# (CT-21015) Software Engineering Mini Project Stage – II

## College Event Management System

### PROJECT REPORT

By

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#### 1 Introduction

### 1.1 Purpose/Motivation

The College Event Management System is utilized to keep up college exercises details like social fest, specialized fest, college day festivities, workshops, project expo and courses and so forth. It gives data on events, keeps up student participation and it keeps up branch details, sports details, and furthermore gives the college accomplishments.

In the past framework, all the data needed to be seen in a hard document. Simultaneously while looking through any data it is too hard to even think about accessing and sets aside a great deal of effort to look through the specific information.

Subsequently, so as to beat this issue an web application can be utilized to make this procedure simpler, secure and less blunder inclined. Increasingly effective data will be accomplished through this framework.

#### 1.2 Problem Statement

To develop a full stack web application, a college event management system to manage various events happening across the college.

## 2 Project Overview

#### 2.1 Problem Description

This is a web-related application that grants us to move toward the whole information with respect to the college events according to departments. This general application made arrangements for helping the students of an association about details on the social exercises, specialized exercises, sports, courses, and workshops and so forth. It additionally permits the students to realize the forthcoming event details.

The administrator would keep up the records of the students, readies the forthcoming event time table and transfer the present data with respect to the college events. A fundamental issue anticipated in the event particulars of interest are accounted for manually in distinct records, which is a difficult activity.

Taking care of and updating records manually expands the opportunity of slip-ups. It requires some investment and necessitates numerous workers to accomplish the task. It even needs security and incapacity to deliver different kinds of reports. S as to take care of these issues, another framework has been made, that endeavors to work the entire methodology considering the database integration approach.

#### 2.2 Problem Domain

Web Development Front-end: HTML, CSS, JS, Bootstrap Backend: Django, Mysql

## 3 Objectives

- To allow event coordinators to host an event and allow users to register for an event.
- To allow users to be a member of club by sending member request.
- Event coordinators should have all privileges for a club and can manage all club activities.

- Admin will have all privileges and can enable/disable club, add notice, news, add event coordinators to club, etc.
- To automatically generate event tickets with registration link once the new event has been added.
- To allow event coordinators to view registered participants and notify them via email.

#### 4 Features

- Admin
  - Registration.
  - Login.
  - Create club.
  - Add event coordinator.
  - Disable club visibility.
  - Add news.
  - Add notice.
  - Add academic calendar.
- Event Coordinator
  - Registration.
  - Login.
  - Add member to the club.
  - Add event.
  - Update event details.
  - Mail participants.
- Student
  - Registration.
  - Login.
  - Request for member of club.
  - Register for event.
  - View clubs, notices, news.

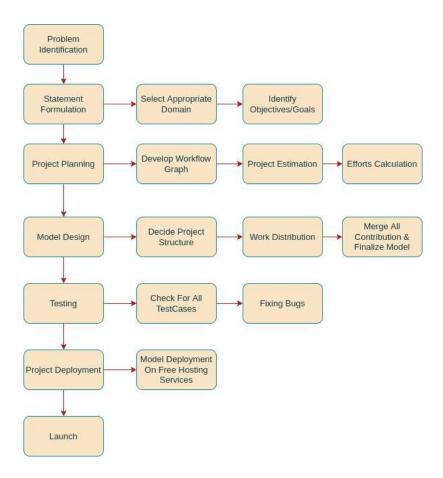
#### 5 Architecture

- The framework can be signed in administrator mode. In the administrator mode all the choices of the framework will be enacted. Inserting, refreshing, and erasure of event details will be done in this mode.
- The administrator can enable/disable events, manage event coordinators.
- The framework gives notifications on upcoming events.
- In this system there are three modules. Admin, event coordinators and students.

- In the admin module, admin can login by using login credentials like username and password.
- After logging in to the system some menu options will be seen like viewing the event data, event time table, registered participants, add news, notices and logout.
- Admin can upload the academic calendar. Admin can add/remove event coordinators to club.
- In the student module, students will register by providing details like roll no, first name, last name, email, and password. Students can login by using login credentials.
- Students can search the data according to event name or event description and also according to specific departments.

