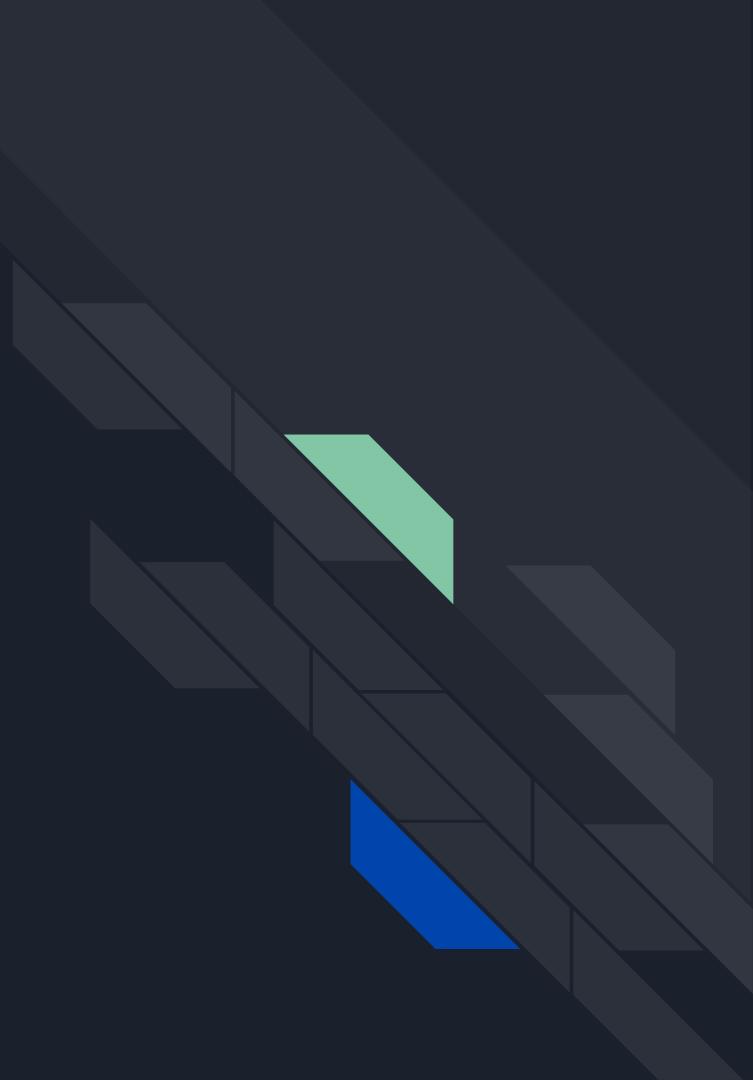




Gradings and Attendance System

Introduction

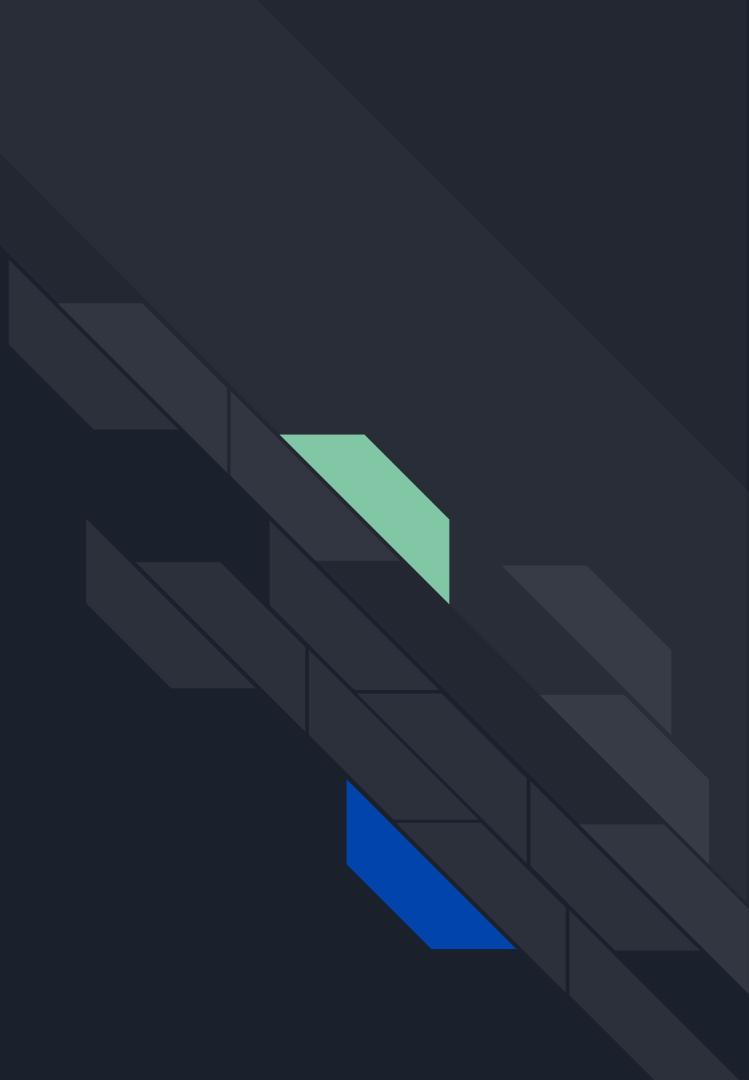




A Grading and Attendance System (GAS) is a digital tool that helps schools track student attendance and academic performance in a faster and more organized way. Instead of manually checking attendance or computing grades, the system does it automatically through apps, biometrics, and built-in grading features. It also generates clear reports and can connect with online learning platforms. When created using Python, the system becomes flexible, efficient, and easy to customize.

