A

Mini Project Report

On

GATHEREASE: Precision Planning For College Event

Second Year Engineering – Computer Science Engineering (Data Science)

By

ANISH DIGHE	**23107008**
ADITYA BHOIR	**23107006**
AARYAN MADHAVI	**23107024**
SHREPAAD HALDANKAR	**23107031**

Under the guidance of

Mr.PRAVEEN SHINDE

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING (DATA SCIENCE)

A.P. SHAH INSTITUTE OF TECHNOLOGY

G.B. Road, Kasarvadavali, Thane (W)-400615

UNIVERSITY OF MUMBAI

Academic year: 2024-25

CERTIFICATE

This to certify that the Mini Project report on **GATHEREASE** has been submitted by **Anish Dighe 23107008, Aditya Bhoir 23107006, Shreepaad Haldankar 23107031, Aaryan Madhavi 231007024**who are bonafide students of A. P. Shah Institute of Technology, Thane as a partial fulfillment of the requirement for the degree in **Computer Science Engineering (Data Science)**, during the academic year **2024-2025** in the satisfactory manner as per the curriculum laid down by University of Mumbai.

Mr.Praveen Shinde

Guide

Ms. Anagha Aher

HOD, CSE (Data Science)

Dr. Uttam D. Kolekar

Principal

External Examiner:

1.

Internal Examiner:

1.

Place: A. P. Shah Institute of Technology, Thane

Date:

ACKNOWLEDGEMENT

This project would not have come to fruition without the invaluable help of our guide **Mr.Praveen Shinde** Expressing gratitude towards our HOD, **Ms. Anagha Aher**, and the Department of Computer Science Engineering (Data Science) for providing us with the opportunity as well as the support required to pursue this project. We would also like to thank our project coordinator **Ms. Rajashri Chaudhari and Mr. Vaibhav Yavalkar** who gave us his/her valuable suggestions and ideas when we were in need of them. We would also like to thank our peers for their helpful suggestions.

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Chapter 1

Introduction

GatherEase is a college event management system designed to simplify the planning, organization, and participation of campus events. It provides role-based access for admins, volunteers, and students, ensuring each user can perform specific tasks efficiently. Admins can create and manage events, volunteers assist with coordination, and students can view and register for events. The system reduces manual effort, improves communication, and enhances overall event management through a user-friendly digital platform.

1.1. Purpose

Gather Ease is designed to simplify college event management. Students can register for events, admins can create and manage them, and volunteers can assist in organizing

The system streamlines coordination, saves time, and ensures smooth event handling.

1.2 Problem Statement

Managing college events manually leads to confusion and miscommunication.
Tasks like booking, student registration, and event scheduling become difficult to handle.
There is no proper system to keep track of participants and event details.
A digital platform is needed to streamline the planning and execution of college events.

1.3 Objectives:

- Allow students to register for events online.
- Enable admins to create and manage events.
- Let volunteers assist in organizing and updating events.
- Ensure smooth coordination and communication during events.

1.4 Scope

The scope of **GatherEase** encompasses the design and development of a role-based event management platform tailored specifically for college environments. The system aims to digitize and streamline the process of planning, organizing, and participating in college events. It supports three distinct user roles: **Admin**, **Volunteer**, and **Student**, each with clearly defined permissions and responsibilities.

Admins have the authority to create, edit, and manage event details, as well as assign and manage volunteers for specific tasks. Volunteers are responsible for handling event batches and managing workspace-related requirements, ensuring smooth coordination during the event. Students can view upcoming events, check availability, and register through a simple and intuitive interface.

The system provides real-time tracking of registrations and maintains structured records in a MySQL database, ensuring efficient data storage and retrieval. GatherEase eliminates the dependency on manual paperwork and reduces the chances of miscommunication, making the event planning process more accurate and time-efficient.

Designed with scalability in mind, the platform serves as a foundational system that can be enhanced in the future with additional features such as feedback collection, event certificates, or analytics. Overall, GatherEase serves as a practical solution for educational institutions to manage internal events with clarity, control, and ease.

Chapter 2

2. Proposed System

The proposed system, **Gather Ease**, is a platform to manage college events efficiently.
It provides login access for students, admins, and volunteers.
Admins and volunteers can create and manage events, while students can register for them.
The system ensures easy participant tracking and role-based access to maintain control and organization.

2.1Features and Functionality

- Login system for students, admins, and volunteers.
- Admins and volunteers can create and manage events.
- Students can view and register for events.
- View and manage event participants.
- Role-based access control.

Chapter 3

Project Outcomes

The development of **GatherEase – College Event Management System** has led to the creation of a simple yet effective platform to handle college event-related activities. It replaces the manual process of event registration and participant tracking with a basic digital solution that is easy to use and efficient for both students and organizers.

