# Student Management System and SGPA, CGPA Calculator

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Abstract - Based on the STUDENT MANAGEMENT SYSTEM AND SGPA, CGPA CALCULATOR this project. It oversees the management of college information, student information, placement information, and a variety of events that take place at our college. Additionally, it keeps a record of all the data pertaining to pupils who are assigned to different organizations. Additionally, we have a SGPA and CGPA calculator in this project. The student will benefit from knowing their grades. You can access the student data from the previous year with the aid of this project and an internet connection

Keywords:, Hypertext Mark-up Language (HTML) ,Cascading Style Sheet (CSS), JavaScript, Hypertext Preprocessor (PHP),Firebase, Student Management Information System, SGPA and CGPA calculator etc.

#### **I.INTRODUCTION**

This STUDENT MANAGEMENT SYSTEM AND SGPA, CGPA CALCULATOR project developed using PHP programming language. The major goal of this project is to create an online website that contains all of the information about the institution, such as information about student attendance, information about events, information about how student fees are paid, information about marks, etc. The project's Superset is Admin. The whole Firefox Database's record stores. Additionally, the burdensome paperwork, human labour, and communication costs will be decreased by the suggested program. Moreover, it maintains a record of all student-related data. Who have been appointed to various organisations? Additionally. SGPA and CGPA calculators are available. Knowing their grade on this endeavour will be beneficial to the student. With the help of the project and an online connection, you can obtain student information from a prior year. It is calculated depending on grade. It is made up of distinct subjects and subject codes. Collecting data on all subjects through grades, converting the grade to credits, and then displaying the CGPA using all of the SGPA data. The user can then choose the grade they achieved and the necessary SGPA, and the CGPA is displayed. Backend technologies include PHP and MYSQL, with the front-end using HTML, CSS, JAVASCRIPT, and BOOTSTRAP.

# II.LITERATURE SURVEY

# [1] HYPERTEXT PREPROCESSOR (PHP)

Author Name: Rafael Skylar cry, Masque His yam,

PHP is commonly used server-side scripting language for commercial applications and web development .One of the most popular languages for building interactive websites and web application .PHP is used in the end-to-end computer infrastructure of some of the biggest web platform .

# [2] APPLICATION DEVELOPMENT

Author Name: Xu Xing; Wang Yandi;

The professor uses a method to monitor the performance of each student at any time and from any location. The server stores all of the most recent data, which uses can access through web-based software. This method I web application but as android apps are more portable and smart phones are more commonly used today

# III AUTOMATION

Author name: Gerald Weber, Sabetha Lange, Vanish Maura, Smith Patel

Automation is the process of minimising or reducing manual labour with the aid of reducing manual labour with the aid of computers, computer-operated equipment and software. Some tasks that are beyond the capabilities of human can be completed using automated techniques. University of Toronto's Library Automation System from 1963 to 1972[1] was one of the earliest successes in managing data with an automated system. The true meaning of using automation will increase productively decrease delays, increase production flexibility, lower costs, and elevation human mistake, ease labour shortage, and provide high level accuracy.

# IV GRADE POINT CALCULATOR

# Author name: Jamal din Bin Omar

Using standardised measurements for various degrees of accomplishment in a course is the process of grading in education. Letter grades, range grades, percentage grades, and numbers out of a possible total can all be used to indicate grades. Grades are averaged to get a grade point average in various nations. The process of grading in education involves using standardised measurements for varying levels of accomplishment in a course. Grades can be expressed as letter grades, range grades, percentage grades, or numbers as a percentage of a possible total. In different countries, grade point averages are calculated by averaging the grades. Standardized metrics are used in the grading process in education to account for different levels of achievement in a course. Letter grades, range grades, percentage grades, and figures as a percentage of a possible total are all acceptable ways to communicate grades. Grade point averages are determined by averaging the grades in several nations. Different degrees of accomplishment in a course are taken into consideration in the grading process in education by using standardised metrics. There are several appropriate ways to express grades: letter grades, range grades, percentage grades, and numbers expressed as a percentage of a feasible total. By averaging the grades across many countries, grade point averages are calculated.

# V CLOUD STORAGE

# Author name: Karana Joshi , Tim Fining , Sung Gaol Choi

Cloud computing is the on-demand availability of computer system resources, primarily data storage (cloud storage) and computing power, without direct active supervision by the user. Functions in large clouds are frequently dispersed over several sites, each of which is a data centre. Cloud computing typically uses a pay-as-you-go model, which can help reduce capital expenses but may also result in unexpected operating expenses for users. Cloud computing depends on resource sharing to achieve coherence. Cloud computing metaphor: The full provider-controlled suite of hardware and software can be thought of as an amorphous cloud; the set of networked pieces providing services does not need to be addressed or handled by users individually.

