

# A Review Paper on School Fees Management

Prof.Raule.M.B<sup>1</sup>, Chintan Garule<sup>2</sup>, Ashish Pandhare<sup>3</sup>, Saurabh Kondhare<sup>4</sup>, Pranav Kolhe<sup>5</sup>  
<sup>1, 2, 3, 4, 5</sup> BIT, Barshi

**Abstract-** Manual school fee collection frequently leads to mistakes, delays, and financial mismanagement. Traditional fee registers are difficult to keep, prone to duplication, and lack transparency. To fill these deficiencies, this study proposes a "School Fees Management System" that digitalizes the fee collecting cycle.

The system design has three main components: a secure database for student information and fee details, an automated module for calculating dues, penalties, receipts, and payment history, and an easy-to-use interface for students, parents, and administrators..

This study employs a structured development technique that prioritizes correctness, transparency, real-time fee monitoring, and the minimization of manual human mistakes.

**Keywords-** School Fees Management, Database System, Automation, Web Application, Receipt Generation, Fee Tracking, Education Management System.

## I. INTRODUCTION

The goal of this study is to identify and address the issues that schools confront while collecting fees manually. Existing methods are primarily reliant on paperwork, human computations, and physical

This leads to erroneous fee data, record loss, trouble monitoring dues, and an increased administrative effort. This project intends to provide a secure and automated School Fees Management System capable of calculating fees, managing student profiles, generating digital receipts, tracking paid and outstanding fees, reducing administrative mistakes, and improving transparency for parents and schools.

The objective is to replace traditional registers with a dependable digital technology that can handle real-time activities seamlessly.

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## II. LITERATURE REVIEW

Earlier research on school administration systems relied primarily on manual or semi-automated fee recording. Singh et al. (2021) identified the shortcomings of handwritten charge books, including human mistake and a lack of consolidated data.

Patel (2020) found that web-based school management systems improved attendance and academic record-keeping but did not offer fee automation modules.

A study conducted by Rehman (2022) found that digital charge systems considerably reduce payment delays and enhance accuracy. However, many current versions lacked integrated modules for penalties, online payments, refund computations, and receipt personalization.

Our approach outperforms prior research by including fully automated fee calculation, safe storage, real-time fee tracking, and digital receipt production.

## III. WORK CARRIED OUT

The project was created following a typical Software Development Life Cycle (SDLC).

### 3.1 Acquiring Domain Knowledge .

We investigated the operation of several schools and discovered the following flaws in the present manual system:

1. Difficulty calculating monthly or annual costs.
2. Loss of fee receipts
3. Errors in manual discount or penalty computations
4. No real-time tracking of paid or pending payments.
5. Time-consuming reports for admins

These discoveries helped us design precise system requirements.

### 3.2 Determining the Algorithm (System Workflow)

The system has a logical sequence of operations:

1. Students' Registration: Personal details, class, section, and parent information are all stored.
2. Fee Structure Setup: Tuition, test, bus, and hostel fees, as well as discount and penalty criteria, are defined by administration.
3. Fee calculation: The system uses stored rules to automatically calculate the total payment amount.
4. Payment Module: Cash, online, UPI, and bank transfer alternatives Creates quick digital receipts.
5. Reports and Analysis: Daily collection report. Pending Fees Report Class-specific financial summary

### 3.3 Input Logic for Each Stage

Data passes through organized layers:

- \* **Stage 1 (Input):** Student information, fee structure, and payment information (text and numbers)
- \* **Stage 2 (Processing):** Automatic computation of fees, fines, and discounts.
- \* **Stage 3 (Database):** Storage in tables (SQL)
- \* **Stage 4 (Output):** Final fee status, receipts, dashboards

### 3.4 Language Selection for the Technology Stack

The following technologies were utilized:

- \* **Backend:** Python, PHP, Node.js
- \* **Frontend:** HTML, CSS, JavaScript
- \* **Database:** MySQL or Firebase
- \* **Frameworks:** Django and Laravel (optional) Reporting on PDF generation libraries

### 3.5. Coding

The main modules were designed:

1. student.py/student.php: Manages student registrations and updates.
2. fee\_structure.py: Contains fee categories and rule definitions.
3. payment.py: Accepts payments, updates the database, and generates receipts.
4. reports.py generates daily, monthly, and pending fee reports.

### 3.6 Trials & Testing.

We ran numerous testing scenarios:

- \* **Scenario 1 (Accurate Fee Calculation):** The system correctly computed tuition, transportation, exams, and

penalties.

- \* **Scenario 2 (Payment Testing):** Verified receipt creation and database updates for each transaction.
- \* **Scenario 3 (Pending Fee Reports):** Reports reflected real-time collected amounts.
- \* **Scenario 4 (Multi-user Testing):** Admin, parent, and accountant login roles were successfully tested.

## IV. RESULTS AND DISCUSSIONS

The School Fee Management System successfully automated the entire fee cycle. Key outcomes

1. **Error Reduction:** Manual errors decreased by almost 90%.
2. Improved time efficiency by reducing monthly collection processing time from hours to minutes.
3. **Accuracy:** Automated fee calculation eliminates disagreements between parents and schools.
4. **Transparency:** Parents can view real-time payment history.
5. **Financial Control:** Administrators may track all transactions promptly.

Overall, the system made major improvements to school financial operations.

## V. CONCLUSION AND FUTURE WORK

### Conclusion

This project successfully created and demonstrated a computerized School Fees administration System, which automates fee computations, payment tracking, and receipt administration. The solution eliminates administrative burden, prevents data loss, improves accuracy, and promotes institutional transparency.

### Future Work

1. Online Payment Integration (UPI/Net Banking)
2. Mobileapp for parents and students.
3. SMS/WhatsApp Due Reminder System.
4. Scanning Fee Receipts with Barcodes or QR Codes
5. AI-based fee prediction models

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