STUDENT RESULT MANAGEMENT SYSTEM

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I. Abstract

Education serves as the cornerstone of societal progress, aimed at nurturing capable individuals for the future. However, the existing approach to handling student grades relies heavily on manual processes, necessitating extensive human involvement. Typically, grades are sourced from lists or other application forms, transcribed onto paper, and publicly displayed before distribution. Addressing these shortcomings, ongoing research centers on crafting an efficient web-based student management system that streamlines operations, saving time and resources while enhancing security. This innovative system is grounded in qualitative research, resulting in a multi-user platform built on web technology. It adopts the MVC architecture, utilizing PHP for development, and seamlessly integrates with the Apache Tomcat server and MySQL database management system, ensuring a robust and efficient solution.

Keywords: Information System; Results; Students.

II. Introduction

The Student Result Management System offers efficient, secure, and flexible web and mobile-based solutions, catering to swift service delivery. This project aims to automate the generation of student results, incorporating both a mobile app and a website. A comprehensive database manages activities and relevant information, with the front-end displaying data like results and reports. Aside from details about the system itself, the website offers additional content.

Functioning as a communication hub for students, teachers, guardians, and administrators, the PHP-based system boasts graceful handling of various functions. This comprehensive solution, built on the MVC

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architecture, ensures scalability and configurability. It presents an alternative to traditional paper-based exam result distribution in educational institutions.

Though the online result management system project in PHP brings advantages, it also has drawbacks. It fortifies the result management process by providing a secure database for storing, evaluating, and publishing candidates' scores online. Students gain online access to their results, reducing conventional result management issues.

The primary goal of the system is to furnish students with precise and crucial results. Faculty and staff can also modify and assess students' marks. This project streamlines result distribution, making exam results readily available to students. Utilizing PHP and MySQL, the student result management system employs a PHP script to track each student's academic status, storing grades per subject and grade level.

Developed using best practices from a local secondary school, this system optimizes student record management. It empowers students and institutions to easily access and analyze results. Notably, a result analyzer ensures secure result display, offering varying privileges based on user roles.

The current manual process for obtaining student information poses challenges. Administration handles information requests, leading to delays. Students face limited access to course and result-related data. The previous practice of managing grades in Excel had drawbacks, including time consumption and difficulty in long-term data storage.

The Student Result Management System aims to organize student, result, subject, teacher, branch, section, and year details. This project caters to administrative and teacher needs, minimizing manual work. The PHP-based application handles courses, exams, and grades, offering comprehensive management.

Automation boosts efficiency, and the user-friendly interface of the PHP-based system surpasses the existing approach. Access control ensures authorized users gain appropriate access, facilitating swift communication and information updates. The adaptable PHP system can be modified if needed.

After successful development, testing, and certification, the Result Processing System emerged, driven by PHP and MySQL. This documentation-rich PHP system trumps manual methods with advantages like reduced processing costs, streamlined transcript generation, and eradication of duplicate records.

III.Existing Method:

In the previous approach, we employed regular sheets for the results management process. However, this method lacked security, potentially exposing students' results to unauthorized access. These sheets were vulnerable to manipulation, creating a risk that anyone with access could alter results at will. This scenario could trigger significant issues for students relying on the management system.

Disadvantages:

- Security issues
- Data privacy issues
- All student's data can be editable

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IV. Proposed Method:

In the new approach, we've adopted an advanced method to enhance data security. Only administrators have access to all accounts, ensuring that students' data remains protected within the system.

The primary goal of the Student Result Management System is to efficiently organize various aspects related to students, results, subjects, teachers, branches, sections, years, and more. For instance, it encompasses comprehensive information about students, subjects, semesters, and more. This system is designed for administrators and teachers, granting them exclusive access. The project aims to minimize manual workload associated with managing student results across different classes, using an application program tailored to college requirements. It also tracks details about subjects, classes, semesters, examinations, and courses. The system stores crucial information about results, exams, students, activities, and grades.

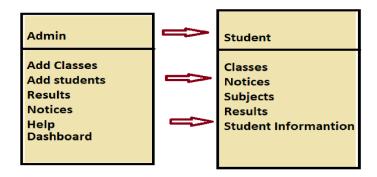
The benefits of the Student Result Management System are as follows:

- 1. **User-Friendly Interface:** The web-based PHP project offers a user-friendly interface, making it easy for faculty to navigate and utilize.
- 2. **24/7 Availability:** As long as a computer is connected to the network, the online result management system is accessible at any time.
- 3. **Simplified Calculation:** The calculation process is straightforward and can be carried out by anyone with ease.
- 4. **Efficient Information Storage:** The student result processing system provides a straightforward way to store essential information securely.
- 5. **Enhanced Quality:** The system has led to an improvement in the quality of the process, enhancing overall performance.
- 6. **Time and Effort Saving:** On the maintenance side, the process is time-efficient and requires less effort to complete tasks effectively.

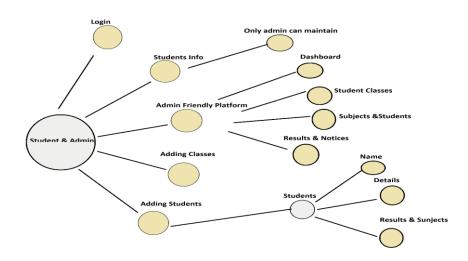
Advantages:

- Increasing Security
- No manual work
- Students can easily access

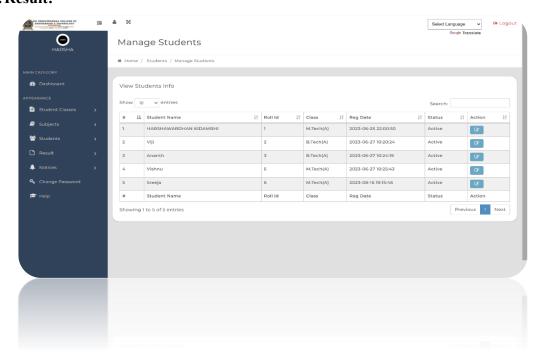
V. Model/Architecture:



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VI. Result:



VII. Conclusion:

In summary, the Student Result Management System project has brought about a significant transformation in the way student results are managed. This implementation has resulted in notable improvements in efficiency, accuracy, and access when it comes to handling and distributing student performance data. By automating the result generation process, introducing data validation checks, and offering user-friendly interfaces, this project has effectively minimized errors, reduced manual work, and ensured the trustworthiness of the data. Furthermore, the system's analytical capabilities have empowered educators and administrators to make informed decisions through thorough performance analysis and trend

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monitoring. The incorporation of communication features has also enriched collaboration and transparency among teachers, parents, and students. Overall, the Student Result Management System project has successfully modernized and simplified the management of results, setting a commendable example for other educational institutions to follow. This not only enhances administrative processes but also elevates stakeholder contentment.

The architecture of the system was thoughtfully designed to facilitate future modifications with ease. From the development process, several conclusions can be drawn:

- **Automation Boosts Efficiency: ** The entire system's automation greatly enhances efficiency.
- **User-Friendly Interface: ** The project's user interface is intuitive and superior to the existing system.
- **Access Control:** It offers appropriate access based on user permissions.
- **Overcoming Communication Delays: ** It effectively overcomes communication delays.
- **Effortless Information Updates: ** Updating information becomes simpler.
- **Emphasis on Security and Reliability:** The system excels in system security, data security, and reliability.
- **Room for Future Enhancements:** The system is designed to accommodate future modifications if needed.

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