# VI. MAIN MODULES OF THE SYSTEM

# A. STUDENT LOGIN

# 1) STUDENT PROFILE: -

Records about the students were kept in this module. It includes details on the student's profile, contact information, educational background, personal information etc. Users can use various search parameters, such as name, course, register number, etc., to find students in the database.

# 2) CERTIFICATES: -

The student wants to upload their certificates for workshops, seminars, in-plant training, symposiums, sports events, and inter- and intra-college competitions and industrial visit in this certification module. This demonstrates the management's involvement in other operations. This will boost teamwork, communication skill, and other skills.

# 3) PLACEMENTS AND INTENSHIP:-

We mention the students' willingness or not in the module, whether the student is interested in the internships and placements. If the internship is paid or unpaid, the company's location, and the duration of the internship if a placement involves the job's duties, the company's location, and the salary, and the placed in an IT or core business, this information will be provided. If you are not placed, they will mention forthcoming drives to you.

#### 4) ACADEMIC ACTIVITIES:-

We have the cycle test, internal test, model, and semester exam schedule in this module. This section displays student reports and scores, and you can view your academic performance on a graph.

# 5) ATTENDANCE: -

This module includes an attendance management system, which makes it possible to track and save attendance information in real time. The student will be deemed absent if the attendance form is not submitted by 9.30 a.m. The proportion of today will be displayed. The student's attendance rate is below 70%. The student can't attend exam.

# 6) PORT FOLIO: -

A portfolio is a compilation of student work that includes tests, reports, courses taken, seminars attended, and proof of academic advancement.

#### 7) ABOUT US:

This module contains details on the college and the professor regarding cost structures as well as educational requirements and lab facilities

# B. PROFESSOR LOGIN

# 1) STUDENT'S PROFILE: -

In this module, student records were maintained. It contains information on the student's profile, contacts, educational background, personal characteristics, etc. Users can find students in the database by using several search criteria, such as name, course, register number, etc. The lecturer can learn a lot about the students' information by using this database.

# 2) STUDENT CERTIFICATE: -

We have certificate uploading in this module because we want to know how many people attended workshops and seminars as well as how many people finished courses, in-plant training, and industrial visits.

# 3) ACADEMIC ATTENDANCE: -

In this module, the student's academic attendance is mentioned. If the student has less than 75%, the class adviser is informed. If there is extremely little hourly attendance, a particular lecturer will be informed. If a professor needs information about a specific student's attendance, they can find it by looking up the student's name or registration number.

# 4) PLACEMENT /INTERNSHIP: -

In the module, we discuss the students' readiness to participate and their interest in internships and job placements. The length of the internship, the location of the company, and whether it is paid or unpaid This information will be provided if a placement involves the duties of the position, the location of the employer, the compensation, and the placement in an IT or core business.

# 5) ACADEMICS: -

All of the student's academic information for the professor is contained in this module. to be aware of student information. This will offer a structure for the graph. Marks will be displayed together with subject-specific and individual student marks. If a lecturer wants a specific student, they will record that student's grade and also offer a graph model.

# NOTICE BOARD: -

This module displays all competitions and events. For both students and professors, this is typical. If someone wants information, they can enable the message icon, which will send all competition and event throw messages to the specified phone number, or they can disable the option if they don't want it. When a person logs in, all of the information is displayed.

# C. CGPA AND SGPA CALCULATOR

# 1) SGPA AND CGPA CALCULATOR: -

A grade point average called SGPA AND CGPA is calculated at the end of each semester. SGPA is applied to the specific year or session. The cumulative grade point average, or CGPA, is determined at the end of the academic year.

#### 2) SGPA: -

Semester Grade Point Average, it is one of the most common Methods to calculate student performance at the college and university level. It is calculated when the semester is over, it is important to maintain a good SGPA. SGPA is for a shorter period of time and CGPA is for a longer period of time. Through help of the example, you must have understood that to get a good CGPA at the end of course, you must have a good consistent SGPA.

#### 3) CGPA: -

It is usually used to measure the overall academic performance of a student how the student performs during his academic years throughout the course period and it is important for placement as some companies have CGPA

criteria for selection in such process students CGPA plays a major role for the filtration of eligible and non-eligible students.

# Student Certificate Profile Pracament/ Internship Attendance Academic activity

# MODULE DESCRIPTION

VII.PRE-REQUISITES

#### A. HTML:

HTML, or hypertext mark-up language, serves as the website's spinal cord. The structure of any website requires an understanding of HTML. We cannot include many of the useful elements on a web page if we only use HTML; instead, we employ a variety of platforms, including static and dynamic ways, to increase the usefulness of a web page. And in this case, we're leveraging this language to improve the usability and effectiveness of our web sites. And we use JavaScript and xml to make our web sites dynamic.

