School Management System

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Introduction

The School Management System (SMS) operates as an internet-based application which seeks to boost school administration while improving overall communication methods. The platform functions as a single center that enables parent-teacher communication and school management tasks through effortless sharing methods between school community members. The program development basis derives from standard challenges faced in traditional school administration such as manual data handling and inferior communication together with insufficient tracking of student progress and school activities. The majority of student time goes toward obtaining study-related messages whereas teachers face excessive repetitive administrative workloads. The tracking abilities for both student progress and school activities are unavailable to parents through standard tools.

Aims

- •To design and develop a user-friendly School management web application.
- •To increase communication between student, teacher, parents and administration.
- •To show transparency between students, parents, student and administration.
- •To reduce physical administrative works through automation.
- •To create a platform to manage academic record, attendance, results.
- •To create a platform where parents can get or buy stationery for their children

Objectives

- •To create a role based access for administrator, teacher, student and parents.
- •To develop features like attendance tracking, communication tool, etc.
- •To enable parents to monitor their children's academic progress, attendance, buy stationery.
- •To protect all personal and academic data stored.
- •To create a shop where parents can buy stationery.
- •To create a safe payment method for parents.
- •To test the application to insure reliability, functionality and security.

Literature Review

- 2.1.1 School Administration through the School's Electronic Management System
- A study on the use of Electronic School Management Systems (eSMS) in a Kosovo school found significant improvements in administrative efficiency. The eSMS automated procedures, reducing mistakes and reliance on paper. Teachers appreciated its user-friendly interface and time-saving features, which enhanced communication and planning. Despite initial technical challenges and the need for additional training, the system proved beneficial in improving school operations and communication among staff, parents, and administrators. The research emphasized the importance of standardizing systems and training for successful implementation (Drini, 2023).
- 2.1.2 The Effectiveness of Google Classroom for Online Science Learning
- This literature review examined Google Classroom's role in supporting online science education during the COVID-19 pandemic in Indonesia. Google Classroom helped teachers manage classes, administer tests, and conduct virtual labs, addressing the challenges of remote learning. While it was user-friendly, there were issues with student engagement and technical difficulties. Nevertheless, it was an effective tool for both teaching and learning science online (AWidiyatmoko, 2021).
- 2.1.3 Canvas Adoption: Assessment and Acceptance of the Learning Management System
- A study on Canvas, a web-based learning management system (LMS), surveyed 214 students to assess their acceptance of the platform. Using the Technology Acceptance Model (TAM), the study found that ease of use and positive attitudes were key factors in students' motivation to use Canvas. Technical support and training were also important for successful adoption. Students viewed Canvas as a valuable tool for enhancing learning, though the study was limited by sample size and phase of implementation. The research suggested further studies with more diverse samples and additional factors like cultural influences (Julius G. Garcia, 2020)

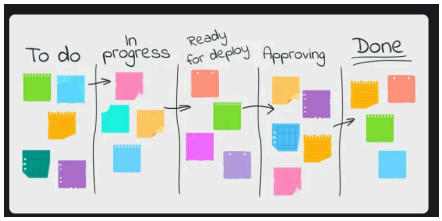
ACADEMIC QUESTION

How can a School management system organize administrative progress, reinforce communication and boost overall performance of School and similar organization?

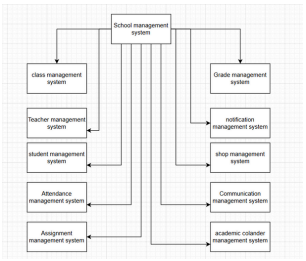
Testing approach

- Black box testing

PROJECT PROCESS



Artifact



Conclusion and Future scope

- The system provides a centralized platform to manage all school-related operations.
- Each sub-system (e.g., student, teacher, attendance, etc.) works independently but integrates with the main system.
- Enhances efficiency by automating daily tasks like attendance, grading, and notifications.
- Promotes better coordination between students, teachers, and administration.
- Allows easy data access, boosting transparency and informed decision-making

Future scope

- Cloud Hosting: Scale the system across multiple schools or branches.
- E-learning Integration: Add LMS features like video lectures, quizzes, and notes.
- Chatbot Integration: Automate FAQs and communication via smart bots.
- Multi-language Support: Localize the platform for various regional languages.
- Finance Module: Include fee management and online payment systems.