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Student's Record

Vishal Soni[1], Bharat Singh[2]
Galgotias University

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ABSTRACT
The major goal of this project is to give the students results in an easy-to understand manner.Students can get their results using their roll numbers on the college or institution website. The results are provided with individual scores and the corresponding percentage after reviewing the result status and using the university's normal calculating method. The student is the system's intended user. The student can log in using their login information and password to each of their findings. Web development tools like HTML, CSS, PHP, Javascript, and MySQL can be used to accomplish this. The faculty can obtain a subject-by-subject breakdown of the students' overall performance on the semester exams.The graphic representation of the total results by subject (the proportion of passes and failures

I. INTRODUCTION

Student Result Management System is a webbased application that mainly focuses on providing the results to the student and the faculty. The student check their respective results usingtheir University registered recognition id's along with their grades and percentage of that particular semester.

It is more convenient for the student to check their results on the college website, and it is simple for the faculty to determine which students passed and failed a certain course. Three modules—Student, Faculty, and Administrator—make up the system. The faculty can view the analysis of the pass and failure count in the chosen subject by using the joining year and the subject name, and the student can view their results by using their roll numbers.

The administrator uploads the results file to the database by converting the file to sql format(.sql) from the PDF format(.pdf). The admin is provided with the privileges to modify the student results by updating the results during the changes in supplementary or revaluation examination. The update of any current score is to done by the administrator. To develop a system that will manage:

- Information about the grades obtained in various semesters.
- Information regarding grade and percentage of each semester of a student.
- ation of results that conveys the overall students performances in a particular subjEct.
- Visualis

The main objective of this system is to provide the student an convenient and simpler way to check their results and for evaluating the total aggregate and the percentage for the semester results available. Itassist the faculty and student to analysis his/her and the whole class performance in a subject. The scope of this project is addressed to solve the issues of long waiting and calculation of grades and percentages in different semesters. Providing the results in an institutional websites provide an easier access to the results to the student. The graphs for overall performance in every subject makes the analysis task simpler.

The Student Result Management System (SRMS) is a web-based tool that primarily focuses on delivering results to students and instructors. The student checks their separate outcomes using their university-registered recognition ids, as well as their grades and semester percentages. It is easy for students to retrieve their results through the college website, and it is easier for faculty to assess the pass and fail rates of a given subject. Student, Faculty, and Administrator are the three components thatmake up the system.

The students may examine his results by entering their roll number, and the faculty can view the analysis of pass and failure counts in the selected topic by entering the

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joining year and subject name. The administ rator is responsible for creating and maintaini ng any current score.

To overcome the issues with the practising manual system, the "Student Result Monitorin g System"was created. The application is pri marily made to help an institute run operatio ns efficiently. To reduce input errors, the pro gramme has been scaled back. Additionally, when entering data in an improper format, it displays error messages. The user doesn't ne ed any formal knowledge to use the system. Thus, everything together forms the system's user-friendly behaviour.

An Automated Digital Student Mark Analysis System is a real boon to educationa l institutions and testing bodies. From planning and preparing t o evaluate the student examination result proc essing system and frees up faculties and adm inistrators so that they can focus on their ot her important tasks.

This will help the organization in saving time and resources use d in the manual analysis of results.

II. LITERATURE SURVEY

PAPER:Student Result's Record

AUTHORS: Vishal Gulam Lorgat ANALYSIS:

The current research aims at creating a web-based student result management system,reducing time, eff ort and improving security. The research resu lts in the development of a multi-user system, based on web technology with a rchitectural pattern and developed using Java programming language with Apache TomcatServer and MySQLDatabase Management System support.

PAPER: Student Performance Analysis System (SPAS)

AUTHORS: Chew Li Sa, Dayang H anani bt.AbangIbrahim, Emmy Dahli na Hossa

According to E. O. Ukem et al. [1], backup procedures and audit logs may be used to strengthen outcome systems. Despite the fact that his solution was created with java and a MySQL database, it did not provide any ev idence for processing results batched in files to improve data integrity and reduce fraud. T he study could not answer what happens to a student following a suspension, deferment o f studies, medical treatment, supplemental test s, or other similar situations. We examined t hese circumstances and created an audit trail for future reference.

The programme includes a login for m for user authentication and Student Regist ration forms for registering students each se mester after payment of dues before results are uploaded using internet browsers, similar to Akinmosin James' [2] approach at Nasar awa State University Keffi. Forms and repor ts are used to implement his solution, which was developed using the Oracle Procedural Language/Structured Query Language (PL/S QL). The interface, however, regularly makes use of the "Grades form for entering stude nt grades and Grades Edit form for amendin g incorrectly recorded grades." This is a des ign defect that poses a security risk and co uld make the database accessible to third pa rties. Users who discover a way to access s uch forms could use the weakness to tampe r with grades.

