



## ABSTRACT

College Portal provides a simple interface for maintenance of students & staffs members information. It can be used by educational institutes or colleges to maintain the records of students & staff's members easily. The creation and management of accurate, update information regarding a students' academic career is critically important in the university as well as colleges. Student information system deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, assignment related, to-do and other resource related details too. Staff's members information deals with all kind of staff's details, academic details, attendance update, course related and other source related to details too. It tracks all the details of a student from the day one to the end of the course which can be used for all reporting, tracking of attendance, progress in the course, completed semesters, upcoming semester year curriculum details, exam details, project or any other assignment details, final exam result and all these will be available through a secure, online interface embedded in the college's site. It will also have faculty details, batch execution details, students' details in all aspects, the various academic notifications to the staff and students updated by the college administration. It also facilitates us explore all the activities taking place in the college, different reports and queries are generated based on vast options related to students, batch, course, faculty, exams, semesters, certification and even for the entire college.

# INTRODUCTION

The impact of computers on our lives today is probably much more than we are actually known to. Getting good information and transforming it quickly into products than consumers want to buy is the essential key to staying in business and this all is done nowadays using Computers and Application Software. College Portal defines as an application (more likely web-based), that provides capabilities for multiple users with different permission levels to manage (all or a section of) content, data or information of a website project, or internet / application. The software helps Managers to plan and control the organizational operations and to respond to changing market conditions. It provides a regular flow of information for managerial decision-making and control.

## 1.1 Purpose

The aim is to design a college website which contains update information of the college that should improve efficiency of college record management.

## 1.2 Objective

The main objective of this system, is to reduce the consumption of time during maintaining Separate divisions are providing to maintain the records of teachers, students, subjects and fees details. Our System also provides an easy way not only to automate all functionalities of a college, but also to provide full functional reports to top management of college with the finest of details about any aspect of college. In other words, our OCP has, following objectives: Simple database is maintained. Easy operations for the operator of the system. User interfaces are user friendly and attractive; it takes very less time for the operator to use the system.

## 1.3 Problem Statement

Today's education scenario is rapidly changing and demanding. The system demands greater levels of communication between college, student and faculty members to have optimum use of resources. Today's industry talent demands are soaring with more and more skills requirements in all fields. Colleges and institutions generating creative students' needs focused approach on such talents and industries so as avail best of benefits to their candidates passing out. Online College Portal is a system fulfilling these demands and enacting as a bridge of communication amongst students, faculties and colleges.

## 1.4 Scope

This type of software is suitable for all colleges. Separate division is provided to maintain Students, Teachers record, Events and Discussion etc.

- Public: OCP, since an open project needs public communications.
- Approachable: Needs to be accessible to potential new community members, ideally without making them learn something new.

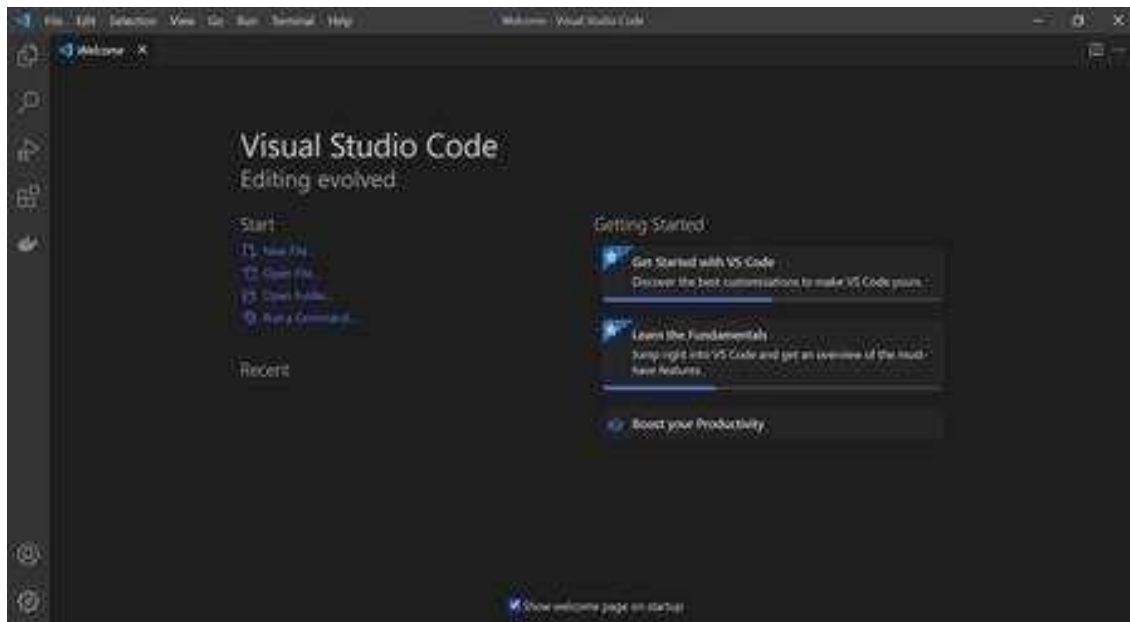
- Asynchronous: with people all around the world, the primary communications need to be not-real-time
- Multiple participant: Multiple User Participation
- Archived: Store People Opinion And feedback
- Searchable: Easy Search
- Filterable: no-one can read every project communication; there needs to be a way of splitting by topic
- Accessible: needs to be accessible to new and future disabled community members.