The system provides distinct roles for **students**, **admins**, and **volunteers**, with appropriate access and functionality for each. **Admins and volunteers** can create and manage events, while **students** can view event listings and register for events of their choice. This eliminates the need for paper-based forms or spreadsheet management, making the process more organized and reliable.

One of the key outcomes is the **improvement in coordination and data handling**. By storing all event and registration data in a structured way, the system ensures better tracking of participants and reduces the chances of errors or miscommunication. It also helps in maintaining a proper record of each event and its attendees, which can be useful for reporting and future reference.

The system is kept intentionally simple to focus on core functions without unnecessary complexity. It meets the primary goals of making event registration easier for students and event management easier for organizers. Overall, **GatherEase** achieves its purpose as a basic event management tool tailored for college use, and lays the groundwork for potential future improvements if needed.

In conclusion, GatherEase successfully delivers a centralized, user-friendly, and robust platform that improves how college events are organized and managed. It saves time, increases efficiency, enhances participation, and provides a strong foundation for further development and innovation.

Chapter 4

Software Requirements

1. Operating System:

- Windows 10 or later
- Linux
- macOS

2. Programming Language:

- Python (Version 3.x)

3. Backend & Database:

- MySQL (for storing customer, vehicle, and booking details)
- MySQL Connector for Python (to connect Python with MySQL)

4. Frontend & GUI Framework:

- Tkinter (Python's built-in GUI library)

5. Development Tools & Libraries:

- **IDEs:**
-
    - PyChar4m
    - Visual Studio Code
    - Any Python-supported IDE
- **Database Management Tools:**
-
    - MySQL Workbench
    - phpMyAdmin
- **Python Libraries:**
-
    - tkinter (for the user interface)
    - mysql-connector-python (for database connectivity)
    - matplotlib (for analytics and data visualization)

Chapter 5

Project Design

The GatherEase – College Event Management System is designed with a role-based structure. It offers a clean and user-friendly interface for three primary users: Admin, Volunteer, and Student. Each role has specific access and functions to enable smooth event creation, management, and participation.

User Interface Design

- Login Page:
  Role-based login for Admin, Volunteer, and Student users.
- Home Page:
  Displays the title *"GatherEase – College Event Management System"* with a simple menu bar.

Main Menu by Role

- Admin:
  - Make Event: Create events with name, date, tagline, description, and capacity.
  - Add Volunteer: Add volunteers and assign them to events.
  - Manage Volunteers: Update volunteer info and event roles.
- Volunteer:
  - Manage Batch: Group and manage participants.
  - Manage Workspace: Handle logistics or setup for assigned events.
- Student:
  - View Events: Browse upcoming events with name, date, and availability.
  - Register for Events: Sign up for available events.
  - My Registrations: View events the student is registered for.

- Event Availability Display:
  Shows remaining slots in events to help students make informed choices.

Database Design

GatherEase uses a MySQL database to manage users, events, registrations, and volunteer coordination.

- Users: Stores ID, name, password, and role.
-
- Events: Holds event name, date, tagline, description, capacity.
- Volunteers: Info on volunteers linked to events.
- Registrations: Tracks student-event registrations.
- Batches: Helps volunteers manage participant groups.
- Workspace: Contains event-related logistics handled by volunteers.

