



JNANABHUMI FACIAL ATTENDANCE



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ABOUT STAKEHOLDERS

Principal: To view the attendance statistics of respective staff and students' daily attendance.

Staff: To authenticate themselves and student attendance for a particular class or group of classes.

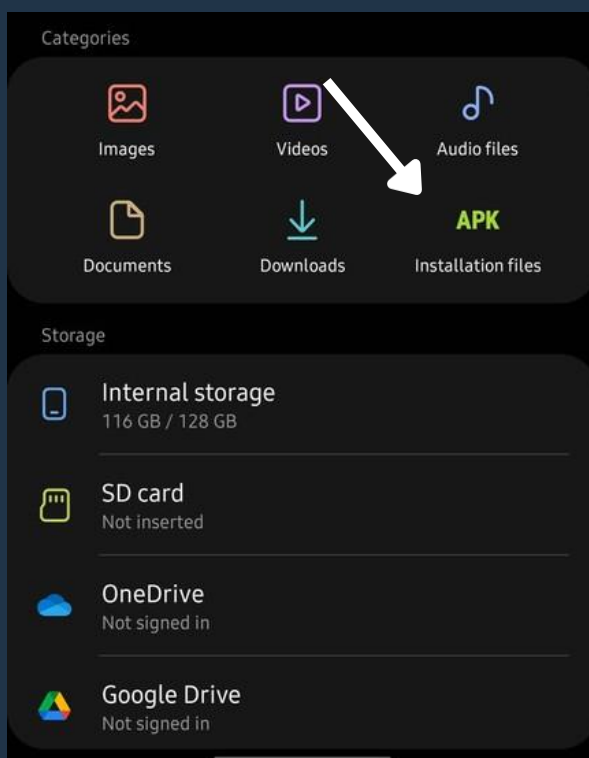
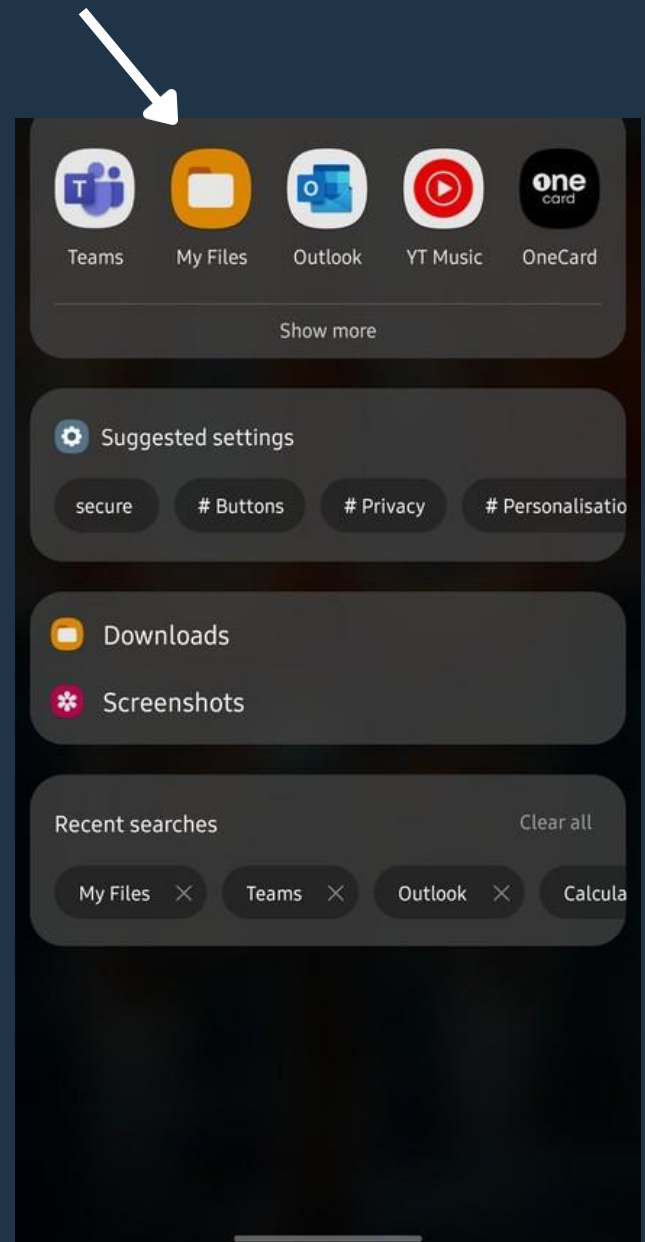
Students: For whom, the attendance is marked.



