A Project Report on

# Design and Development of Student's Activity Management System

submitted in partial fulfilment of the requirement of
the degree of

**Bachelor of Engineering**

by


| | |
|---|---|
| Shivam Sharma | 62 |
| Anuj Dhumal | 13 |
| Vivek Kamble | 24 |
| Aatif Shaikh | 57 |


Under the supervison of
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**2023-24**

**Don Bosco Institute of Technology**
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# Certificate

This is to certify that the project entitled **"Design and Development of Student's Activity Management System"** is a bonafide work of

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submitted to the University of Mumbai in the partial fulfillment of the requirement for the award of the degree of **"Undergraduate"** in **"Bachelor of Engineering"**.

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# Project Report Approval for B.E.

This project report entitled **"Design and Development of Student's Activity Management System'** by **Shivam Sharma, Anuj Dhumal, Vivek Kamble, Aatif Shaikh** is approved for the degree of **Bachelor of Engineering** in **Electronics** & **Telecommunication Engineering**.

_____ _____

Internal Examiner External Examiner

Date:
Place: Mumbai

# Declaration

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, We have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea / data / fact / source in our submission. We 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 that have thus not been properly cited or from whom proper permission has not been taken when needed.

_____ _____

**Shivam Sharma** **Anuj Dhumal**

_____ _____

**Vivek Kamble** **Aatif Shaikh**

Date:
Place: Mumbai

# Acknowledgement

A project is a teamwork that involves the contribution of many people. We would like to thank everyone who has contributed by taking an interest in our work and motivating us all the way through.

Our sincere thanks to **Ms. Namita Agarwal**, project guide, for ...

We would like to thank **Ms. Namita Agarwal**, Head of Department for .....

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Submitted with regards,
Shivam Sharma
Anuj Dhumal
Vivek Kamble
Aatif Shaikh

Date :
Place : Mumbai, Maharashtra, India.

# Contents

# List of Figures

# List of Tables

# List of Abbreviations

| | |
|---|---|
| HCC | Hepatocellular Carcinoma |
| CT | Computer Tomography |
| CNN | Convolution Neural Network |
| DNN | Deep Neural Network |

# Abstract

”The Design and Development of the Student Activity Management System” is an online, web-based platform that serves as a valuable resource for both faculty members and students within the department. This system is structured with three distinct modules: student, admin, and faculty, each of which is endowed with specific permissions tailored to their respective roles and responsibilities. These unique rights and access levels ensure that the system operates efficiently and securely, meeting the diverse needs of the users. This system is designed to securely store both academic and non-academic data of students, offering valuable reference and insight for faculty members in the event they need to access information about students, particularly for addressing any future academic or disciplinary matters. This system includes a feature that enables the automated dissemination of attendance records and academic marks to parents through text messages. This functionality ensures that parents are kept well-informed about their child’s progress and attendance, promoting better communication and transparency between the department and the students’ families. Additionally, the system incorporates a ”notice board” feature, which serves as a virtual platform for posting important announcements, updates, and notifications. This feature is a convenient means of communicating time-sensitive information to students, faculty. It provides a centralized location for disseminating vital messages, reducing the likelihood of missed communications and enhancing overall organizational efficiency.

# Chapter 1

# Introduction

”Design And Development of Student Activity Management System” is a web-based platform designed to benefit both faculty members and students in our department. This system securely stores academic and non-academic student data, providing valuable reference for faculty when needed for academic or disciplinary matters. Moreover, it facilitates the automated sharing of attendance and academic records with parents via text messages, ensuring they stay informed about their child’s progress. Additionally, a user-friendly ”notice board” feature serves as a central hub for posting essential updates and announcements, fostering efficient communication within the department.

## 1.1 Motivation

The motivation behind this project is to simplify the work of faculty members by providing easy access to students’ comprehensive data. The primary goal of this project is to enhance departmental efficiency and foster collaboration.

## 1.2 Scope of the Prject

1. Secure Data Storage: The development of a robust system for the secure storage of both academic and non-academic data pertaining to students. This will facilitate easy access to information for faculty members, primarily for academic and disciplinary purposes.

2. Automated Communication: Implementation of an automated system for the efficient dissemination of attendance records and academic performance data to parents through text messages. This feature will ensure that parents are promptly informed about their child’s progress and attendance, thereby strengthening the partnership between the department and students’ families.

3. Notice Board Feature: Inclusion of a ”notice board” feature, which serves as a virtual platform for posting essential announcements, updates, and time-sensitive notifications. This feature will enhance communication among students, faculty members, and other stakeholders, reducing the risk of missed information and bolstering overall organizational efficiency.

## 1.3 Problem Statement

Unavailability of a student information system makes the tracking of student progress difficult. There is a need to design and develop a system for easy access of students records and progress monitoring.

## 1.4 Objectives

- To develop a user-friendly interface that allows administrators to easily access and manage the data.
- To Provide a system to send the grades and attendance to parents.
- Store and update student profiles, academic performance, extra curricular and co-curricular information.
- Provide notice facility for the department.

## 1.5 Outcomes

- The system will facilitate the smooth transfer of student data between different courses and programs within the department.
- Teachers will have a user-friendly interface to access students information.
- The platform could promote better communication within the department by providing facility of notice.
- The system will generate and send marks and attendance to each student's parents via message.