## METHODOLOGY

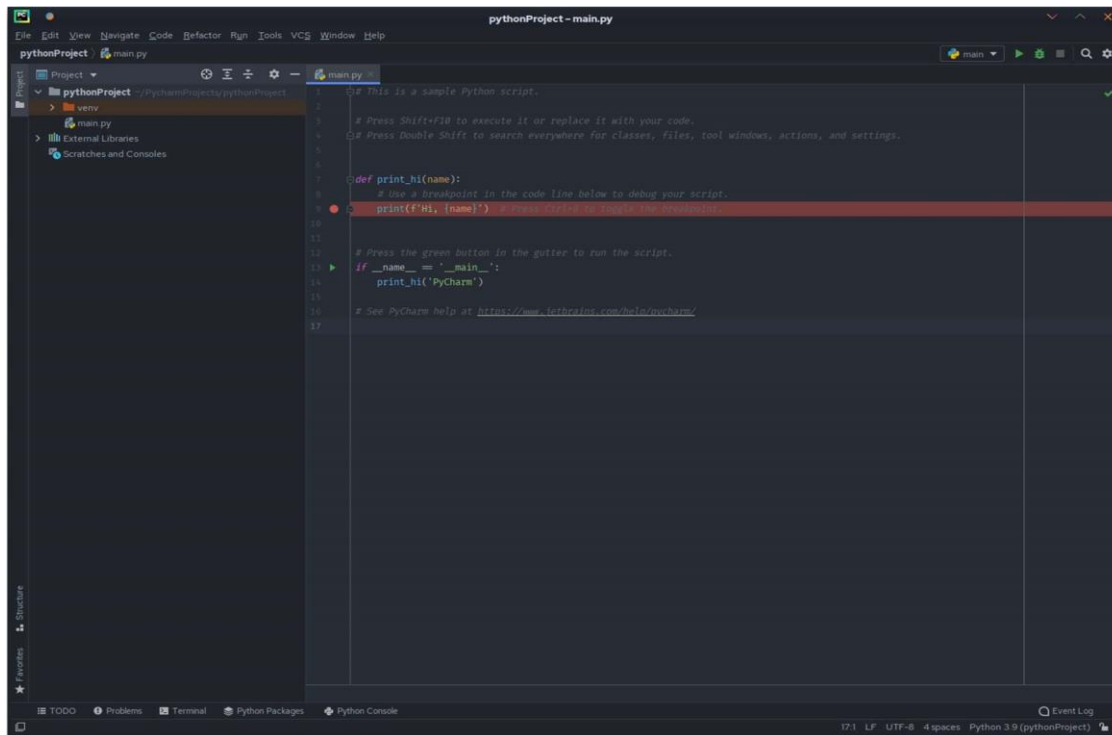
### 1 Visual Studio Code (VS Code)

Visual Studio Code is a streamlined code editor with support for development operations like debugging, task running, and version control. It aims to provide just the tools a developer needs for a quick code-build-debug cycle and leaves more complex workflows to fuller featured IDEs, such as Visual Studio IDE. At its heart, Visual Studio Code features a lightning-fast source code editor, perfect for day-to-day use. With support for hundreds of

languages, VS Code helps you be instantly productive with syntax highlighting, bracket-matching, auto-indentation, box-selection, snippets, and more [10].



2. PyCharm is an integrated development environment (IDE) used in computer programming, specifically for the Python language. It is developed by the Czech company JetBrains (formerly known as IntelliJ). It provides code analysis, a graphical debugger, an integrated unit tester, integration with version control systems (CVSs), and supports web development with Django as well as data science with Anaconda. PyCharm is cross-platform, with Windows, macOS and Linux versions. The Community Edition is released under the Apache License, and there is also Professional Edition with extra features – released under a proprietary license.



## REQUIREMENT ANALYSIS

### 1.1 HARDWARE REQUIREMENT: -

- Computer/laptop
- RAM: 8 GB or above

### 1.2 SOFTWARE REQUIREMENT: -

- a. operating system: Window 10/11
- b. visual code
- c. python
- d. Django framework

### 1.3 Functional Requirements

SIGCE College Portal system aims to improve the efficiency of college information management, and the main function is managing and maintaining information. The administrator and students are two major functional requirements in the system. The Administrator will be given more powers (enable/disable/ update) than other users. It will be ensured that the information entered is of the correct format. For example, name cannot contain numbers. In case if incorrect form of information is added, the users will be asked

to fill the information again. Students use the system to query, get information and enter their information only.

## 1.4 Non-Functional Requirements

- **Performance Requirements:** The proposed system that we are going to develop will be used as the chief performance system for helping the organization in managing the whole database of the student studying in the organization and having message notifications. Therefore, it is expected that the database would perform functionally all the requirements that are specified.
- **Safety Requirements:** The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.
- **Security Requirements:** We are going to develop a secured database. There are various categories of people namely Administrator, Student who will be viewing either all or some specific information. Depending upon the category of user the access rights are decided. It means if the user is an administrator, then he can be able to modify the data, append etc. All other users only have the rights to retrieve the information from database.
- **Database Management System (DBMS)** is a collection of programs that enables users to create and maintain a database. DBMS is a general – purpose software system that facilitates the process of defining, constructing, manipulating, and sharing database among various users and applications. Defining a database involves the specifying the data types, structures, and constraints of the data to be stored in the database. The database definition or descriptive information is also stored in the database in the form of dictionary; it is called Meta data constructing the database is the process of storing the data on the storage medium that is controlled by DBMS

## TECHNOLOGY USED

### □ DJANGO FRAMEWORK: -

Django is a web application framework written in Python programming language. It is based on MVT (Model View Template) design pattern. The Django is very demanding due to its rapid development feature. It takes less time to build application after collecting client requirement. This framework uses a famous tag line: The web framework for perfectionists with deadlines. By using Django, we can build web applications in very less time. Django is designed in such a manner that it handles much of configure things automatically, so we can focus on application development only.

### □ HTML

HTML is a hypertext mark-up language which is in reality a backbone of any website. Every website can't be structured without the knowledge of html. If we make our web page only with the help of html, then we can't add many of the effective features in a web page, for making a web page more effective we use various platforms such as CSS. So here we

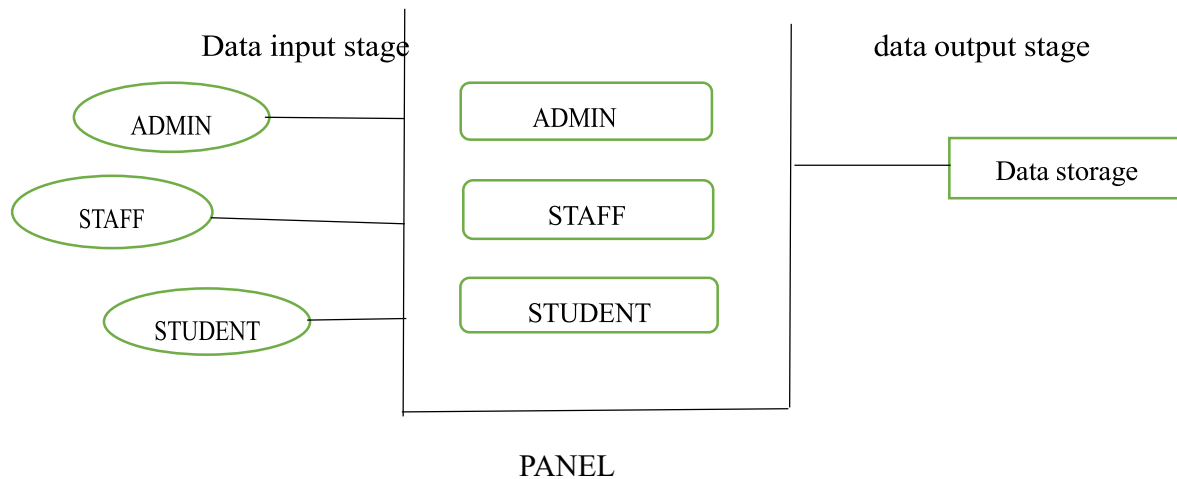
are using this language to make our web pages more effective as well as efficient. And to make our web pages dynamic we are using Java script.

