ANALYSIS OF STUDENT ACADEMIC PERFORMANCE

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ABSTRACT

This project focuses on designing and developing a **Analysis of Student Academic Performance** to simplify and improve the way student results are recorded, managed, and accessed. In many schools and colleges, managing results manually is time-consuming, error-prone, and inefficient. This system aims to solve those problems by creating a digital platform where administrators and teachers can easily enter and update students' marks, and students can view their results online. The system allows secure login for different users (admin, student), automated calculation of grades, and generation of result reports. It helps reduce paperwork, improves data accuracy, and ensures fast access to academic records. This research also highlights the benefits of digital result systems in improving transparency and efficiency in educational institutions.

Keywords: Student Result, Result Management, Academic Records, Digital System, Automation, Database Management, Grading System, Web-based Application, Education Technology, Result Processing, Online Result Portal, Information System, Secure Login, Data Accuracy, School Management System.

1. INTRODUCTION

In today's digital era, educational institutions are increasingly shifting from manual processes to automated systems to improve efficiency and accuracy in academic operations. One of the most critical components of any educational institution is the management of student results. Traditionally, result processing has been handled manually, involving significant paperwork, time consumption. To overcome these challenges, the development of a **Analysis of Student Academic Performance** has become essential. A Student Result Management System is a software-based solution designed to automate the collection, processing, analysis, and dissemination of student performance data. The system allows administrators and students to efficiently manage academic records and generate accurate reports with minimal effort. By integrating technologies such as **cloud computing, databases, and web-based interfaces**, the system ensures real-time access, data security, and scalability.

2. METHODOLOGY

Data Collection Method

Primary

Information was gathered through **interviews and questionnaires** with teachers, students, and administrative staff to understand the existing challenges in result processing and record management.
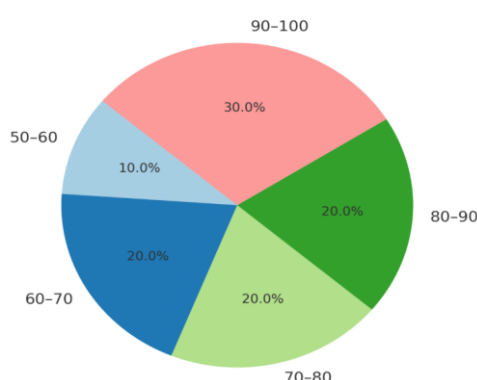
Secondary

Data were collected from **academic journals, research papers, and online articles** related to student information systems, database management, and automation in education.

3. RESULTS AND DISCUSSION

The table shows that most students performed well, with **30% scoring 90–100 marks**. Around **60%** of students scored between **60–90 marks**, indicating consistent academic achievement. Only **10%** of students scored **50–60 marks**, showing a need for extra support. Overall, the result distribution reflects good performance and effective teaching methods.

Marks Range	Percentage of Students (%)
50–60	10%
60–70	20%
70–80	20%
80–90	20%
90–100	30%

Pie Chart of Student Marks Distribution

4. CONCLUSION

In today's fast-growing educational environment, managing student academic records efficiently is very important. This research focused on the development and implementation of a **Analysis of Student Academic Performance** that aims to replace traditional, manual methods of recording and processing results. Manual result systems often lead to delays, errors, data loss, and increased workload for school staff. Through this project, we have shown that a digital system can significantly reduce these problems by offering a faster, more accurate, and user-friendly way of handling student results. The proposed system allows teachers and administrators to securely input marks, automatically calculate grades, and generate result reports. Students can easily access their results online without waiting for printed report cards. The system also ensures better data security through login authentication and controlled access, making the process more transparent and reliable.

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