The automated programme uses a bro wser as the front end, a PHP engine as the back end, and a MySQL server as the middl e layer. This is similar to the system created by Idogho, Akpado, and Agajo [3] for Fede ral Polytechnic Auchi. Their technology promi sed to reduce the processing time for admissi on lists to 24 hours using the PHP My Adm in database administration system. However, t he announcement made no mention of the for ms or file uploads that are used to enter stu dent exam scores into the system. Second, thi s particular software document was not transp arent about the normalisation done to remover epetition in the database, despite the use ofM acromedia Flash 8.0 and Dreamweaver 8.0.Thi s would have made it easier to forecast how well the programme would manage its mem ory.

According to Bijoy, Sanjay, Bhibak, Nishal, and Zarmit [4], PHP is object-oriented, cross-platform, and usable on a variety of systems, including Microsoft Windows, Apple Macinto sh, Linux, and others. Instead of using manua l processes, such automated methods reduce d uplication and data loss.

Effective systems focus on a small n umber of crucial goals. For instance, after giv ing the matter significant thought, Duan and Zhang [5] defined a number of system perfor mance goals, including usability, sophistication,

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integrity, and security. As a result, the introduction of huge amounts of data through file uploads promotes this measure, and data processing scheduling and data queries are effective means of achieving it.

In India, Bharamagoudar, Geeta, and Totad [6] created a webbased Student Information Management System that could send emails to students to confirm their mailbox when they registered. They accomplished this by utilizing technologies such as HTML, CSS, JavaScript, PHP, and SQL. It is a paperless task that aids in automating current manual procedures and may be remotely monitored and managed on a server-based network, according to its definition.

In China, Hemn and Wu Fei [7] created a method that can give students with general and instructional information. They claim that the Students Information Management System (SIMS) may be used to create, read, and update a student's information as well as generate reports regarding his or her abilities and experience. Such technologies reduce retrieval time and avoid data loss.

Mariusz C. [8] mentioned in his solution University StudyOriented System (USOS) in Poland that the key functional aspects are the admin, web, admission/registration of students, database of results, course and certificate catalogue, statistics, and so on. According to him, this solution is employed by 27 Polish higher education institutions. In such a system, each module that is to be used in production must first pass through a sample database and a university test. The documentation, which included the system definition and implementation, was kept up to date on a regular basis. Such methods improve communication between students and teachers.

According to Vishal [9], a good database prevents anomalies and saves crucial information in a structured way for data integrity. Tables must therefore be normalised for accuracy and retrieval simplicity. Additionally, they used PhpMyAdmin, which works with both WAMP and LAMP, to link to a MySQL database and integrate PHP into HTML to construct their solution. PHP was selected because of its ease of use across many platforms with minimal script modification, as well as its quick compilation time. They added a "export" feature to their system to cut down on the time needed for each student's registration. It might move students.

According to a Wikipedia article titled Student Information System (SIS), a SIS [10] offers capabilities for course registration, grade documentation, transcript generation, students test results and assessment scores recording, students' schedules including disciplinary records, attendance monitoring, and the overall management of student-related data in a school. It should not be confused with a learning management system, which enables the publication of readings, homework, and tests.

Bhatt et al. [11] created the Credit-based Grading Scheme (CBGS) in India. The solution is essentially a PHP-MySQL one for gathering student results. The system creates reports in either Excel or PDF format depending on the use. The methodology for determining Grade Point Average (GPA), despite the fact that the grading system has changed from the Nigerian system, is still the same: the sum of the product of credit hours and grade points divided by the number of credit hours. The ease of searching and creating lists is a crucial factor.advantage of such automated systems over manual procedures.

Nmaju et al. [12] suggested an Academic Records Information System (ARIS) at the University of Port Harcourt, Nigeria, using the incremental software model and prototyping approach. Their suggestion that reporting sheets only be made when there are nounresolved grades for students' registered courses was also adopted, meaning that all of these courses' grades had to have been approved by University Senate and uploaded on time.

In a report for North Illinois University USA, Charletta F. G. [13] cited a lawsuit brought against Microsoft by a woman in Los Angeles about security flaws in the company's software. A film producer named Marcy Hamilton brought the action, claiming that due to Microsoft's shoddy work, she had become a victim of identity theft. She alleges that her Social Security Number (SSN) and bank information were stolen online. Because of this, we have incorporated a log file and audit trail to help monitor database activity in this SRMIS and have recently taken security vulnerabilities into account. By doing this, management will be able to account for changes

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made at any time by a single user and boost the system's credibility.

