

# **Government College for Men:: Kadapa**

Autonomous & NAAC accredited at "B" Grade

### Andhra Pradesh-516004



# Digital Tools for Academic Monitoring and Assessment

### 1. Title of the Practice:

Digital Tools for Monitoring of Academic & Administrative Activities

### 2. Objectives of the Practice:

The primary objective of this practice is to leverage digital tools to enhance the efficiency and accuracy of academic monitoring and assessment in higher education. The underlying principles involve integrating technology to streamline student and faculty teaching learning process and also management of academic activities. By doing so, the practice aims to improve the overall learning experience, facilitate timely interventions, and provide a comprehensive view of student & faculty performance.

### 3. The Context:

The implementation of this practice stemmed from the growing complexity of academic data management and assessment processes in Indian higher education. The need to address diverse learning styles, ensure data integrity, and accommodate the large number of students and faculty prompted the adoption of digital tools. Additionally, the practice sought to bridge the gap between traditional assessment methods and contemporary learning expectations.

### 4. The Practice:

In response to the challenges faced, the institution introduced a comprehensive digital platform that integrated learning management systems, analytics tools, and assessment modules. This platform facilitated real-time tracking of student progress, automated assessment processes, and provided instant feedback. Its uniqueness lies in the adaptability to various academic disciplines and the ability to customize assessment parameters. The constraints included the initial resistance to technology adoption among faculty and students, as well as infrastructural limitations in certain regions. The details and expected outcomes of the apps used are discussed below.

### a) Classroom Teaching Learning Process Monitoring App (C-TLPM App)

The key features of this app are college-wise timetable mapping, student enrollment data, mandatory data upload by lecturers after every class with class room photograph. The expected out comes are ensured lecturers and students attendance, timely corrective measures for poor attendance, monitored conduct of classwork, proper recouping of deviated classes, improved academic performance by monitoring of faculty performance by the Empowered Principals.

### b) Internship Monitoring App (I-MAPP)

The key features of this app are database of industries, mapping students to industries for internships, mentoring and on-site monitoring of internship, monitoring student weekly tasks by mentors, trainers, and principals, task assignment with alerts for students, mentor feedback mechanism. The expected out comes are provided internship opportunities with industry, monitored internship status of every student, efficient industry-student collaboration, enhancements in industry-student engagement and identified lapses and gaps for focus.

### c) Facial Recognition Biometric Attendance System (F-MAPP)

The key features are students and faculty mark biometric attendance through face or fingers, real-time data analysis, user-friendly interface for monitoring of attendance. The expected out comes are improved Accountability (foster a sense of responsibility among students and faculty, enhancing overall attendance compliance), time-efficient reporting (automate attendance reporting for administrators, saving time and facilitating efficient attendance trend analysis), attendance monitoring anywhere (enable remote attendance monitoring, offering flexibility for administrators and faculty).

### d) Grievance Redressal Management App (G-MAPP):

Facilitating seamless grievance submission, G-MAPP ensures quick and transparent redressal mechanisms with guaranteed follow-up. users, including staff and students, can easily file grievances with a simple click, providing direct access to administration. Features include 24x7 online access, rapid escalation to concerned authorities, and real-time tracking via dashboards at various levels. The outcomes encompass faster redressal, enhanced class conduct, increased accountability, and improved transparency in administration.

### e) e-Office Management:

The Commissionerate of Collegiate Education employs the National Informatics Center's e-Office functionality, ensuring easy, transparent, and prompt file disposal within set timelines. staff guidelines promote the creation, sharing, modification, and tracking of e-files seamlessly. Functionalities involve attaching enclosures through uploads and facilitating collaborative actions such as sharing, editing, and providing remarks. this streamlined e-office system enhances administrative efficiency and transparency in file management.

### f) Fee Management APP (F-MAPP)

Student fee will be paid through F-MAPP through online mode. So that is easy for accountant to maintain the fee details and accountability.

### g) Academic Activities Information Management System (AAIMS)

The IQAC has developed Academic Activities Information Management System (AAIMS) for data collection, data analysis, data reporting and maintenance of dash boards.

### 5. Evidence of Success:

The implementation of the digital tools resulted in a significant improvement in assessment accuracy and efficiency. Comparative analysis showed a reduction in assessment turnaround time by 30%, with a simultaneous increase in the quality of feedback. Student engagement metrics indicated a positive correlation between active use of the digital platform and academic performance. The institution observed a 20% decrease in administrative overhead related to data management. These outcomes underscore the success of the practice in enhancing both the teaching and learning experience.