#### □ CSS

CSS Stands for "Cascading Style Sheet." Cascading style sheets are used to format the layout of Web pages. They can be used to define text styles, table sizes, and other aspects of Web pages that previously could only be defined in a page's HTML. The basic purpose of CSS is to separate the content of a web document (written in any markup language) from its presentation (that is written using Cascading Style Sheets). There are lots of benefits that one can extract through CSS like improved content accessibility, better flexibility and moreover, CSS gives a level of control over various presentation characteristics of the document. It also helps in reducing the complexity and helps in saving overall presentation time. CSS gives the option of selecting various style schemes and rules according to the requirements and it also allows the same HTML document to be presented in more than one varying style

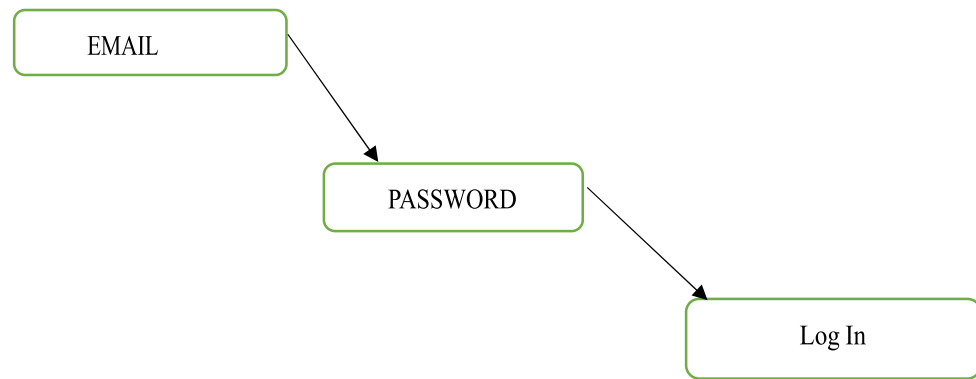
## DATA FLOW DIAGRAM

### 1.Context 0<sup>th</sup> level diagram



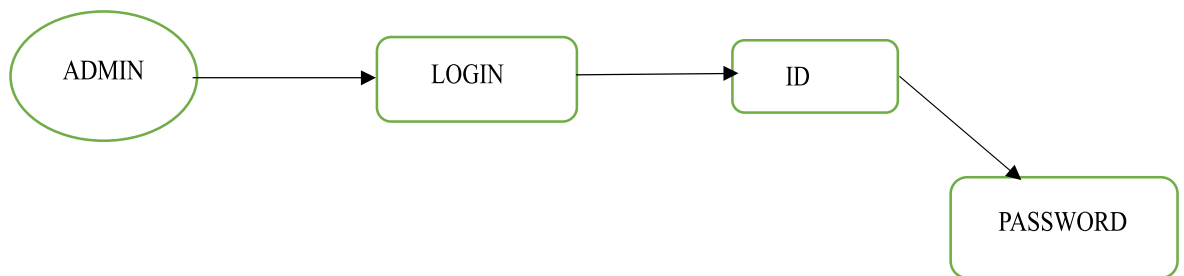


## 2.Login page

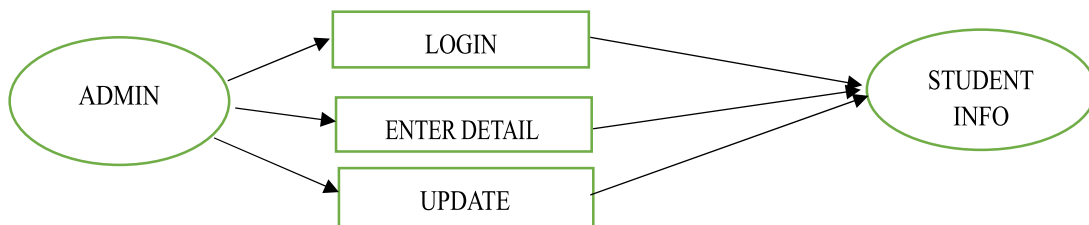


## 3.Admin detail data flow: -

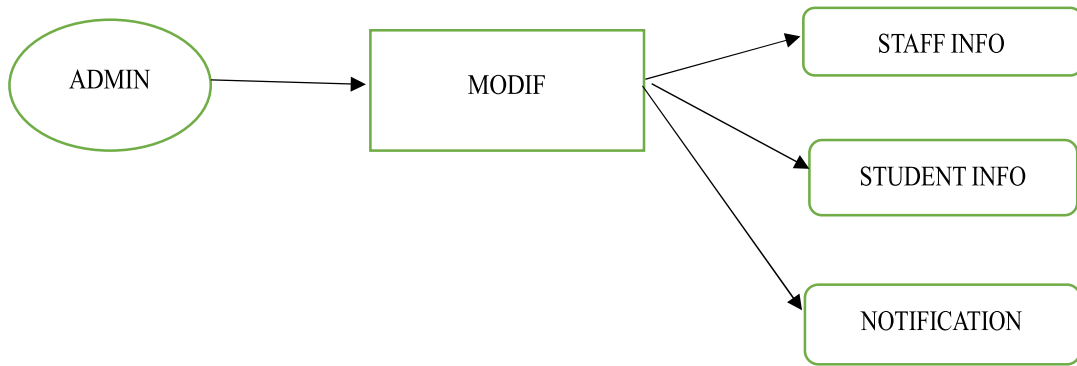
### a.1<sup>st</sup> level detail data flow