#### B. CSS:

The PHP acronym for formatting the design of Web pages is done using cascading style sheets. They can be used to specify the writing or formatting style, the size of different tables, and other elements of Web pages that were previously only able to be set in the HTML of a static page. The primary function of Cascading Style Sheets is to divide the content of a web document that is written in any mark-up language. This has many advantages, including enhanced information accessibility, greater adaptability, and additionally, it provides the user some degree of control over the document's presentational attributes. Additionally, it speeds up access while minimizing issues. Additionally, it speeds up access while minimizing issues. It provides the flexibility to choose different style guidelines and schemes depending on the situation.

#### C. JAVASCRIPT:

The most well-known scripting language of all time is JavaScript. The World Wide Web has a scripting language called JavaScript. JavaScript is mostly used to add different Web functions, validations, detections, the creation of cookies, and other things. Since JavaScript is the best scripting language, practically all browsers support it. The most potent scripting language currently in use is JavaScript. For client-side web development, it is employed. Pages are interactive thanks to JavaScript. It is a simple programming language that is immediately

integrated into mark-up syntax. As its name implies, JavaScript was influenced by several languages, particularly Java.

# D. PHP

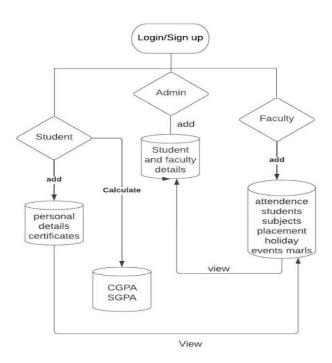
Since more than ten years ago, articles have asked the question, "Is PHP Dead?" with rivals like JavaScript vying to replace it. With or without a few percentage points, PHP has maintained its 80% market share as the backbone of websites over the years, proving its viability. And there's a good reason behind it. PHP has developed despite being an older programming language that lacks several capabilities of more modern languages. A level of maturity results from such evolution, and PHP is well-supported, well-documented, and simple to use. PHP developers can set up their code on any Linux, Windows, or Unix OS and have access to a wide range of frameworks, databases, and libraries to help their work.

# E. My SQL

It might be anything, such as a straightforward grocery list, a photo gallery, or the enormous amount of data in a business network. A database management system, such as MySQL Server, is required to add, access, and process data contained in a computer database.

Given how much data we currently produce, it is simple to understand why reliable database structures are so crucial in modern web development.

#### USE CASE DIAGRAM



# VIII.APPLICATION

Through real-time and customized reporting, Google Analytics for Firebase enables you to follow the path of your consumers.

- With Firebase, you can follow your users across
- a variety of platforms, including is, Android, the web, and Unity products.

- Firebase Dynamic Links are clever URLs that allow marketers to advertise the app through a variety of outside channels, including social media, email, the web, and more.
- The fact that dynamic links can be used by both app users and people without the app installed is one of their best benefits.

# XI.SCOPE FOR

The user's obligations include:

- Accessing and searching for information.
- The initial page of the application can be used to:
- Log in to the system;
- After signing in, update your password;
- View/modify details.
- Can access help via the help option to view various system properties.
- Students can comment on the college, the staff, or another student.
- There should be an admin login that can read and delete any uploads.

RESULTS

LOGIN PAGE

This is the page where users log in. we have here student, teacher and SGPA and CGPA calculator

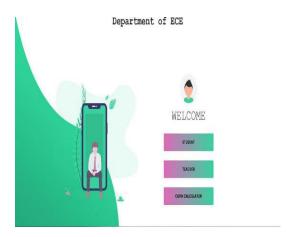


Fig.1 Login page

DASHBOARD:

Options are displayed in dashboard in various form



Fig.2 Dashboard

# ATTENDANCE:

The students put their attendance in this module

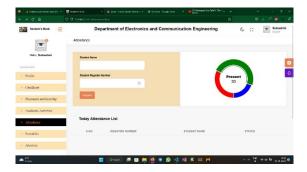


Fig 3 Attendance

# **ACADEMIC ACTIVITIES:**

In this module, they show the schedule of the department



Fig 4 Academic Attendance

# CHOOSE YOUR REGULATION:

This page is used to choose the regulation



Fig 5 Choose your regulation

# CGPA CALCULATOR

:

Which use is to calculate the CGPA and SGPA?



Fig 6Regulation 18

# X.CONCLUSIONS

The existing system can be changed to a site-based system with the help of this paper. This work is electronic. Remote monitoring and control are both possible. It requires less labour overall. It consistently delivers accurate information. Mistakes can be minimized. Any information obtained or added can be preserved and viewed at any time. The data that is kept about the project aids management in making wise decisions quickly. Therefore, a web-based information management system is preferable. Staff employees and all stakeholders can quickly obtain the information they need. This system is crucial at universities, colleges, and hostels.

# XI. ACKNOWLEDGEMENT

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