## 6 Project Efforts Estimation and Planning

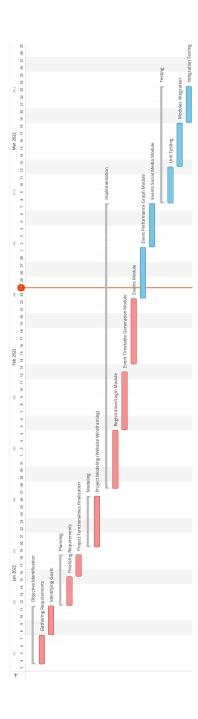
#### 6.1 Workflow Graph



## 6.2 Project Efforts/Cost Estimation

| Name   | Start      | Due        | Estimated Hours | Working Da | ays |
|--|------------|------------|-----------------|------------|-----|
| Objective Identification                             | 04/01/2022 | 11/01/2022 |                 |            | 6   |
| Gathering Requirements                               | 04/01/2022 | 07/01/2022 |                 | 4          | 4   |
| Identifying Goals                                    | 08/01/2022 | 11/01/2022 |                 | 5          | 2   |
| Planning   | 12/01/2022 | 18/01/2022 |                 |            | 5   |
| Finalizing Requirements                              | 12/01/2022 | 15/01/2022 |                 | 4          | 3   |
| Project Functionalities Finalization                 | 16/01/2022 | 18/01/2022 |                 | 6          | 2   |
| Modeling   | 20/01/2022 | 26/01/2022 |                 |            | 5   |
| Project Modeling (Website Wireframing)               | 20/01/2022 | 26/01/2022 |                 | 9          | 5   |
| Implementation                                       | 28/01/2022 | 07/03/2022 |                 |            | 27  |
| Registration/Login Module                            | 28/01/2022 | 04/02/2022 |                 | 10         | 6   |
| Event Timetable Generation Module                    | 05/02/2022 | 12/02/2022 |                 | 6          | 5   |
| Events Module  | 14/02/2022 | 22/02/2022 |                 | 7          | 7   |
| Event Performance Graph Module                       | 23/02/2022 | 01/03/2022 |                 | 6          | 5   |
| Events Social Media Module                           | 02/03/2022 | 07/03/2022 |                 | 4          | 4   |
| Testing  | 08/03/2022 | 23/03/2022 |                 |            | 12  |
| Unit Testing   | 08/03/2022 | 12/03/2022 |                 | 3          | 4   |
| Modules Integration                                  | 13/03/2022 | 18/03/2022 |                 | 5          | 5   |
| Integration Testing                                  | 19/03/2022 | 23/03/2022 |                 | 2          | 3   |
| Total  |            |            | Ť               | 71         | 55  |
| Total Estimated Cost = 71 hours × ₹400/hour = ₹28400 |            |            |                 |            |     |

## 6.3 Gantt Chart



### 7 SRS Summary

### 7.1 Project Scope

This document will address a few key themes in terms of Event Management System - a web based authenticated interface of creating new events and a notification system for running and upcoming events. We intend to consider only students and faculty members of College Of Engineering, Pune (COEP). Although this project can be further extended to many colleges (Inter-college Event Management System).

#### 7.2 User Classes and Characteristics

| User              | Privilege Level | Experience        | Product              |
|-------------------|-----------------|-------------------|----------------------|
| Student           | Low             | Basic web browser | Sign up, login, view |
|                   |                 | usage             | events, view news,   |
|                   |                 |                   | register for events, |
|                   |                 |                   | logout               |
| Event Coordinator | Intermediate    | Basic web browser | Login, add event,    |
|                   |                 | usage             | edit event, view     |
|                   |                 |                   | registered           |
|                   |                 |                   | participants, mail   |
|                   |                 |                   | participants,        |
|                   |                 |                   | generate tickets     |
| Authority/Admin   | High            | Basic web browser | Create club, disable |
|                   |                 | usage             | club, add event      |
|                   |                 |                   | coordinator, change  |
|                   |                 |                   | event coordinator,   |
|                   |                 |                   | add notice, add      |
|                   |                 |                   | news, upload         |
|                   |                 |                   | academic calendar    |

#### 7.3 External Interface Requirements

#### 7.3.1 User Interfaces

The interface of the software will provide options for relatively easy data input processes textboxes that will be properly labeled. It will also have a user-friendly view of the whole system with simple and easy undertaking of action-driven processes as buttons are functionally labeled. With all these, target users of this software will relatively find it not difficult to use it.