### b.2<sup>nd</sup> level detail data flow

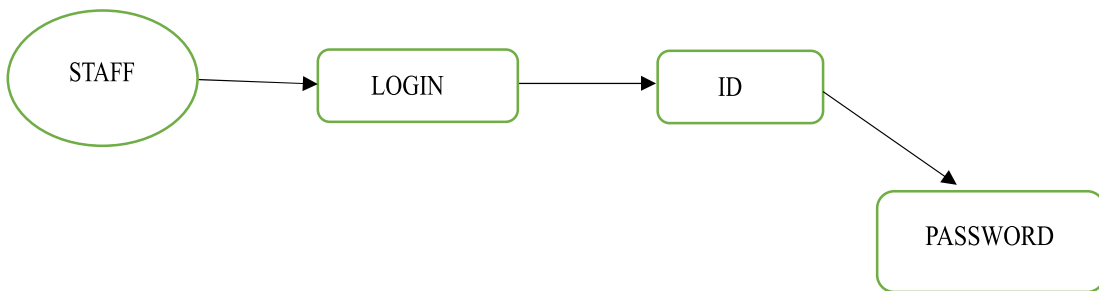


### c.3<sup>rd</sup> level detail data flow

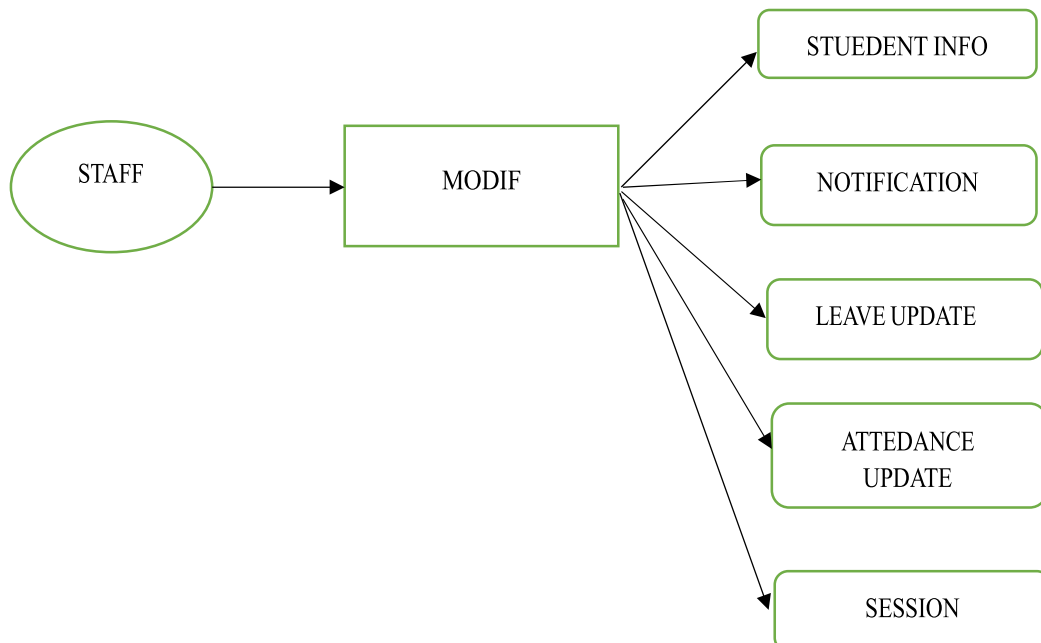


#### 4. Staff detail data flow:

##### a. 1<sup>st</sup> level detail data flow

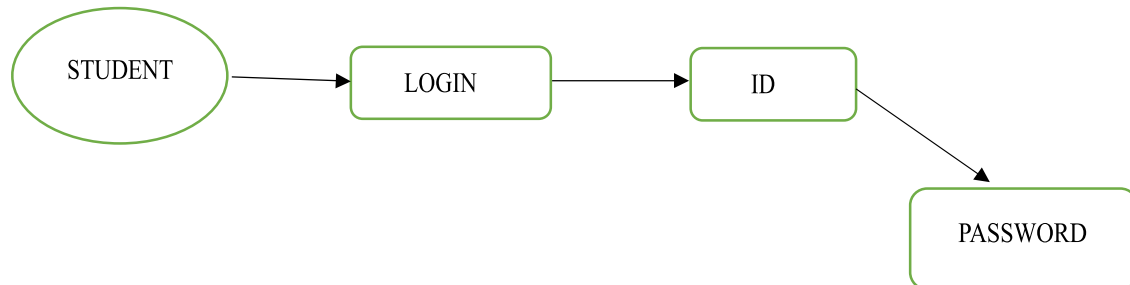


##### b. 2<sup>nd</sup> level detail data flow

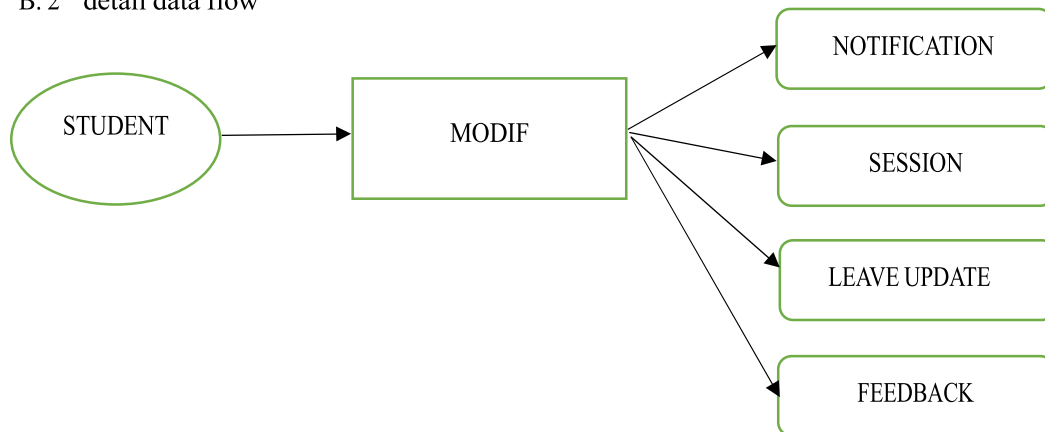