### 6. Problems Encountered and Resources Required:

Challenges included initial faculty apprehension, technical glitches during the implementation phase, and the need for substantial training. Adequate resources, including funding for technology infrastructure and continuous professional development, were essential. Faculty training programs and awareness campaigns helped mitigate resistance, and ongoing technical support addressed operational challenges. Continuous monitoring and periodic updates were necessary to ensure the sustainability of the digital tools.

# 7. Notes (Optional): For institutions considering a similar digital transformation, it is crucial to foster a culture of technological readiness through workshops and ongoing support. Collaboration with industry experts in educational technology can provide valuable insights. Emphasizing the scalability and adaptability of the digital tools ensures long-term success. Additionally, fostering a collaborative environment for feedback and improvement contributes to the continual enhancement of the practice.

### TECHNOLOGY ENABLED GOVERNANCE

For effective administration of colleges at state level, CCE has developed five (5) Apps which are intended to cover the major administrative aspects of the department. They include two administrative Apps and three academic apps. Real Time monitoring of these activities from a state level dashboard is an added advantage of these interventions.

### 1. ACADEMIC RELATED

### a) C-MAPP (Teaching Learning Process App)

Digital initiative by the department introduced during 2020-21 (July 2021) to monitor online/offline Teaching learning Process during the COVID-19 second wave. It is available in two forms, Web Application for Desktop Users and Mobile Application. All the faculty of GDCs across the state are using TLP App to report and monitor teaching learning progress daily. Every College prepares course-wise timetables and map them to the respective teachers through the principal's dashboard of Web Application.