• Frontend: HTML, CSS, JS, Bootstrap

• Backend: Python, Django

• Database: MySQL

#### 7.3.2 Hardware Interfaces

The web application is very light, if you want to use an application, you can start the server on most multi-core processors. When the size increases accordingly the number of threads used will increase, this requires better performing processors. The minimum amount of RAM required is 2 GB.

#### 7.3.3 Software Interfaces

As this is a web application, it can run on any machine (mobile, laptop, PC, etc.) having a web browser installed. To run the application locally on your machine, obviously you need to install dependencies like Python, some Python packages, MySQL, etc.

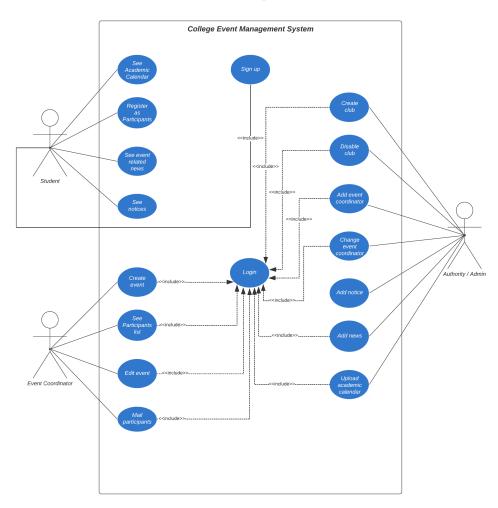
#### 7.3.4 Communications Interfaces

All communication on this web application will happen through HTTP/HTTPS protocol.