## 5. Student detail data flow:

### a. 1<sup>st</sup> detail data flow

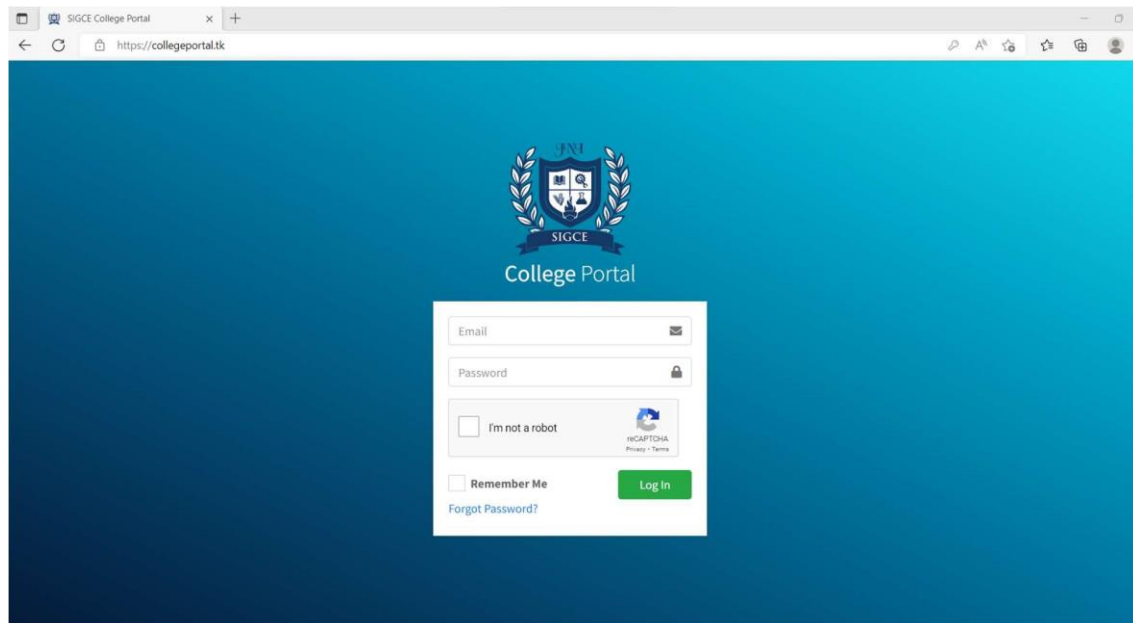


### B. 2<sup>nd</sup> detail data flow



# RESULTS

## LOGIN PAGE: -



SIGCE College Portal

https://collegeportal.tk

**SIGCE**  
College Portal

Email

Password

☐ I'm not a robot

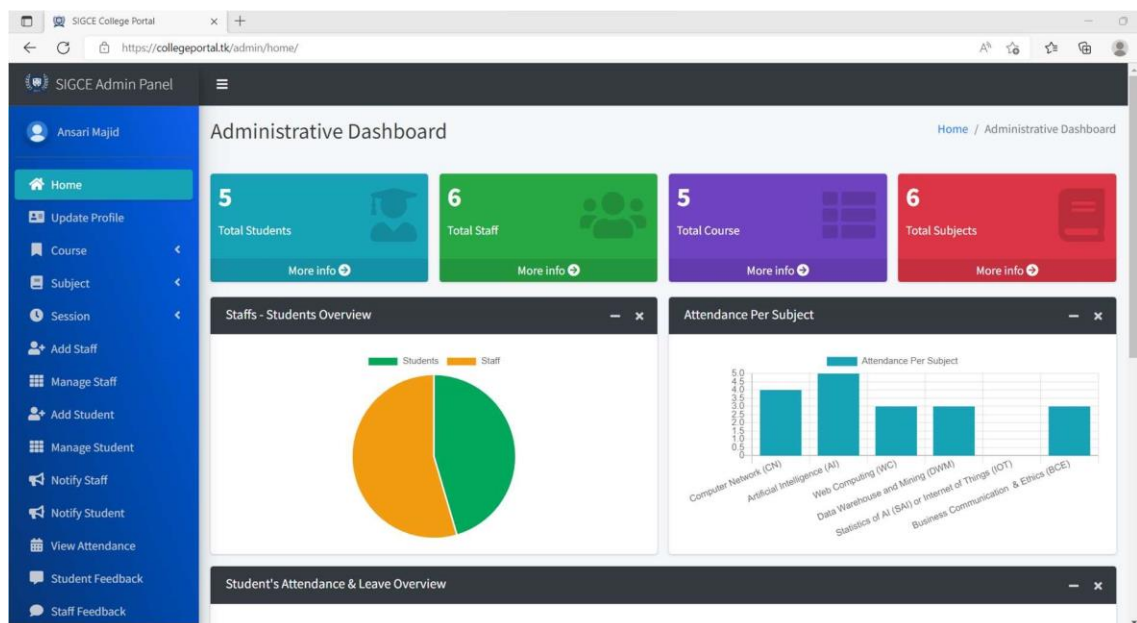
☐ Remember Me

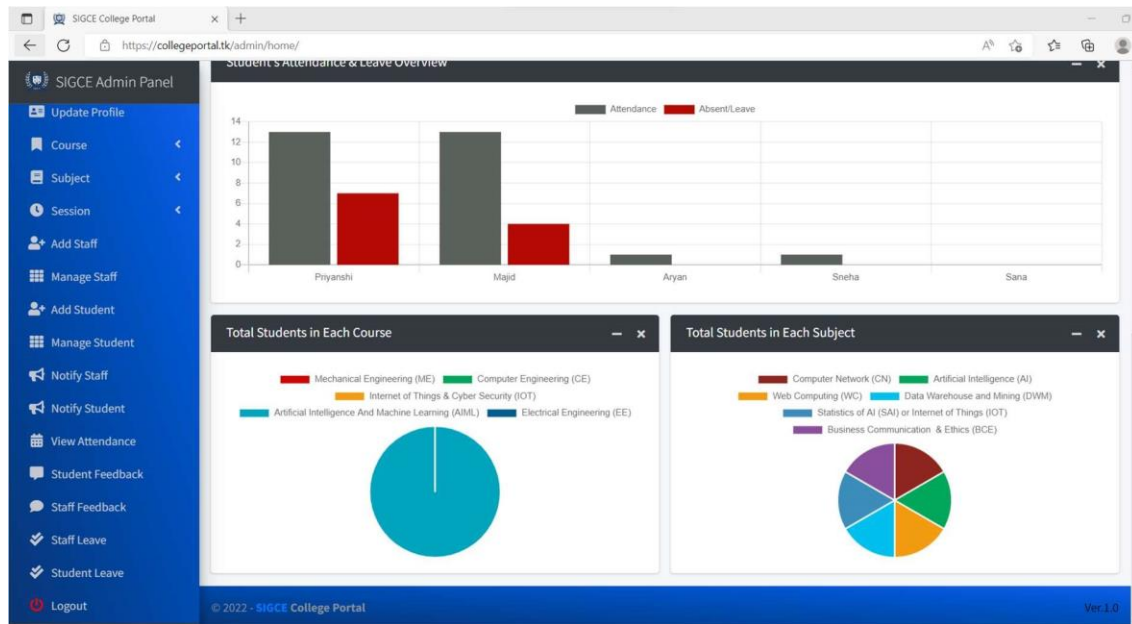
[Forgot Password?](#)

[Log In](#)