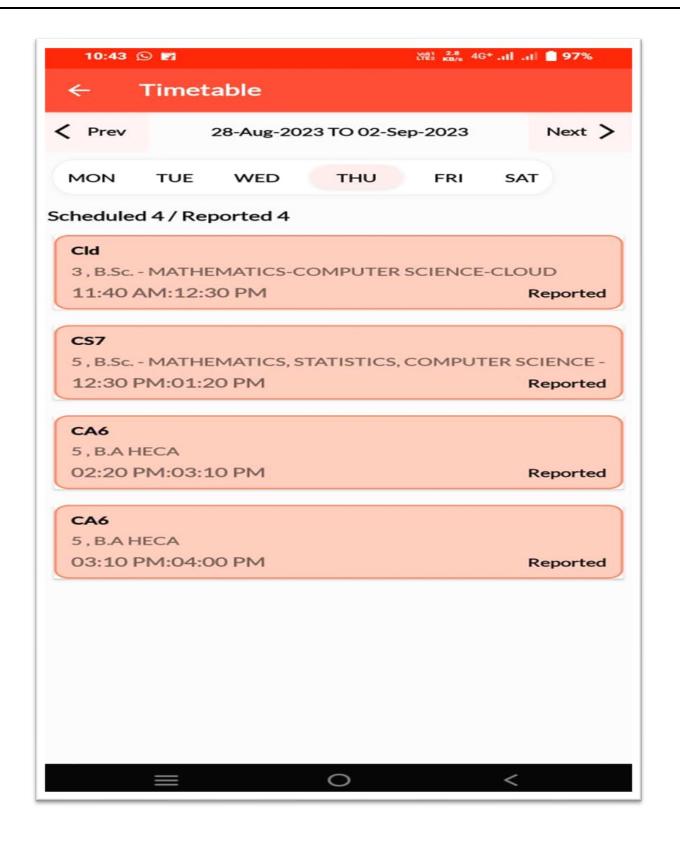
### **Features:**

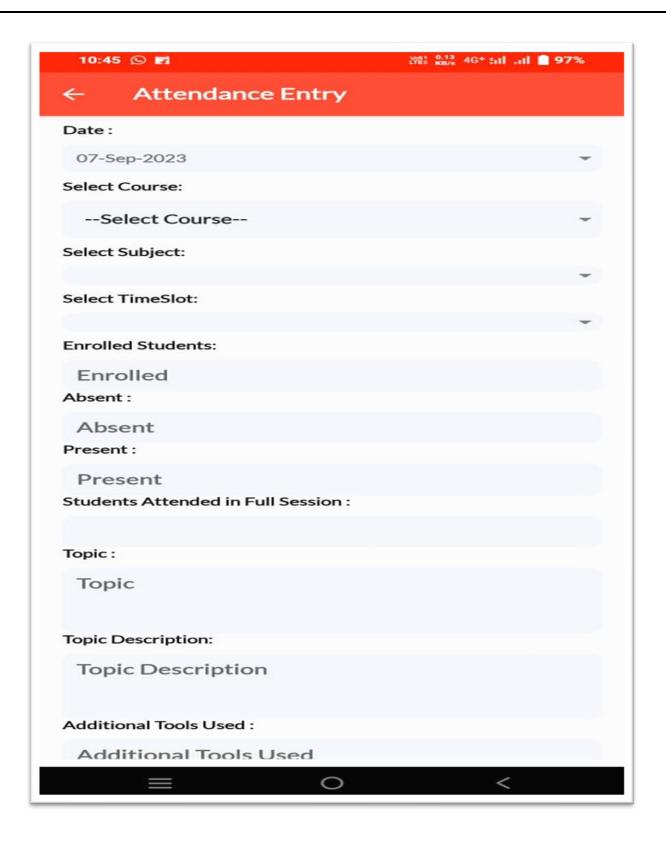
- ➤ College wise Timetable is mapped
- > Student enrolment data is prepopulated
- ➤ After every class, Lecturer must upload the data

### **Outcomes:**

- > Lecturers and students' attendance is ensured
- ➤ Corrective measures are being taken for poor attendance
- Conduct of classwork is monitored.
- Deviated classes are being properly recouped
- ➤ Academic Performance is accounted for
- ➤ Phenomenal increase witnessed in the academic performance
- > Principals have been empowered
- Timetable Mapping to lecturers and corresponding sections/classes.
- Attendance entry of the students.
- Transfer Class from a lecturer to another lecturer as per dynamic requirements.
- ➤ Rescheduling of Classes for administrative flexibility
- ➤ Offline / Online mode of Class reporting to overcome network issues.
- ➤ View Reports of Individual, College, District, Zone, and State level.
- > Feedback for betterment of the functionalities











Yea1 3.36 4G till .il ■ 97%



## Reports



### Summery Dashboard

Summery details / % of Compliance / Grade of the College



### College Wise Compliance Report

College Wise Compliance Report: Shows college wise scheduled, completed and % of compliance details



### College Date Wise Compliance Report

College and Date wise % of Compliance Report: Shows college and date wise scheduled, completed and % of compliance details



### Attendence Log History

College and Date wise Attendance log history



### Logged In Users Counts

College wise Logged In Users Counts



### Work done Statement

College & Teacher wise Work done Statement







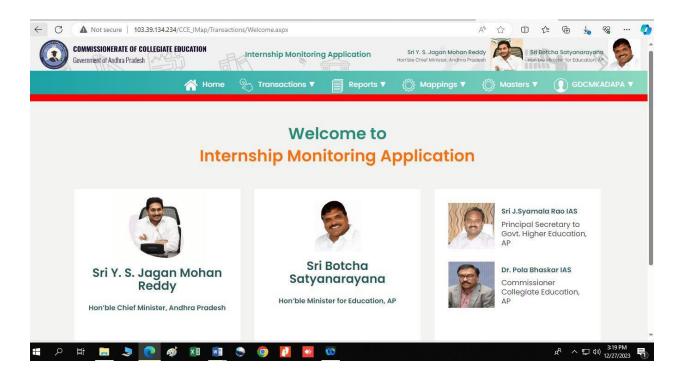
### b) I - MAPP (Internship Monitoring APP)

Internship is mandatory as part of revised CBCS curriculum 2020-21, which is a tough task for colleges to implement alone. This Internship Monitoring App provides Internship opportunities to students with industry connect & monitors the status of every student in the state helping to easily identify the lapses and gaps to focus on. It's available in two (02) forms:

- 1. Web Application for Desktop users
- 2. Mobile App

### The I-MAPP functionalities include

- Adding industries to the Database for "Industry Connect"
- Mapping students to various industries for internships as per industry connect.
- Mentoring & monitoring the students who are doing internship on-site.
- Monitoring the student weekly tasks by the mentor, trainer, and the principal.
- To Assign tasks to the students, which will be reflected in the student login, and he/she is alerted of the daily tasks list, enabling them to submit the task report with attachments (If required in the scheduled task).
- Mentor can submit his comments on the student task report so that the student can improve himself/ herself according to the guidance.