# Chapter 2

# Literature Survey

**DEPARTMENT ACTIVITY MANAGEMENT SYSTEM (2020)**

**Authors: Ms.Swati S. Shintre, Ms. Shubhangi B. Bagul, Ms. Ashwini B. Kanawade , Ms. Shital B. Tajanpure, Mr.Kishor N. Shedge**

Department activity management system desktop application is the one kind of desktop application which integrates all the modules and functionalities of department system on a single system that can be handled by the administrative and access by the students and faculties with valid user id and password. The main goal of the entire system is to provide a user understandable interface and powerful data system which make this system more useful.

The Department Activity Management System consist four major categories of user such as students, teachers, operators, and administrator. Student user can add various student details for further analysis, view notes and assignments, check academic performances, view attendance details. Teacher user can upload notes and assignments, enters attendance records for respective subjects, enter marks of different levels of tests, view or analyses students performances. Operator is responsible for event, notices, and data entry managements. Administrator controls the system at all levels. Only admin can enter all administrative details in the system. The Department Activity Management System specially focuses on notifying academic and attendance performance of the students to their parents. Parents are able to receive messages about their child's on their registered mobile numbers as well as emails.

This system has an extra user called operator which may give burden to system or complicate the system also the rights given to "operator" is not effective it can be given to other users like "admin" or "faculty". Apart from it we have applied same features like Notice board, sending attendance and performance of student via sms.

**AN INNOVATIVE INFORMATION SYSTEM FOR COLLEGE MANAGEMENT (2018)**

**Authors: Chaitra B. S**

This is an information system application called Electronic-College Management and Information System (ECMIS) which is useful for staff, faculty, and principal to deal with all information about student details, academic related reports, college details, course details, batch details and other related details. This is user friendly and easy to use system.

This is a web oriented application which allows staff, faculty, and principal to deal with whole information about student details, academic related reports, college details, course details, batch details and other related details. College Staff are able to directly access all aspects of a student's academic progress through a secure, online interface embedded in the college website. This system includes functionalities like managing fee details, Managing study material, Managing leaves, Managing Admission. This system also includes principle module which have rights to approve leave, viewing details of student as well as faculties.

This system includes five user modules Faculty Module, Staff Module, Student Module, Principal Module as we are developing websites covering only department we don't have principle module, and also the staff module.

**DEPARTMENT MANAGEMENT SYSTEM (2020)**

**Authors: Jhanvi Agarwal, Renuka Singh, Mansi Singh, Mansi Raghav**

DEPARTMENT MANAGEMENT SYSTEM is a web based application. This project serves as a comprehensive tool for managing the activities of a specific department within a college. Their primary objective is to streamline and enhance departmental operations, and it caters to various users, including administrators, faculty members, and students. This is developed with aim to provide information to all the levels of department in an organization.

This system consist of three users Admin Staff and Student.System administrator is the one who create, update, delete as well as manages the database of the whole system. In this module some of the activities done by the admin are managing library, keeping records of placements, rooms and labs etc, adding faculty details in the system as well as updating the same.
The system appears to be relatively complex, involving different user roles, extensive data management, and integration with SMS and email notifications. This complexity may not be suitable for smaller educational institutions or projects with limited resources.

## 2.1 Comparative Analysis of various existing systems/methodologies

The ”Department Activity Management System Desktop Application” offers a comprehensive and user-friendly solution that caters to a wide range of users, including students, teachers, operators, and administrators. This project distinguishes itself by prioritizing seamless communication with parents through SMS and email notifications, thereby fostering a strong link between the educational institution and students' families.

On the other hand, ”An Innovative Information System for College Management (2018)” is designed as a web-oriented application with a broader focus on overall college management. This project is particularly user-friendly, aiming to provide staff, faculty, and the principal with a versatile platform for academic and administrative tasks. Notably, it does not explicitly mention features related to parent communication.

In contrast, ”Department Management System (2020)” takes on a more specialized approach as a web-based application. This project is centered around the specific needs of a department within a college. It caters to a more limited user base comprising administrators, staff, and students. While it offers features for managing aspects like the library, placement records, and faculty details, it does not appear to incorporate explicit parent communication features.

Sample citation

Huang et al. [**?**] discuss Math operations used in image processing. Another citation sample is [**?**].

# Chapter 3

# Methodology

Methodology, Block Diagram, Design, Circuit diagrams with explanations, Architectures, etc.

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## 3.1 Analysis / Framework / Algorithm

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## 3.2 Details of Hardware and/or Software

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## 3.3 Design Details

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## 3.4 Proposed System/Methodology/Framework/Algorithm

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# Chapter 4

# Implementation or Simulations

About implementation details ...

# Chapter 5

# Results

Results of work till semister VII

Sample Table for results

Table 5.1: Sample Table

| Country List | | | |
|---|---|---|---|
| Country Name or Area Name | ISO ALPHA 2 Code | ISO ALPHA 3 Code | ISO numeric Code |
| Afghanistan | AF | AFG | 004 |
| Aland Islands | AX | ALA | 248 |
| Albania | AL | ALB | 008 |
| Algeria | DZ | DZA | 012 |
| American Samoa | AS | ASM | 016 |
| Andorra | AD | AND | 020 |
| Angola | AO | AGO | 024 |

## 5.1 Timelines

1. Provide Gantt Chart

## 5.2 Plan for Semester VIII

2. Provide Plan of project work for next semester

# Chapter 6

# Conclusion

Provide a conclusion based on the work till the VII semester.

# Bibliography

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