With this system, teachers save time, avoid mistakes and gain useful insights. Students can also easily access their attendance records, grades, and overall performance anytime, making the system reliable and convenient for both teachers and students.

Statement of the Problem

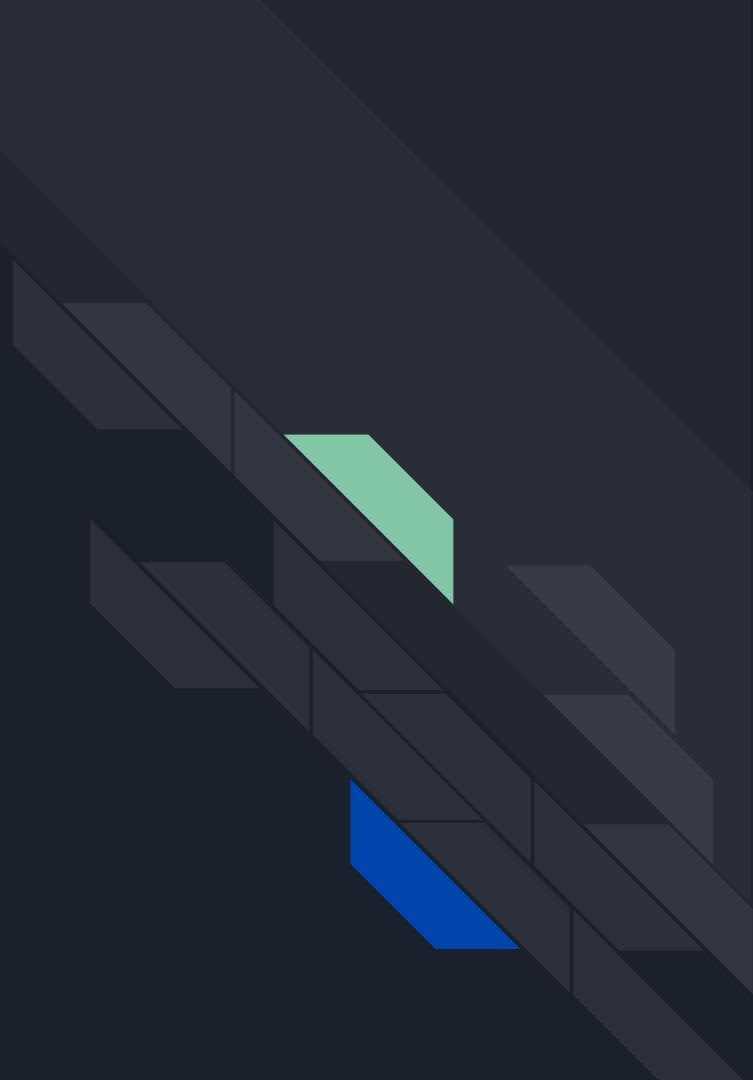




Many community schools still rely on notebooks, class cards, and manual logs for recording attendance and grades. These outdated methods often lead to misplaced records, human errors, and delays during busy periods like report card season. Because information is not always easy to access, parents struggle to stay updated on their child's performance, while teachers spend valuable time on repetitive paperwork instead of focusing on teaching.