# ← FINAL YEAR INTERNSHIP...

• FINAL YEAR INTERNSHIP B.COM (CA)-EM BATCH-II

B.Com. - COMPUTER APPLICATIONS - Sem - V - English - 5 - 3

GDC (M)(A), Kadapa YSR KADAPA

### **Batch Members Wise Status**

MAMILLA UDAY KUMAR - (OAM202100561598)



RAMPURAM VAMSI -(OAM202100568829)



MALLEPOGU CHINNA LAXMANNA - (OAM202100579134)



KODIMURTHY VINOD KUMAR - (OAM202100632214)



MUTHAYALAPATI SANTHAN MANOHAR - (OAM202100635102)



PINJARI RASHEED BASHA - (OAM202100658789)



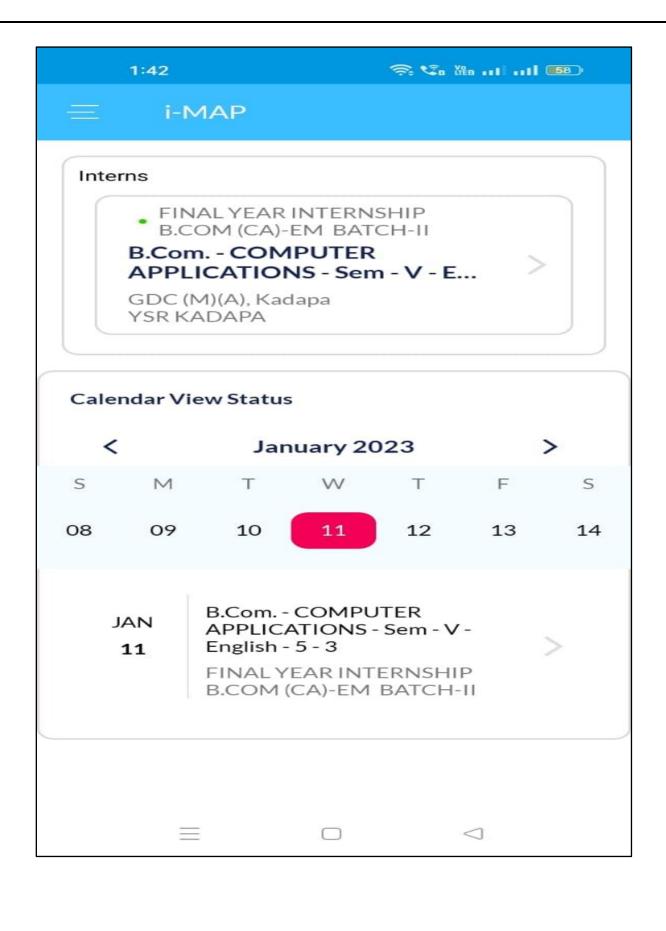
PULLURU VENKATA PRASAD -

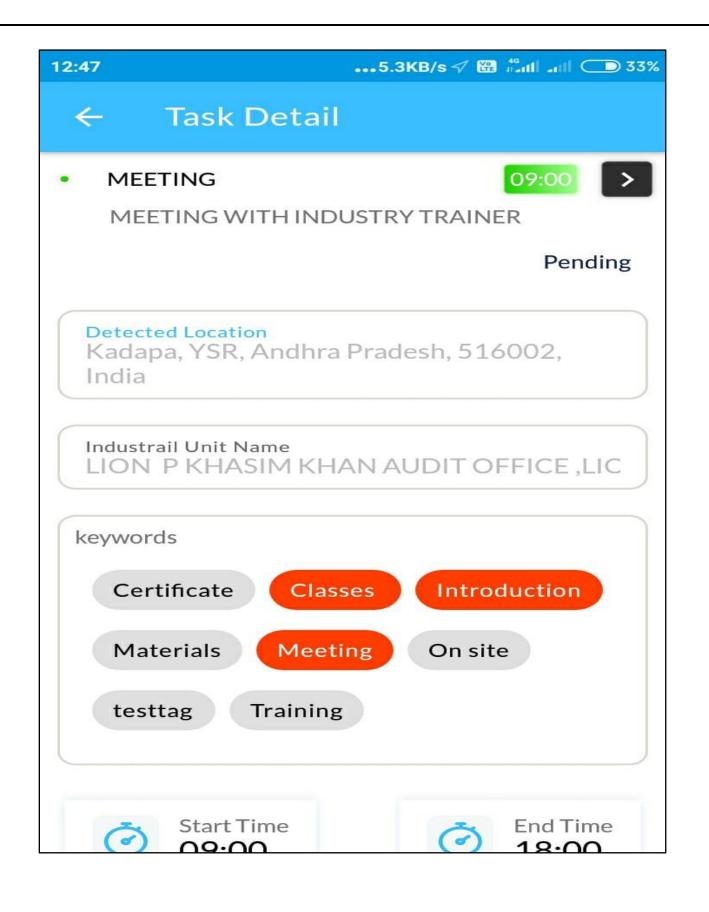


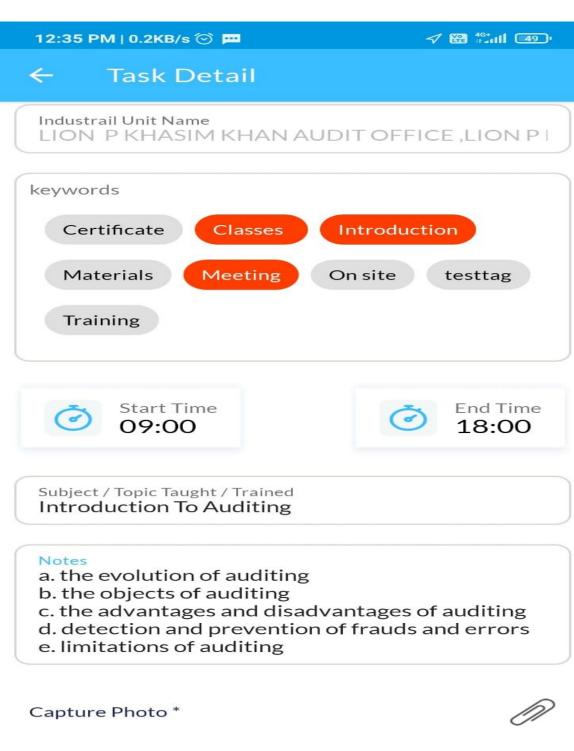


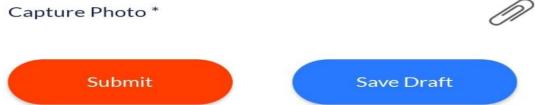










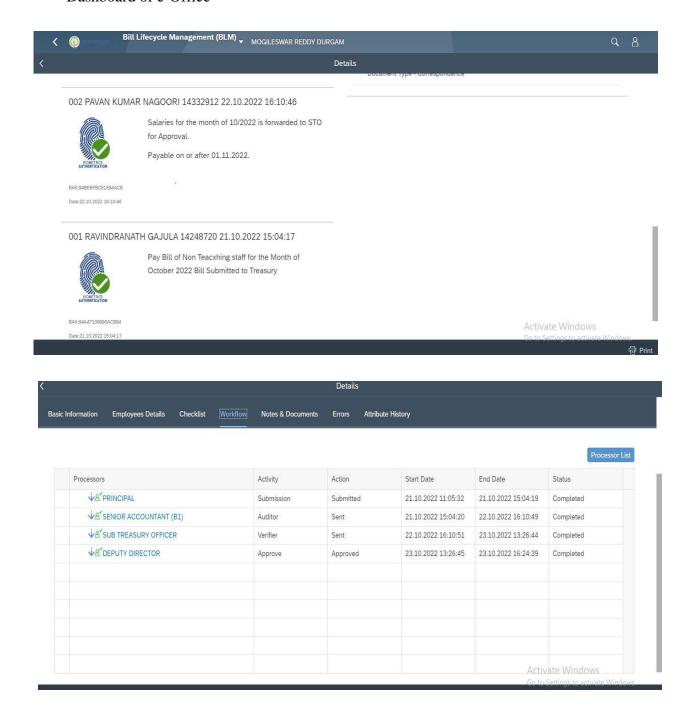


### C) e-Office Management

The Commissionerate of Collegiate Education uses the e-Office functionality of the National Informatics Center. Guidelines were issued to all the competent staff to use e-Office for easy, transparent, and quick disposal of the files within the stipulated timelines.

### **Functionalities**

- Creation of e-files with enclosures attached by uploading
- Share, Modify, Provide Remarks, Edit the e-Office files.
- Track the files with ease.
- Dashboard of e-Office



### d) G-MAPP (Grievance Redressal Management App)

The Grievance Redressal Management App facilitates easy submission of grievances to CCE enabling quick and transparent redressal mechanism with assured follow up. No grievance is left unredressed with this app. Staff & Students can file grievances with ease of a click & hope of assured redressal.