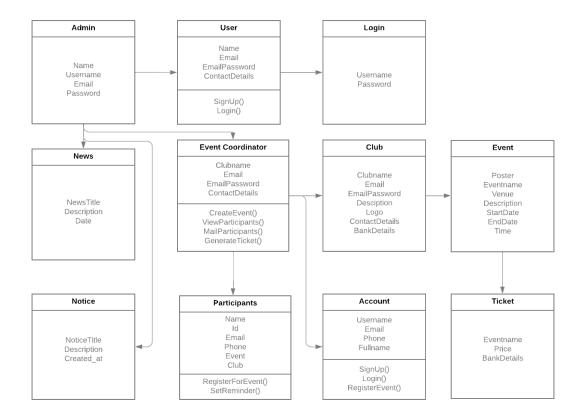
## 8 System Design

### 8.1 Use Case Diagram

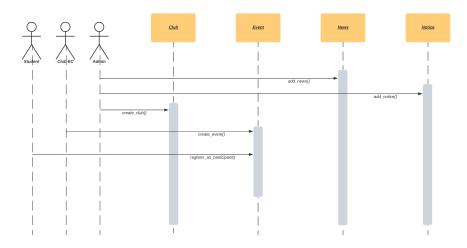
Use case diagram



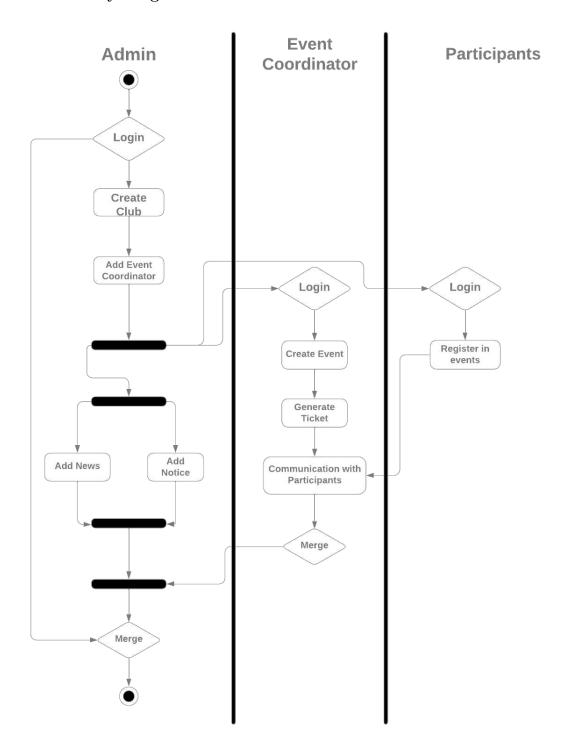
## 8.2 Class Diagram



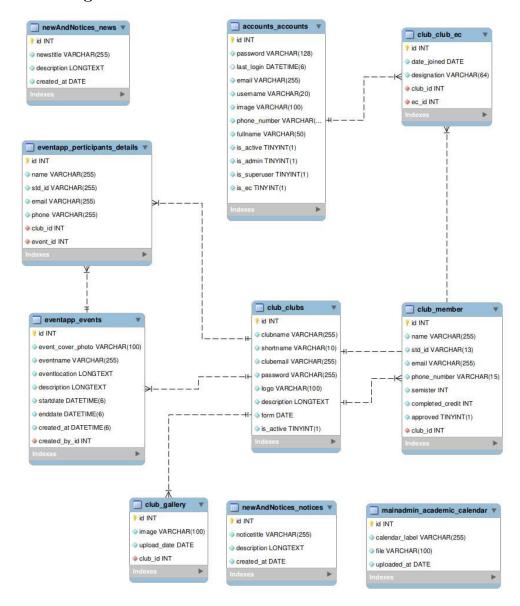
## 8.3 Sequence Diagram



## 8.4 Activity Diagram



### 8.5 ER Diagram



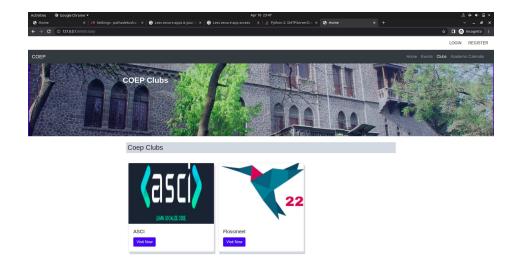
## 9 Project Snapshots



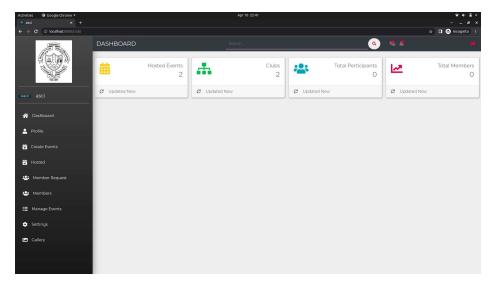
Home Page



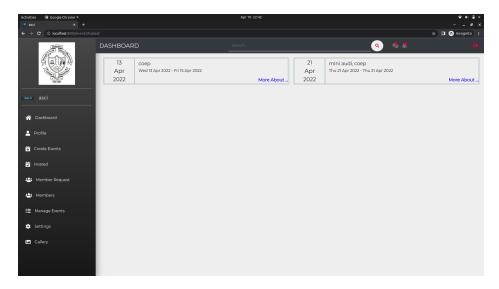
Events Page



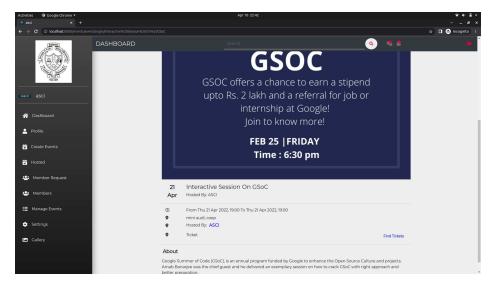
Clubs Page



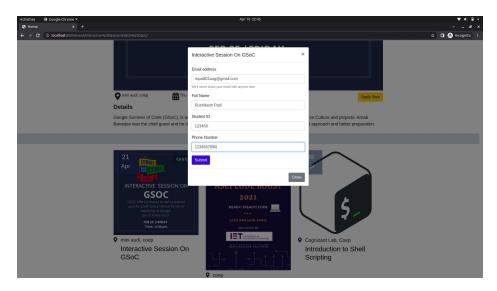
Event Coordinator Dashboard



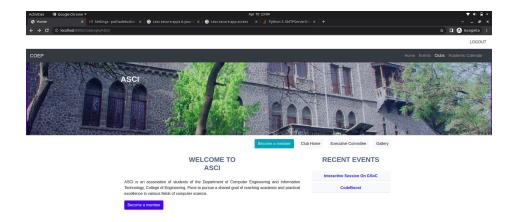
Event Coordinator can view all hosted events