## ADMIN PANEL: -

## HOME PAGE





ADD THE SUBJECT: -

SIGCE College Portal

https://collegeportal.tk/subject/add/

### SIGCE Admin Panel

- Home
- Update Profile
- Course
- Subject
- Session
- Add Staff
- Manage Staff
- Add Student
- Manage Student
- Notify Staff
- Notify Student
- View Attendance
- Student Feedback
- Staff Feedback

### Add Subject

Home / Add Subject

**Add Subject**

**Name:**

**Staff:**

**Course:**

**Add Subject**

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## MANAGE SUBJECT: -

SIGCE Admin Panel

Ansari Majid

Home / Manage Subjects

Manage Subjects

#	Subject	Staff	Course	Actions
1	Computer Network (CN)	Kirti Rana	Artificial Intelligence And Machine Learning (AIML)	<a href="#">Edit</a> <a href="#">Delete</a>
2	Artificial Intelligence (AI)	Sonali Deshpande	Artificial Intelligence And Machine Learning (AIML)	<a href="#">Edit</a> <a href="#">Delete</a>
3	Web Computing (WC)	Selvamurugan Kasi	Artificial Intelligence And Machine Learning (AIML)	<a href="#">Edit</a> <a href="#">Delete</a>
4	Data Warehouse and Mining (DWM)	Swati Vyas	Artificial Intelligence And Machine Learning (AIML)	<a href="#">Edit</a> <a href="#">Delete</a>
5	Statistics of AI (SAI) or Internet of Things (IOT)	Bhagyalaxmi V	Artificial Intelligence And Machine Learning (AIML)	<a href="#">Edit</a> <a href="#">Delete</a>
6	Business Communication & Ethics (BCE)	Sana Qureshi	Artificial Intelligence And Machine Learning (AIML)	<a href="#">Edit</a> <a href="#">Delete</a>

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## ADD COURSE: -

SIGCE Admin Panel

Ansari Majid

Home / Add Course

Add Course

Name:

[Add Course](#)

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## MANAGE COURSE: -

The screenshot shows the 'Manage Courses' page in the SIGCE Admin Panel. The left sidebar contains a navigation menu with options: Home, Update Profile, Course, Subject, Session, Add Staff, Manage Staff, Add Student, Manage Student, Notify Staff, Notify Student, View Attendance, Student Feedback, and Staff Feedback. The main content area displays a table of courses with columns for ID, Course Name, and Actions (Edit, Delete).

#	Course	Actions
1	Mechanical Engineering (ME)	<a href="#">Edit</a> <a href="#">Delete</a>
2	Computer Engineering (CE)	<a href="#">Edit</a> <a href="#">Delete</a>
3	Internet of Things & Cyber Security (IOT)	<a href="#">Edit</a> <a href="#">Delete</a>
4	Artificial Intelligence And Machine Learning (AIML)	<a href="#">Edit</a> <a href="#">Delete</a>
5	Electrical Engineering (EE)	<a href="#">Edit</a> <a href="#">Delete</a>

At the bottom of the page, there is a footer with the text '© 2022 - SIGCE College Portal' and 'Ver.1.0'.

## ADD SESSION: -

The screenshot shows the 'Add Session' page in the SIGCE Admin Panel. The left sidebar is identical to the previous screenshot. The main content area contains a form with two date pickers labeled 'Start year:' and 'End year:', both showing the format 'dd-mm-yyyy'. Below the form is a large green button labeled 'Add Session'.

At the bottom of the page, there is a footer with the text '© 2022 - SIGCE College Portal' and 'Ver.1.0'.

## ADD STAFF: -

**SIGCE Admin Panel** | **Ansari Majid**

**Add Staff** | [Home](#) / [Add Staff](#)

**Add Staff**

**First name:**

**Last name:**

**Email:**   
*Email Address Already Exist*

**Gender:**

**Password:**

**Profile pic:**  No file chosen

**Password:**

**Profile pic:**  No file chosen

**Address:**

**Course:**

**Add Staff**

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## ADD STUDENTS: -



SIGCE Admin Panel

Ansari Majid

Home

Update Profile

Course

Subject

Session

Add Staff

Manage Staff

Add Student

Manage Student

Notify Staff

Notify Student

View Attendance

Student Feedback

Staff Feedback

Home / Add Student

Add Student

First name:

Last name:

Email:

majidgt786@gmail.com

Gender:

Male

Password:

\*\*\*\*\*

Profile pic:

Choose File No file chosen

Address:

Profile pic:

Choose File No file chosen

Address:

Course:

Session:

Add Student

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Ver:1.0

## MANAGE SESSION: -

SIGCE Admin Panel

Ansari Majid

Home

Update Profile

Course

Subject

Session

Add Staff

Manage Staff

Add Student

Manage Student

Notify Staff

Notify Student

View Attendance

Student Feedback

Staff Feedback

Home / Manage Sessions

Manage Sessions

Manage Sessions

#	Start	End	Actions
1	Aug. 19, 2022	Aug. 27, 2022	<div>Edit</div> <div>Delete</div>
2	July 1, 2020	July 1, 2024	<div>Edit</div> <div>Delete</div>

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Ver:1.0

ATTENDANCE: -

The screenshot shows the 'View Attendance' page in the SIGCE Admin Panel. The interface includes a dark blue header with the 'SIGCE Admin Panel' logo and a user profile for 'Ansari Majid'. A left sidebar contains a menu with options like Home, Update Profile, Course, Subject, Session, Add Staff, Manage Staff, Add Student, Manage Student, Notify Staff, Notify Student, View Attendance (highlighted), Student Feedback, and Staff Feedback. The main content area has a title 'View Attendance' and a breadcrumb 'Home / View Attendance'. Below the title is a form with two dropdown menus labeled 'Subject' and 'Session', each with a 'Select' placeholder. A green 'Fetch Attendance' button is positioned below the dropdowns. The footer contains the text '© 2022 - SIGCE College Portal' and 'Ver 1.0'.