### **Features:**

- College wise Student and staff data is uploaded
- Individual can login and register grievance
- Online 24X7 access to file any grievance.
- Escalation of grievance to concerned authority within a short time.
- Tracking the redressal status of the grievances from dashboard at Individual, College, District, Zone, and State level.
- Grievance will be forwarded to concerned officer for redressal

### **Outcomes:**

- Provision of direct access to the administration
- No delay and faster redressal mechanism
- Applicant can track his/her application
- No need to visit Head Office and hence conduct of classes enhanced
- Transparency in Administration
- Increase of accountability on part of Colleges and HoD office
- Staff & Students can file grievances with ease of a click & hope of assured redressal.

The GR Mapp has two (02) forms

- 1. Web Application for Desktop users,
- 2. Mobile App

### e) FRAMS (Facial Recognition Attendance Management System)

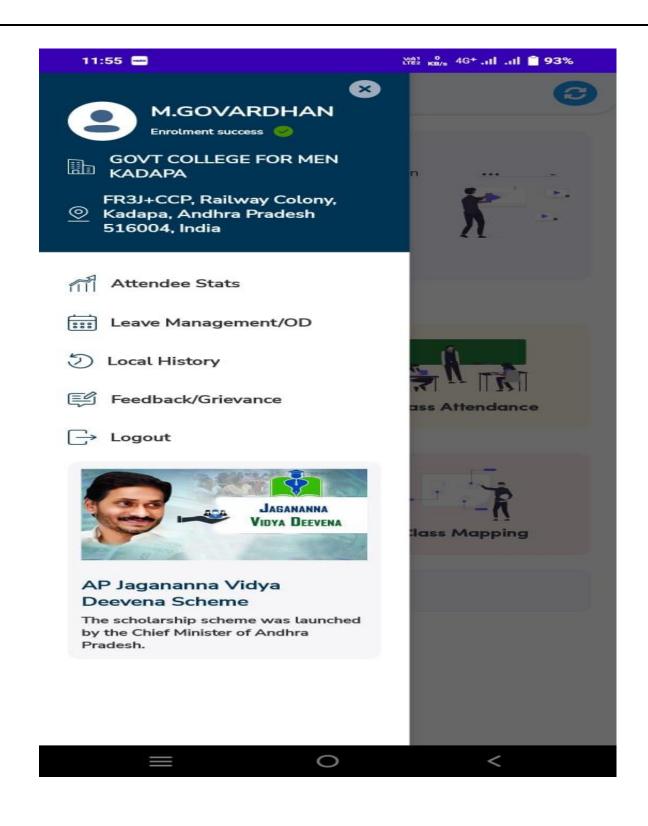
The Government of Andhra Pradesh has come up with a 'Facial Recognition' based software solution for the Management of Attendance in Govt. organizations, namely "Facial Recognition Attendance Management System (FRAMS)". The FRAMS is used to Manage / Monitor the attendance of all the Staff and Students of the Government Colleges in Andhra Pradesh under the aegis of the CCE.

### **Functionalities & Features**

- > The primary functionality of attendance capturing in FRAMS is based on 'Facial Recognition and Presence' of the staff or students.
- ➤ Mobile devices running on Android/iOS with a decent camera are the only required equipment to implement the utility at College/Classroom level.
- > Students are registered in the FRAMS APP and organized into sections/classes. Similarly, staff are also registered in the APP based on facial recognition.
- Accordingly, Lecturers are mapped to sections as per the timetable.
- ➤ A lecturer needs to capture the image of self in FRAMS to mark self-attendance followed by capturing of the class through camera.
- The system recognizes facial differences between individuals with utmost accuracy and marks attendance, for instance, it can differentiate between twins, and between stationary objects (like pictures) and people.
- ➤ It accepts the attendance within the radius of Geo-coordinates of the college.
- > Re-scanning adds the attendance of any individual(s) left out of the attendance.
- ➤ Encrypted Students' & Staff data from Janmabhoomi portal of the Govt. of A.P. is used for managing attendance.

### **Outcomes**

- ➤ Use of simple tool like a mobile device helps in averting problems that arise with biometric devices in practice.
- ➤ High accuracy of attendance management in relatively less time.
- ➤ Unbiased attendance using facial capturing and detecting.