To preserve the privacy of digital rec ords, JISC Info Net [14] suggested utilising p asswords and other electronic security measure s. They said that institutions should avoid acc identally disclosing student information. As a result, only personnel who require the data sp ecified in their job descriptions ought to have access to it, and even then, only to the par ts of the files that pertain to them. Additiona lly, because these records contain personal dat a, the Data Protection Act of 1998 requires t hat the student, who is the data subject, have access to the information, whether it is in ha rd copy or electronic form.

An open-source web-based MIS was recommended by Gunathilake et al. [15] for the University of Ruhuna in S ri Lanka. The LAMP/WAMP technologies ma de this possible. They were able to categorise their users into categories such as administra tor, super administrator, top administrator, gen eral, professor, and student. The primary DES method was used to successfully encrypt pas swords in the prototype version, which was i ntended for their Faculty of Science.

The objectives of creating a web-based framework for results processing, accord ing to Walia and Gill [16], are to shorten th e time needed to access students' records and to make a platform that is more secure. Ov er time, this has proven to be a more effecti ve strategy for managing universities.

ANALYSIS:

The suggested approach makes use of rules produced by data mining to forecast stu dent achievement. The classification data mini ng approach is employed in the project to ca tegorise the pupils according to their grade.B-Tree is the most successful strategy when co mparing the results of several techniques. In 2016, the Student Information Report System with SMS (SIRS) was implemented.
Isbudeen Noor Mohamed, Syed Ajaz, Ahmad Tasnim Sidiqui, and S Mohamed Idhris are t he authors.

The suggested system is an applicatio n programme that aims to provide direct and direct statistical exchange with students, facu lty, and college/school administration on a sec ure platform. Through an SMS sent to the st udent's or parent's contact information, the stu dent can view their findings.

1. SYSTEM REQUIREMENT

3.4.1 Software Specifications

- Operating system : Windows XP.
- Front IL, PHP
- Database : MYSQL
- Model Design : Rational Rose

3.4.2 Hardware Specifications

- Processor : Intel Pentium 4.0
- Ram : 2GB
- Hard disk : 500GB

III. TECHNOLOGY DESCRIPTION

1.1 HTML

The markup language used to create web pages and web applications is called Hy pertext Markup Language (HTML). It is one of three foundational technologies underpinning the World Wide Web, along with JavaScript and Cascading Style Sheets (CSS).
[4] Web browsers transform HTML document s into multimedia web pages after receiving t hem from a web server or local storage. HT ML originally featured cues for the document' s design and semantically explains the structu re of a web page.

HTMLTFORMS

When you wish to collect information from a website visitor, HTML forms are ne cessary. For instance, you might want to gath er details like name, email address, payment card, etc. during user registration. When a sit e visitor fills out a form, it posts their infor mation to a back-end application such as CGI, ASP Script or PHP script etc. The back-end application will perform required processing on the passed dat a based on defined business logic inside the application.

1.2 JAVATSCRIPT

JavaScript is a high level, interpreted programming language that is frequently abb reviated as JS. Additionally, it is a dynamic, weakly typed, prototype-based, and multiparadigm language. JavaScript is one of the three key technologies of Wor ld Wide Web content engineering, together wi th HTML and CSS. It is employed to give online programmes, such as video games, and to dynamically create interactive web pages. The majority of websites use it, and becaus e to a built-in JavaScript engine, all current web browsers

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support it without the need for plug-ins. Although all of the various JavaScript engines are based on the ECMA Script specification, some engines do not completely support it, and many engines provide capabilities that go beyond ECMA. Each JavaScript engine represents a unique implementation of the language.

TTTTTTCASCADINGTSTYLETSHEETS

The display of a text expressed in a markup language can be described using Cascading Style Sheets (CSS), a style sheet language. The language can be used to set the visual style of any XML document, including plain XML, SVG, and XUL, and is adaptable to rendering in voice or on other media, while being most frequently used to set the visual style of web pages and user interfaces written in HTML and XHTML. The majority of websites employ CSS, together with HTML and JavaScript, as a foundational technology to design visually appealing webpages, user interfaces for web apps, and user interfaces for many mobile applications.

1.3 HYPERTEXTTPREPROCESSOR(PHP)

PHP started out as a small open source project that evolved as more and more peoplefound out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

PHP is a recursive acronym for "PHP:HypertextPreprocessor".

PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.

It is integrated with a number of popular databases, including MySQL, PostgreSQL,Oracle, Sybase, Informix, and Microsoft SQL Server.