SIGCE Admin Panel

Ansari Majid

Home / View Attendance

View Attendance

Subject

Select

Session

Select

Fetch Attendance

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Ver 1.0

STUDENT FEEDBACK: -

SIGCE Admin Panel

Ansari Majid

Home

Update Profile

Course

Subject

Session

Add Staff

Manage Staff

Add Student

Manage Student

Notify Staff

Notify Student

View Attendance

Student Feedback

Staff Feedback

Student Feedback Messages

Home / Student Feedback Messages

Student Feedback Messages

#	Student	Session	Message	Sent On	Replied On	Action

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Ver 1.0

SIGCE Admin Panel

Ansari Majid

Home

Update Profile

Course

Subject

Session

Add Staff

Manage Staff

Add Student

Manage Student

Notify Staff

Notify Student

View Attendance

Student Feedback

Staff Feedback

Staff Feedback Messages

Home / Staff Feedback Messages

Staff Feedback Messages

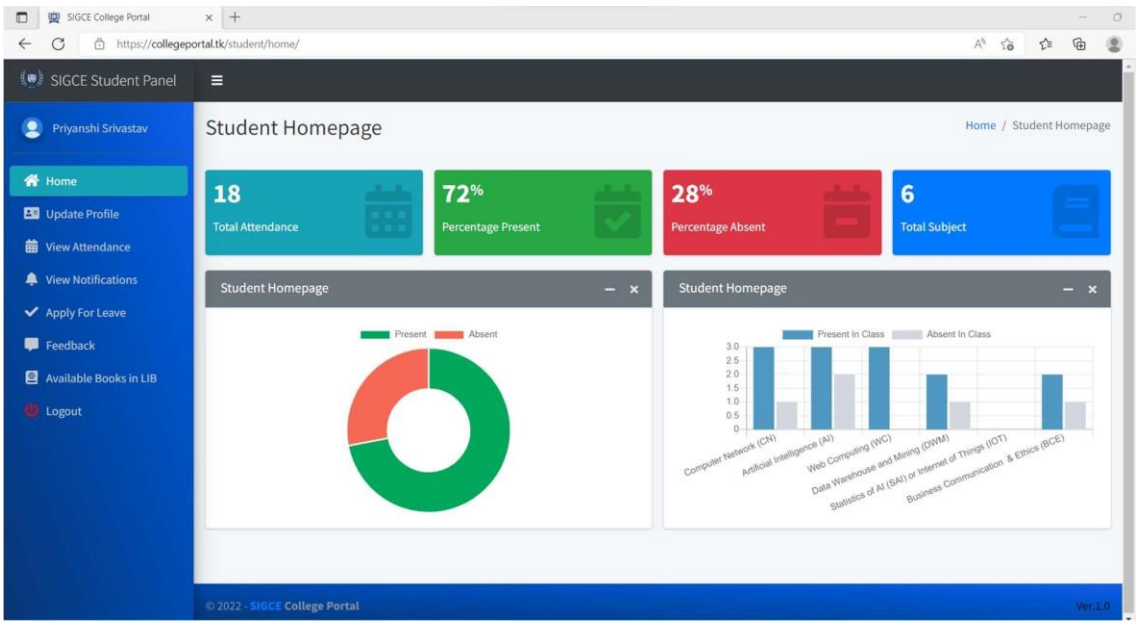
#	Staff	Course	Message	Sent On	Replied On	Action

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Ver 1.0

STUDENT PANEL DETAIL: -

HOME PAGE



LIBRARY:-

The screenshot shows the 'Library' page of the SIGCE Student Panel. The left sidebar is identical to the homepage. The main content area displays a table of available books for issue.

Sr.No	Book Name	Author	ISBN Number	Category
1.	java	majid	333	genral
2.	Python	sajid	444	open
3.	larvel	king	201	figured
4.	crave	alph	2002	thrill
5.	80 day world tour	alice mark	8009	novel
6.	PyScripts	macc miller	9087	Programming
7.	data Analytics	jhon harber	100203	Computer Science

STUDENT FEEDBACK

SIGCE Student Panel

Priyanshi Srivastav

Home

Update Profile

View Attendance

View Notifications

Apply For Leave

Feedback

Available Books in LIB

Logout

Student Feedback

Home / Student Feedback

Student Feedback

Feedback:

Submit Feedback

Student Feedback

ID	Feedback	Reply	Created At
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VIEW ATTENDANCE

SIGCE Student Panel

Priyanshi Srivastav

Home

Update Profile

View Attendance

View Notifications

Apply For Leave

Feedback

Available Books in LIB

Logout

View Attendance

Home / View Attendance

View Attendance

Select Subject

Start Date

dd-mm-yyyy

End Date

dd-mm-yyyy

Fetch Attendance Data

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APPLY FOR LEAVE

SIGCE Student Panel

Priyanshi Srivastav

Home

Update Profile

View Attendance

View Notifications

Apply For Leave

Feedback

Available Books in LIB

Logout

Apply for leave

Home / Apply for leave

Apply for leave

Date:

dd-mm-yyyy

Message:

Apply For Leave

VIEW NOTIFCATIONS

SIGCE Student Panel

Priyanshi Srivastav

Home

Update Profile

View Attendance

View Notifications

Apply For Leave

Feedback

Available Books in LIB

Logout

View Notifications

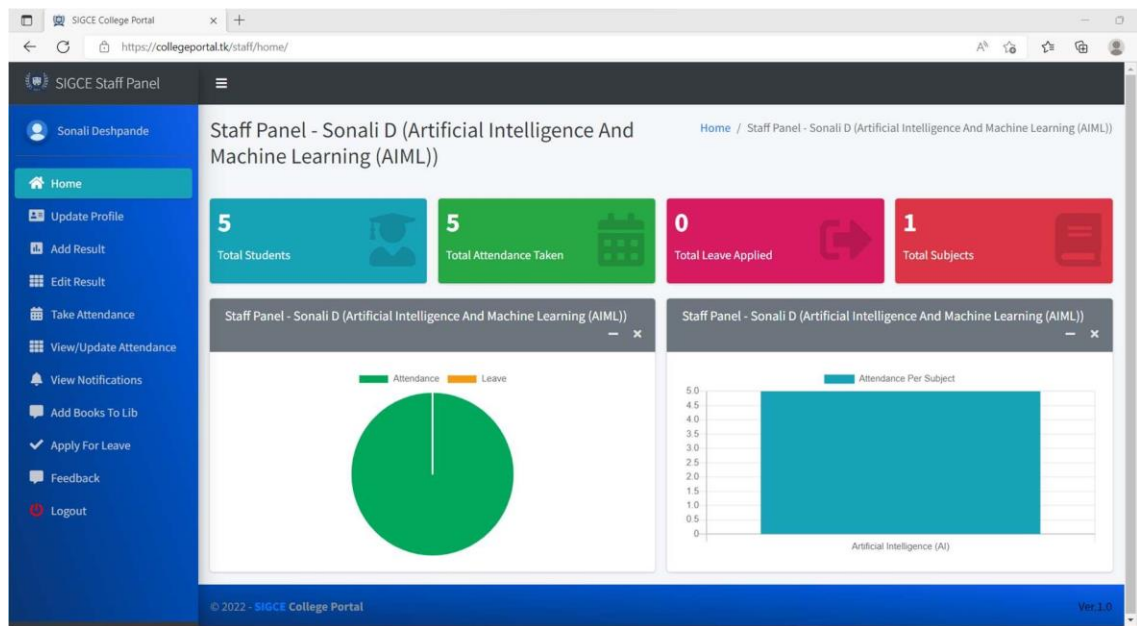
Home / View Notifications

View Notifications

#	Date	Message
1	Aug. 19, 2022, 2:51 p.m.	please submit fees
2	Aug. 19, 2022, 2:51 p.m.	please submit fees
3	Aug. 19, 2022, 2:51 p.m.	please submit fees
4	Aug. 19, 2022, 2:51 p.m.	please submit fees