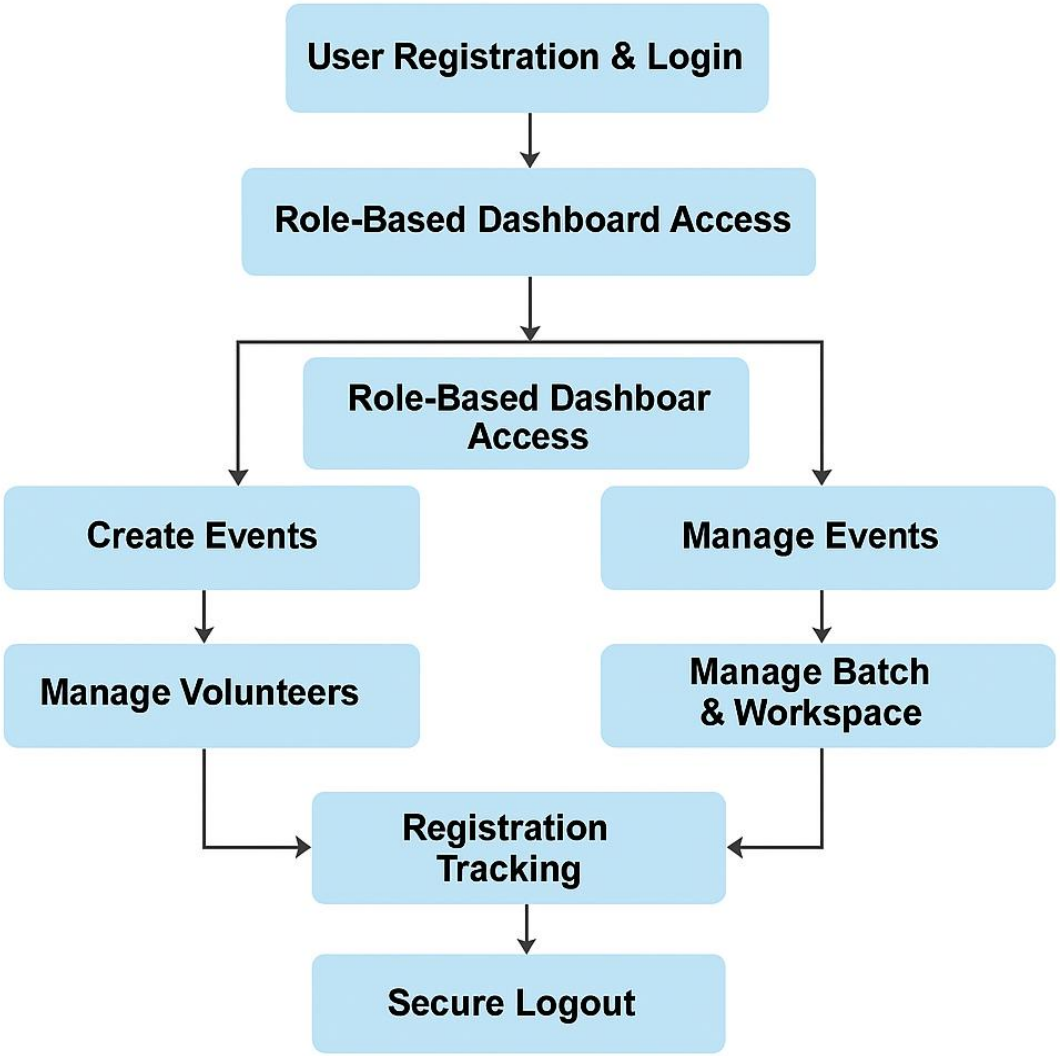
Workflow – GatherEase

This block diagram represents the flow of the GatherEase College Event Management System. Below is an explanation of the key components and their relationships:

1. User Registration & Login:
   New users (students, volunteers) register. Existing users log in with credentials. Password recovery option is available.
2.
3. Role-Based Dashboard Access:
   Users (Students, Volunteers, Admins) are redirected to their respective dashboards after login.
4. Event Creation & Volunteer Management (Admin):
   Admin creates events with details like name, tagline, date, and capacity. Admin adds and assigns volunteers to events.
5. Batch & Workspace Management (Volunteer):
   Volunteers manage student batches and update workspace or setup requirements for events.
6. Event Listing & Registration (Student):
   Students view available events, check availability, and register.
7. Registration Tracking:
   Students can view their registered events. Admins and volunteers can access participant lists.
8. Secure Logout:
   All users log out securely to ensure account safety.

GatherEase

College Event Management System



Chapter 6

Project Scheduling

Gantt Chart:
A Gantt chart is a visual project management tool that displays the project timeline. Each task is represented by a horizontal bar, with the length indicating its duration.

The team comprising Anish Dighe, Aditya Bhoir, Shreepad Haldankar and Aaryan Madhavi was formed to work on the GatherEase – College Event Management System. The first step involved discussions to finalize the project topic, scope, and objectives.

Next, the team created a paper prototype to visualize and refine the system's features and user interface. This phase helped identify the core modules and ensured clarity in the design approach.

After that, the team began working on the graphical user interface (GUI) using a simple and structured layout, ensuring it aligned with the planned user roles (Admin, Volunteer, and Student).

The team later collaborated on designing the database structure using MySQL, creating tables for users, events, registrations, and other components. Once the structure was complete, the backend was successfully connected to the frontend.

In the final phase, the team worked on module integration, testing, and documentation. All components were brought together, and the complete project was prepared for review and presentation. The project was finalized and approved by the faculty.

Figure 6.1: Gantt Chart

GANTT CHART TEMPLATE

Smartsheet Tip

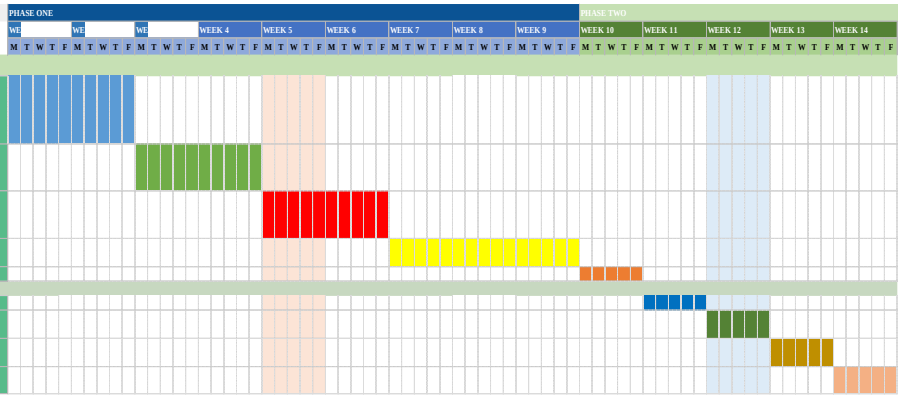
PROJECT TITLE: Gatherease-Precision Planning for Every Event.

