

# Synopsis Presentation on





## CHECKIT

Click. Check. Done.

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#### 1. Introduction



#### 1.1 Overview

CheckIT is a web-based ERP platform developed to modernize and automate academic management, particularly attendance and communication. It integrates Google Forms and Sheets, enabling a streamlined and accessible interface for students, faculty, and administrators.

#### 1.2 Purpose

- Automate student attendance tracking
- Enhance academic communication
- Provide centralized access to notes and timetables
- Issue real-time alerts and reminders
- Encourage efficient academic management



## 2. Literature Review



Sr. No.	Solution/ System	Key Features	Limitations/ Drawbacks
1	Basic Spreadsheet Systems	Widely adopted due to simplicity	Prone to manual errors; time-consuming data entry
2	Biometric Attendance Systems	High accu- cacy and tamper-prof verification processes	Require signific- ant initial investment in hardware and maintenance
3	Google Forms	Quick, setup: ease of use	Slower response for real-time updates if not optimized
4	Smart Card Attendance Systems	Quick, automated check-in and check- out proces- ses	High infrastructural cost for readers and smart cards



#### 3. Problem Statement





Manual attendance systems are outdated, inefficient and error prone.



No centralized platform for notes, reminders or timetable.



Lack of real-time alerts for students and faculty.



Students cannot easily manage tasks or receive updates promptly.



Data inconsistency due to scattered tools.



## 4. Proposed Solution



- ✓ **Digital Attendance:** Students mark attendance via Google Forms, reducing manual errors and saving time.
- ✓ **Real-Time Data Management:** Attendance data is synced instantly with Google Sheets and stored securely in MySQL.
- ✓ Smart Notifications: Sends alerts to students for low attendance and reminds faculty about upcoming lectures.
- ✓ **Role-Based Access:** Admin, faculty, and students each have personalized access to relevant features.
- ✓ Academic Resource Sharing: Faculty can upload notes and class timetables for easy student access.
- ✓ Task & Reminder Module: Users can create to-do lists and receive reminders to stay organized.



## 5. Objectives



- **Dynamic Class Selection** Faculty chooses a class from a dropdown menu, triggering the system to load the corresponding student roster in real time.
- Real-Time Attendance Marking Once students are loaded, faculty can directly mark attendance (e.g., via checkboxes or toggles) on the same interface, eliminating the need for separate forms.
- ► Automated Data Storage The attendance data is automatically recorded into subject-specific sheets or sections, which simplifies subsequent analysis and record-keeping.
- Academic Data Integration The system features additional modules, such as a class timetable and an academic calendar with holidays, providing a holistic academic management environment.
- Role-Based Access Control Faculty have full editing rights to update records, while students have a view-only version of the compiled attendance for transparency.



## 6. Theoretical Analysis



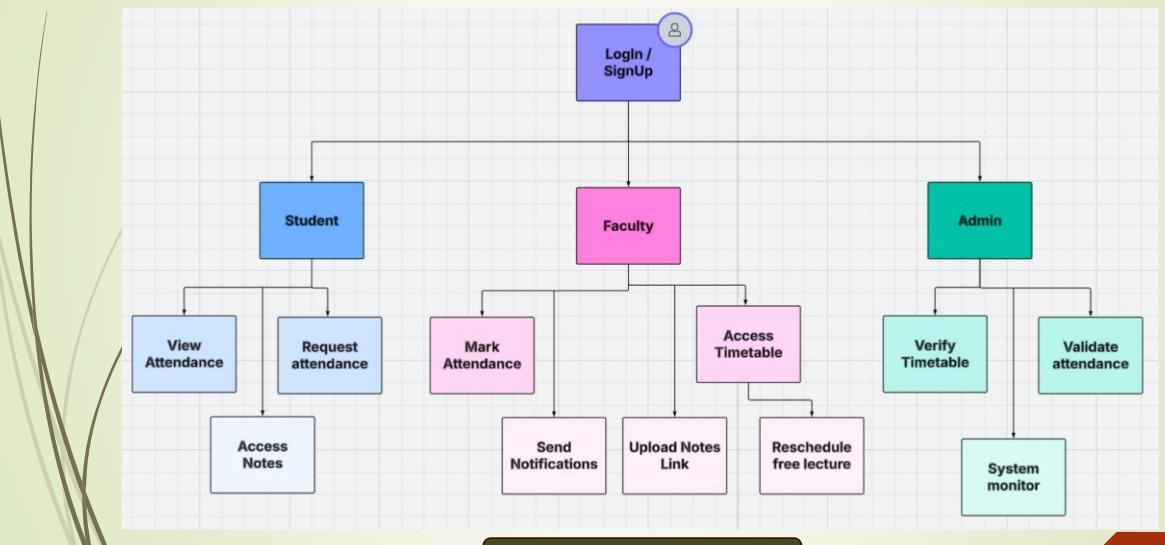


Fig.1. Flow Diagram





#### 6.2 Hardware Requirements

- CPU: Multi-core processor
- RAM: Minimum of 8GB, but for large user bases, 16GB or more.
- SSD storage for faster read/write speeds, around 250GB or more depending on content volume.
- High-speed internet connectivity to ensure fast response times and reliable service.

### 6.3 Software Requirement

- Frontend HTML5, CSS3, JavaScript, ReactJS, Tailwind.
- **Backend** Node.js, Apache
- APIs for synchronization with Google Sheets.

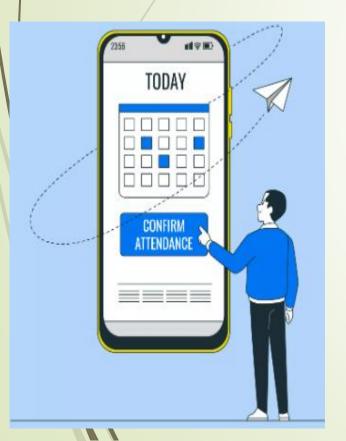




## 7. Applications



**Scalability for Institutions:** Adaptable to various sizes of academic institutions, allowing for easy upgrades and integration with other administrative systems.



Analytical Reporting: The centralized system can easily generate attendance reports and analytics, supporting performance evaluations and institutional decision-making.

Error Reduction and Efficiency: The dynamic student roster integration minimizes manual data entry errors and streamlines the overall process, saving administrative time.

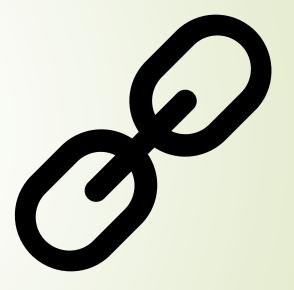
**Real-Time Attendance Recording:** Faculty can quickly load a class's student roster and mark attendance directly, ensuring immediate data capture and eliminating delays.



## GitHub Link



https://github.com/Saloni-Jain25/checkit





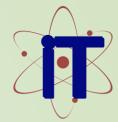
#### REFERENCES



- Sonawane, R. K., & Singh, A. T. (2023). *Importance and Impact of Attendance Management System: A Literature Review.* International Journal of Advanced Research in Science, Communication and Technology, 3(5), 328.
- Ali, N. S., Alhilali, A. H., Rjeib, H. D., Alsharqi, H., & Al-Sadawi, B. (2022). Automated Attendance Management Systems: Systematic Literature Review. International Journal of Technology Enhanced Learning, 14(1), 37–65.
- Soundarya, S., Ashwini, P., Rucha, W., Gaurav, K., & Patil, M. S. A Review Paper on Attendance Management System Using Face Recognition. International Journal of Computer Research Trends.







# Thank You

Any Queries?