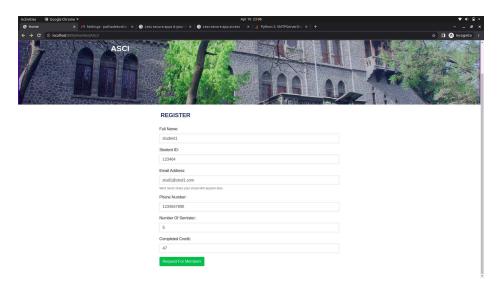
Detailed view of an event



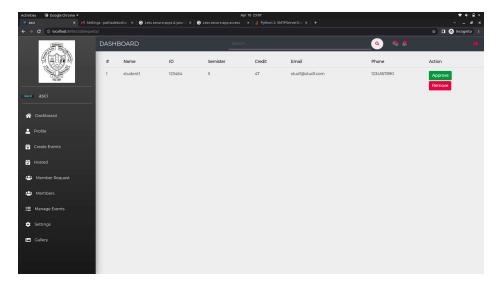
Student can register for an event



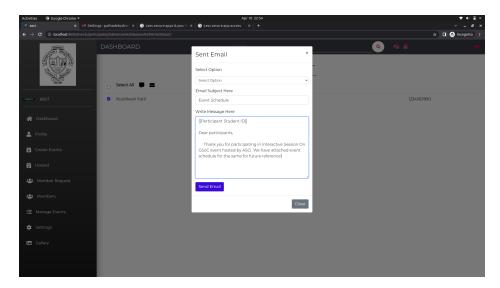
Detailed view of an event for student



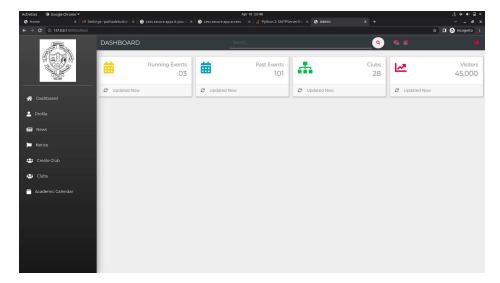
Student can request to become member of a club



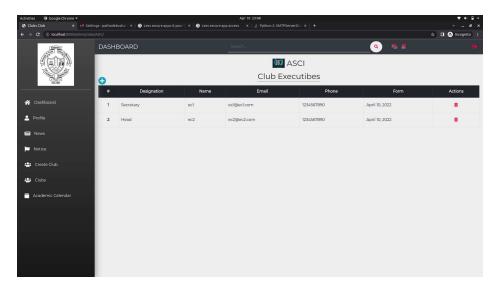
Event Coordinator can approve/reject member requests



Event coordinator can send email to participants



Admin Dashboard



Admin can manage club executives

### 10 Constraints, Advantages and Disadvantages

#### 10.1 Advantages

- Till now there is no event management system available for COEP college. So, to make this system is in itself an advantage.
- Event admin can generate event poster and event ticket in app only.
- Event admin can share there posts at a time on social media handles.
- Students can view and participate in all events across all departments.

#### 10.2 Disadvantages

- Attendees/Participants won't be able to send messages.
- Actual Payment Gateway won't be implemented for payment.

#### 11 Future Scope

- Currently this project is limited to a single college i.e, COEP. But in future this can be scaled to multiple colleges.
- Ticket hosting and check-in functionality for the participants can be implemented.
- Payment gateway can be integrated.
- Social media integration (automatic post creation and posting) can be implemented.
- Day-to-day club activities can be tracked by event/club coordinators.
- Event recommendation can be added to recommend events based on past activity of user and his friends.

## 12 References

Django documentation: https://docs.djangoproject.com/en/4.0/MySQL Documentation: https://dev.mysql.com/doc/

## 13 Project GitHub Link

https://github.com/Rushikesh-Patil17/Event-Management-System