PHP performs system functions, i.e. from files on a system it can create, open, read, write, and close them.

PHP can handle forms, i.e. gather data from files, save data to a file, through email you can send data, return data to the user.You add, delete, modify elements within your database through PHP.

1.4 DATABASE DESCRIPTION MYSQL

A relational database management system (RDBMS) based on SQL called MySQL is open source. In addition to being a key part of the widely used LAMP open-source web application software stack (and other "AMP" stacks), MySQL is a well-liked database for usage in web applications. "Linux, Apache, MySQL, Perl/PHP/Python" is referred to as LAMP. MySQL is frequently used in free software open-source projects that need a robust database management system.TYPO3, MODx, Joomla, WordPress, phpBB, MyBB, Drupal, and more programmes all use the MySQL database.Many well-known, large-scale websites also utilise MySQL, including Google (albeit not for searches), Facebook, Twitter, [Flickr, and YouTube.

IV. METHODOLOGY

Three modules are present. Those are

Student

Admin

Faculty

Web technologies like HTML, CSS, PHP, and MySQL can be used to construct the system.

User registration using the user's password and the specific university registration number can make up the front end.

The findings are presented to the student in tabular form along with the corresponding aggregate and percentage for that semester.

All of the data may be retrieved from the table and displayed as results depending on the student's roll number.

Data visualisation is another function of PHP. fusion charts are what we utilise for the dynamic visualisation.

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IMPLEMENTS

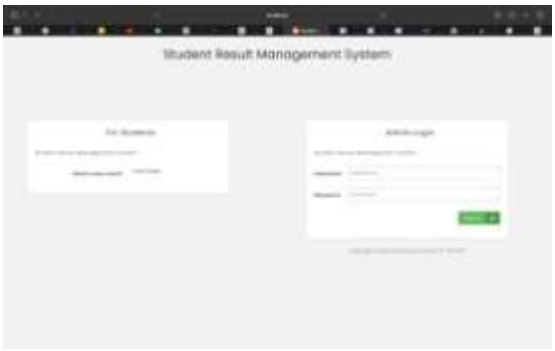

Fig 6.1Dashboard

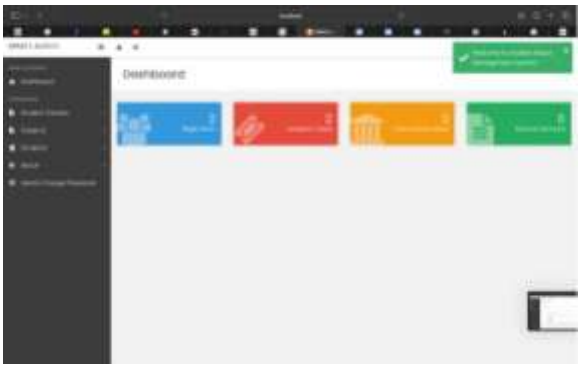

Fig 6.3 Visualization

V. TESTING

TESTING TECHNOLOGIES

System Testing

System testing, or end-to-end testing, tests a completely integrated system to verify that it meets its requirements. For example, a system test might involve testing a logon interface,then creating and editing an entry, plus sending or printing results, followed by summary processing or deletion (or archiving) of entries, then logoff.

Unit Testing

Tests that confirm the functionality of a particular area of code, typically at the function level, are referred to as unit testing, sometimes known as component testing. This occurs typically at the class level in an object-oriented system, and the constructors and destructors are covered by the bare minimum unit tests. Developers typically write these kinds of tests as they work on the code (white-box approach), to make sure the particular function is performing as it should.

System Testing

The first level of testing that is done on the entire application is system testing. This level's objective is to assess the system's compliance with all of the listed requirements and ensure that it satisfies the Quality Standards. Independent testers who weren't involved in the program's development perform system testing.

User Input Validation Testing

The user's input needs to be verified to make sure the values match up. Additionally, the fields shouldn't be empty.

FUTURE IMPLEMENTS

The system interface may soon be enhanced with more visually appealing, interactive, and relevant pictures. Email and SMS or email notifications may also be added to the system. Improve the current system by automating nearly all of the institution's services, transforming it into a full LMS. and improve the system by creatin

g multiple iterations based on user feedback. if a comprehensive answer hasn't been found.

VI. CONCLUSION

Student result management system is an online website and can be used at any pl ace, any time and by any student or faculty. This application will avoid the calculation a nd simplify the process of visualizing results by students as well as faculty.

dashboard. They are unable to communica te, but they will soon be able to do so. I t has its own database "rms.db" which is produced using SQLite, therefore it doesn 't require any additional software.

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