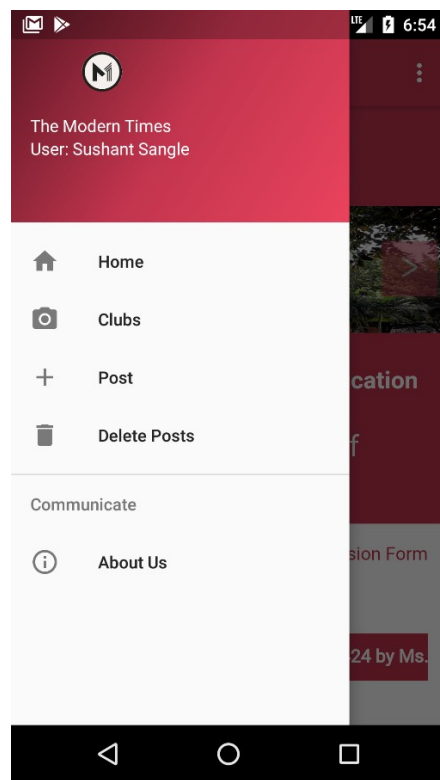


Fig.6

## Conclusion

1. In this communication app, we have modules where students can **share the details of the events** of a particular club.
2. This application can play a major role in **increasing participation levels of students** in various events regardless of their departments.
3. This app makes it easy for the **users to know about the events** in the college as well as makes complete use of the information in line with their personal interest.



## **Future Scope**

The main objective of this project is to provide a platform for the students and college personnel to spread information about an event happening in the college.

There are some features we're thinking to add up in the very next version of the primary version. These features are:

1. Currently this project focuses on the clubs present in the college. In the near future we'll release an update to expand the target audience stated above.
2. The project can further be expanded to include the registrations and payments of the events apart from the updates alone.
3. It can also enable communication between lecturers and students.
4. Various other services like attendance management system and Moodle can be implemented inside the application as the application if successfully deployed will already have a large user base of the college students.
5. This application can also be expanded so as to acquire information from multiple colleges in a region. This in turn will reduce the expense and labor work required to convey information about an event to various colleges.

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