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### Mark Attendance



### Verify Staff Authorization

Class/ Branch:

1560-B.Sc.(MATHEMATICS-COMPUTER SCIENCE-CLOUD COMPUTING)\_2\_1

1561-B.Sc.(MATHEMATICS-COMPUTER SCIENCE-CLOUD COMPUTING)\_1\_1

1564-B.Sc.(MATHEMATICS, STATISTICS, COMPUTER SCIENCE)\_2\_1

1565-B.Sc.(MATHEMATICS, STATISTICS, COMPUTER SCIENCE)\_1\_1

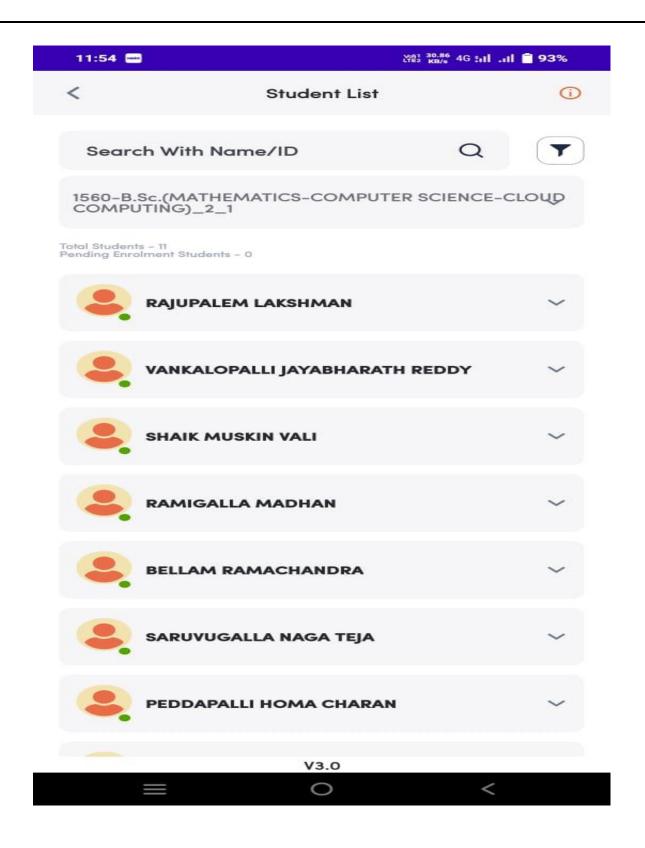
1567-B.Sc.(MATHEMATICS, PHYSICS, COMPUTER SCIENCE)\_1\_1

13102-B.Sc.(MATHEMATICS-COMPUTER SCIENCE-CLOUD COMPUTING)\_3\_1

13103-BA(HISTORY, ECONOMICS, COMPUTER APPLICATIONS)\_3\_1

13106-B.Sc.(MATHEMATICS, ELECTRONICS, COMPUTER SCIENCE)\_3\_1

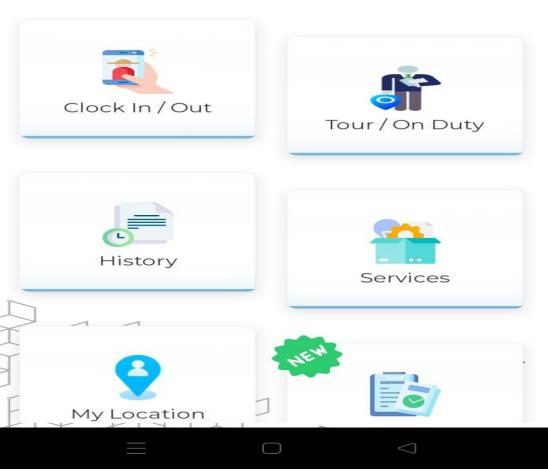
63367-B.Sc.(GEOLOGY-PHYSICS-COMPUTER SCIENCE)\_1\_1