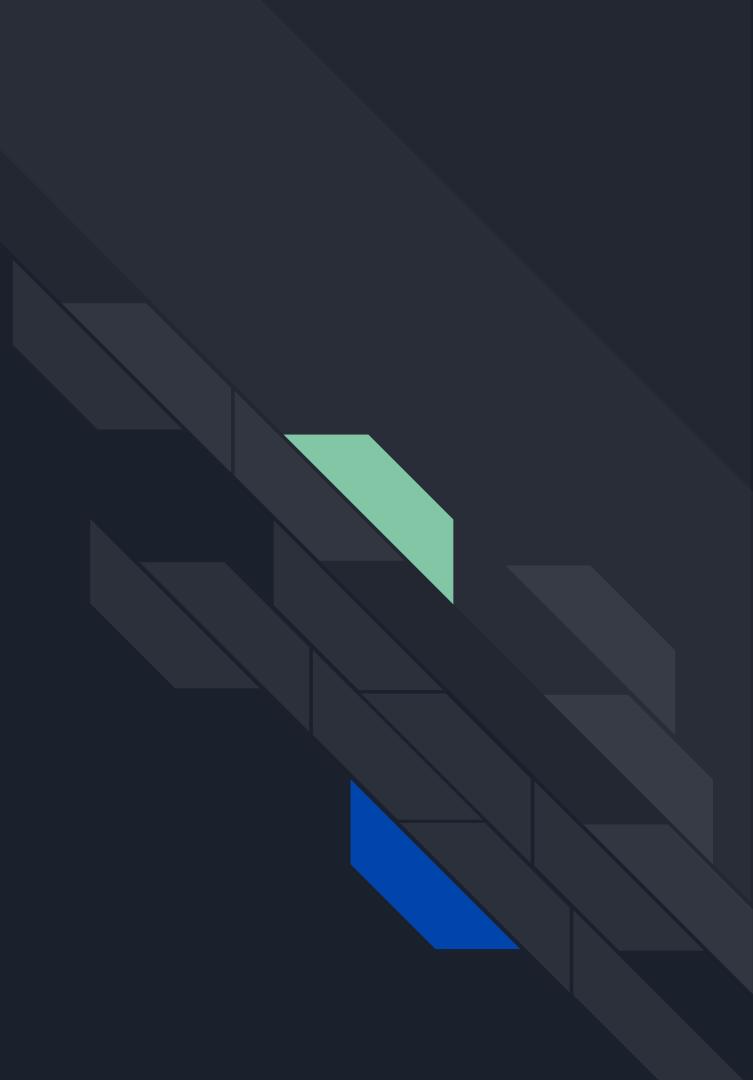
Our proposed digital Grading and Attendance System aims to solve these issues by providing a fast, organized, and reliable way for teachers to record attendance and grades. The system gives students and parents real-time access to academic progress, strengthens school communication, and reduces common manual errors. With centralized data, automated computation, and secure access for all users, the system creates a more efficient and connected school community.

Objectives of the Study



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- To reduce teachers' workload by minimizing repetitive manual tasks.
 - To provide parents with timely and accessible updates on their child's academic progress.
 - To help students monitor their own performance and encourage responsibility.
 - To eliminate common errors caused by manual grading and record-keeping.
 - To create a secure, organized, and centralized digital space for school information.
 - To strengthen communication and transparency within the school community.

Scope and Limitation





The system focuses on managing essential academic records such as student information, grades, and attendance. It allows teachers to store student profiles, record subject grades, and track daily attendance using a simple digital interface. All records student data, grades, and attendance are saved in organized local CSV files to ensure easy retrieval. The system is designed to simplify basic academic tasks, support teachers in monitoring student performance, and provide administrators with an organized digital record-keeping process.

However, the system has several limitations. It is desktop-based, meaning it cannot be accessed online or used remotely by parents or teachers. Data entry is fully manual, increasing the possibility of errors, and the system does not generate advanced reports, graphs, or automated notifications. Stored data is not encrypted and lacks backup protection, posing a risk of data loss. Additionally, the system does not support multi-user access, which may limit its effectiveness in larger schools.

System Requirements





Hardware Requirements:

- Processor: Intel Core i3
- Memory (RAM): 8GB
- Storage: Storage: 477 GB (188 GB used)
- Monitor: Any display that supports text output (console view)
- Keyboard: For entering employee IDs and commands
- Optional: Mouse



Software Requirements:

- Operating System: Windows 10 or higher / Mac OS
- Programming Language: Python
- Code Editor: Visual Studio Code
- Console or Terminal: Command Prompt, PowerShell or Terminal

Flowchart