PROJECT GUIDE: Prof.Pravin Shinde

INSTITUTE & DEPARTMENT NAME: AP SHAH INSTITUTE OF TECHNOLOGY(CSE-Data Science)

DATE: ##

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION(Weeks)	PERCENTAGE OF TASK
1	**Project Conception and Initiation**					
1.1	Group formation and Topic finalization. Identifying the scope and objectives of the Mini Project	1.Anish Dighe 2.Shreepaad 3.AdityaBhoir 4.Aaryan Madhavi	1-8-25	1-16-25	1	100%
1.2	Identifying the functionalities of the Mini Project	1.Anish Dighe	1-16-25	1-28-25	2	100%
1.3	Discussing the project topic with the help of paper prototype.	1.Anish Dighe	1-28-25	2-5-25	1	100%
1.4	Designing the Graphical User Interface(GUI)	1.Shreepaad Haldankar	2-5-25	2-11-25	1	100%
1.5	Presentation I	Anish Dighe	2-11-25	2-17-25	1	100%
2	**Project Design and Implementation**					
2.1	Database Design	Anish Dighe Aditya	2-17-25	3-3-25	2	100%
2.2	Database Connectivity of all modules	Aditya Bhoir Aryan Madhavi Shreepaad	3-3-25	3-13-25	2	100%
2.3	Integration of all modules and Report Writing	Anish Dighe	3-13-25	3-31-25	3	100%
2.4	Presentation II	Anish Aditya Shreepaad Aaryan	3-31-25	4-1-25	1	100%



Chapter 7

Results

The development of **GatherEase – College Event Management System** has led to the creation of a streamlined and well-structured platform that addresses the challenges of traditional event management in academic institutions. The system enhances the way college events are planned, organized, and executed by shifting from outdated manual processes to a reliable digital solution. This shift has brought noticeable improvements in speed, accuracy, and coordination throughout the event lifecycle.

Throughout the course of the project, core functionalities such as event creation, participant organization, registration tracking, and backend data management were implemented and tested successfully. The integration of a graphical user interface with a structured database system allowed for efficient data flow and minimal error handling, ensuring that each task could be completed smoothly and on time. Additionally, the system provides a centralized environment where all event-related information is stored and maintained consistently.

One of the key results of this project is the dramatic reduction in dependency on physical documentation and repetitive communication. Processes that previously required significant time and effort—such as maintaining attendance sheets, updating availability, and coordinating event logistics—have now been simplified into a few streamlined actions within the application. This digital transformation not only saves time but also ensures greater consistency and transparency in operations.

The user interface design proved to be intuitive during testing, allowing users to interact with the system efficiently. All modules were developed in accordance with the initial planning and integrated successfully, leading to a fully functional, cohesive system. The database schema, built on MySQL, performed well under testing scenarios and demonstrated its ability to store, retrieve, and manage data accurately.

In conclusion, the **GatherEase** system fulfils the project's original vision of modernizing college event management. It provides an organized, paperless, and dependable solution that can be scaled or enhanced in the future. The successful implementation and testing of all system components indicate its readiness for real-time application within academic settings, potentially improving the way student-driven and institutional events are handled going forward.

Chapter 8

Conclusion

In today's digitally driven world, managing college events through traditional, manual methods can often lead to confusion, delays, and inefficiencies. **GatherEase** was envisioned as a response to these challenges — a system designed not just to automate, but to **simplify and organize** the entire event management process within an academic setting.

This project allowed the team to bridge the gap between theoretical learning and practical application. From requirement gathering to deployment-ready implementation, each stage of the development journey was a hands-on experience in problem-solving, collaboration, and decision-making. It encouraged critical thinking in areas such as system design, data management, and user interaction.

Rather than simply building a tool, the team focused on creating a system that adds value — making it easier for students to engage with campus events, for volunteers to assist efficiently, and for event organizers to operate smoothly. The project also highlighted the importance of modular design and maintainable code, ensuring that **GatherEase** can evolve over time.

Ultimately, this mini project stands as an example of how even simple software systems, when thoughtfully designed, can make a meaningful difference in everyday college operations. It not only delivers on its goals but also opens the door for future enhancements and integration into broader institutional systems.

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