STAFF PANEL DETAIL: -

HOME PAGE



## RESULT UPLOAD

The screenshot displays the SIGCE Staff Panel for Sonali D (Artificial Intelligence And Machine Learning (AIML)) with the 'Result Upload' form. The sidebar navigation is the same as the previous screenshot. The main content area shows the 'Result Upload' form with fields for 'Subject' and 'Session Year', both with dropdown menus. Below these fields is a blue button labeled 'Fetch Students'. The footer shows the copyright notice '© 2022 - SIGCE College Portal' and the version 'Ver 1.0'.

EDIT STUDENTS'S RESULT

SIGCE Staff Panel

Sonali Deshpande

Home

Update Profile

Add Result

Edit Result

Take Attendance

View/Update Attendance

View Notifications

Add Books To Lib

Apply For Leave

Feedback

Logout

Edit Student's Result

Home / Edit Student's Result

Edit Student's Result

Session Year:

Subject:

Student:

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Ver.1.0

ATTENDANCE

SIGCE Staff Panel

Sonali Deshpande

Home

Update Profile

Add Result

Edit Result

Take Attendance

View/Update Attendance

View Notifications

Add Books To Lib

Apply For Leave

Feedback

Logout

Take Attendance

Home / Take Attendance

Take Attendance

Subject

Session Year

Fetch Students

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## UPDATE ATTENDANCE

The screenshot shows the 'Update Attendance' page in the SIGCE Staff Panel. The left sidebar contains a menu with options: Home, Update Profile, Add Result, Edit Result, Take Attendance, View/Update Attendance (highlighted), View Notifications, Add Books To Lib, Apply For Leave, Feedback, and Logout. The main content area has a header 'Update Attendance' and a breadcrumb 'Home / Update Attendance'. Below the header is a form with two dropdown menus labeled 'Subject' and 'Session'. A green button labeled 'Fetch Attendance' is positioned below the dropdowns. The footer of the page displays '© 2022 - SIGCE College Portal' and 'Ver.1.0'.

SIGCE Staff Panel

Sonali Deshpande

Home

Update Profile

Add Result

Edit Result

Take Attendance

View/Update Attendance

View Notifications

Add Books To Lib

Apply For Leave

Feedback

Logout

### Update Attendance

Home / Update Attendance

Update Attendance

Subject

Session

Fetch Attendance

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Ver.1.0

## VIEW NOTIFICATION

The screenshot shows the 'View Notifications' page in the SIGCE Staff Panel. The left sidebar contains a menu with options: Home, Update Profile, Add Result, Edit Result, Take Attendance, View/Update Attendance, View Notifications (highlighted), Add Books To Lib, Apply For Leave, Feedback, and Logout. The main content area has a header 'View Notifications' and a breadcrumb 'Home / View Notifications'. Below the header is a table with three columns: '#', 'Date', and 'Message'. The footer of the page displays '© 2022 - SIGCE College Portal' and 'Ver.1.0'.

SIGCE Staff Panel

Sonali Deshpande

Home

Update Profile

Add Result

Edit Result

Take Attendance

View/Update Attendance

View Notifications

Add Books To Lib

Apply For Leave

Feedback

Logout

### View Notifications

Home / View Notifications

#	Date	Message
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Ver.1.0

STAFF CAN ADD THEIR NOTES

SIGCE Staff Panel

Sonali Deshpande

Home

Update Profile

Add Result

Edit Result

Take Attendance

View/Update Attendance

View Notifications

Add Books To Lib

Apply For Leave

Feedback

Logout

Add Book

Home / Add Book

Add Book

Book Name

Enter name of the Book

Author Name

Enter name of the Author

ISBN Number

Enter ISBN number of the book

Category

Enter Category of the book

Add Book

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Ver.1.0

APPLY FOR LEAVE

SIGCE Staff Panel

Sonali Deshpande

Home

Update Profile

Add Result

Edit Result

Take Attendance

View/Update Attendance

View Notifications

Add Books To Lib

Apply For Leave

Feedback

Logout

Apply for Leave

Home / Apply for Leave

Apply for Leave

Date:

dd-mm-yyyy

Message:

Apply For Leave

Leave History

## FEEDBACK

The screenshot shows a web application interface for a staff panel. On the left is a blue sidebar with a user profile 'Sonali Deshpande' and a list of menu items: Home, Update Profile, Add Result, Edit Result, Take Attendance, View/Update Attendance, View Notifications, Add Books To Lib, Apply For Leave, Feedback (highlighted), and Logout. The main content area is titled 'Add Feedback' and includes a breadcrumb 'Home / Add Feedback'. It features a large text input field labeled 'Feedback:', a green 'Submit Feedback' button, and a table below. The table has a header row with columns 'ID', 'Feedback', 'Reply', and 'Created At', but it is currently empty.

ID	Feedback	Reply	Created At
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## CONCUSLION

This paper assists in automating the existing manual system. This is a paperless work. It can be monitored and controlled remotely. It reduces the man power required and provides accurate information. Malpractice can be reduced. All years together gathered information can be saved and can be accessed at any time. Therefore, the data stored in the repository helps in taking decision by management. So, it is better to have a Web Based system. All the stakeholders, faculty and management can get the required information without delay. This system is essential in the colleges and universities.

## FUTURE SCOPE

- This will make a student to update or analysis their problem
- This will help to add the new staffs and student's and can check the correction of any mistake.
- This make the work essay and time shaving which is now most important part of the life.
- This will make easy to contact with student
- It will make education essay and control and education management best.

## REFERENCES

Software Engineering by Roger Pressman <http://santronix.com/webdesigning/college%20website%20development%20solution.asp>

Object –oriented Modelling and Design with UML by James Rumbaugh