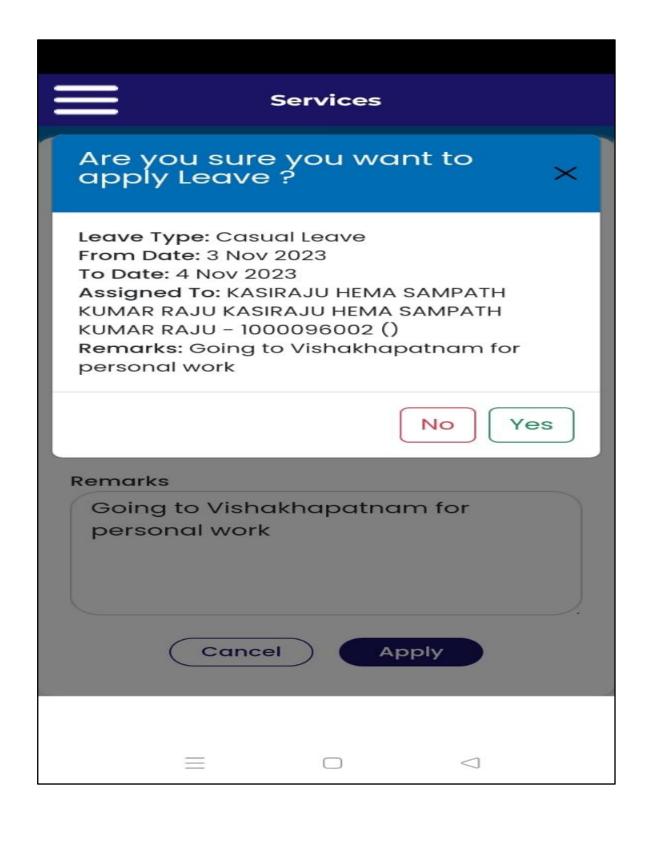




### **APFRS** (Andhra Pradesh Face Recognition Service)



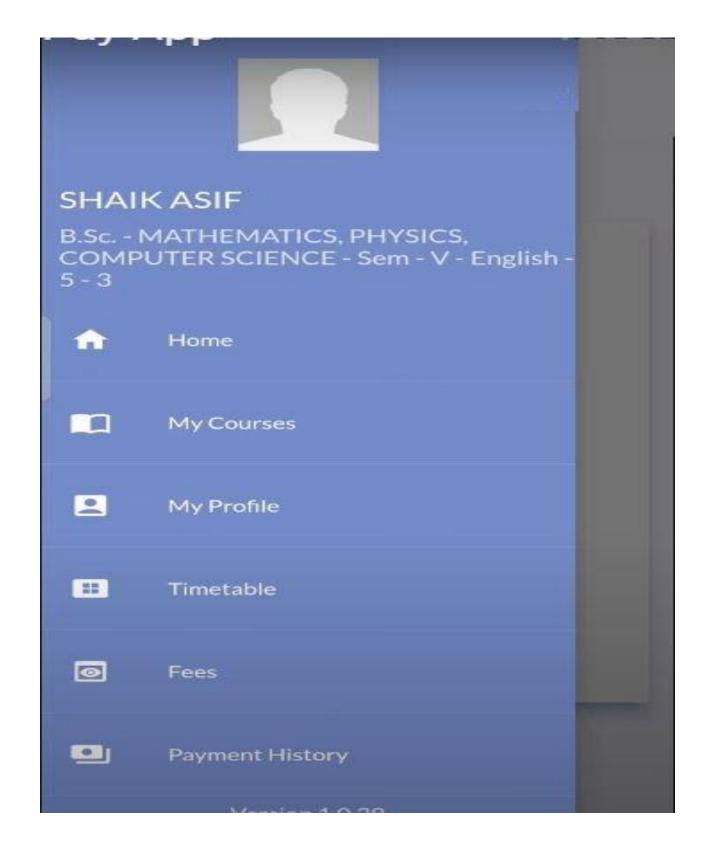




# Fee Management APP (F-MAPP)

Student fee will be paid through F-MAPP through online mode. So that is easy for accountant to maintain the fee details and accountability







# SHAIK ASIF

Degree Program: B.Sc. - MATHEMATICS, PHYSICS

Year: 3rd year

Total Fee to be paid: 6440.00

Paid: 10.00

Balance to be Paid: 6430.00

30971 - B.Sc. - MATHEMATICS, PHYSICS, COMPUTER SCIENCE -English - 3 (Total College Fee)

FEE DESCRIPTION

Academic Year : 2022 - 2023

Total Fee to be paid : 6440.00

Paid : 10.00

Balance to be Paid : 6430.00

Penalty Charges
Applicable From : 10-Dec-2022

Last Date for Payment : 31-Mar-2023



# SHAIK ASIF 's Fee Status

30971 - B.Sc. - MATHEMATICS, PHYSICS, COMPUTER SCIENCE - English - 3

Total Amount: 6440.00

Penalty Charges Applicable: 10-Dec-2022

From

Last Date for Payment : 31-Mar-2023

Last Updated Balance - need to pay

₹ 6430.00

Pay Now

Fee Structure (DCB)

Payment History

		Paid	Balance
Fee Head	Fee		
Special Fee - Games/ Sports and Inter collegiate Fee	₹ 40.00	₹0.00	₹ 40.00
Special Fee - Indian Red Cross Fee	₹ 10.00	₹ 10.00	₹ 0.00
Special Fee - Laboratory Fee	₹ 200.00	₹0.00	₹ 200.00
Special Fee - Audio Visual Fauinment	₹ 10.00	₹0.00	₹ 10.00

<sup>\*</sup> DCB: Demand Collection Balance