2. HOW TO INSTALL APPLICATION

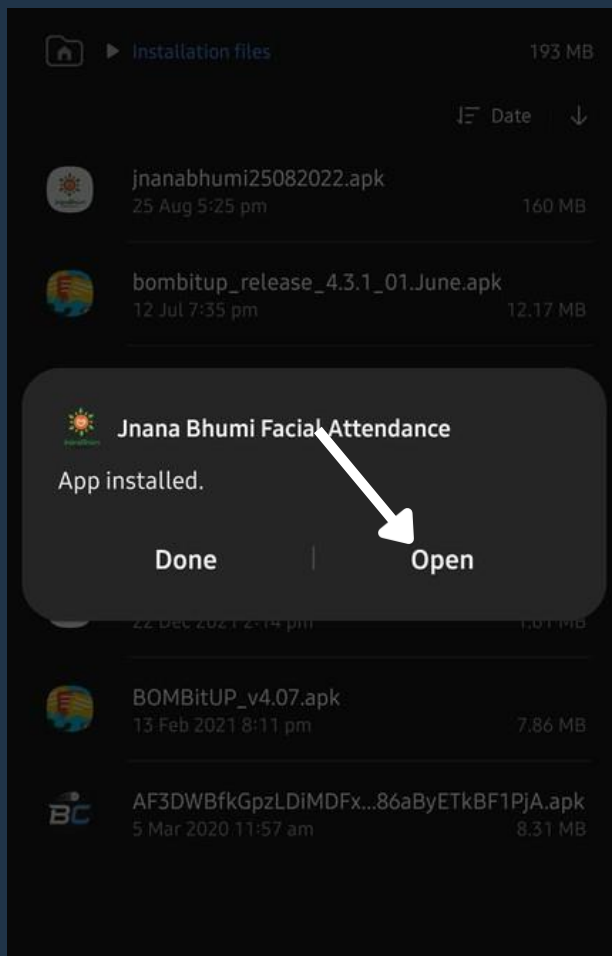
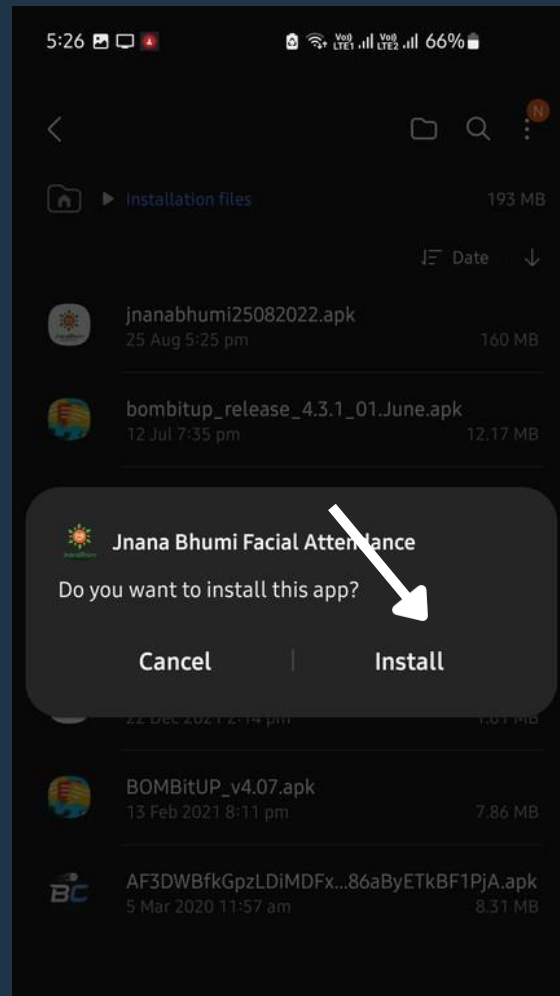
- A link for downloading the application (APK) will be sent to staff and the principal.
- After the principal/staff receive the link, click on it to download it.
- To open and install the app, follow these steps.

2.1. Click on my files in your mobile to view the recently downloaded Jnanabhumi application.



2.2. Click on APK installation files to view and install Jnanabhumi Application.

2.3. Now, click on install to install the jnanabhumi application on your device.



2.4. After installing, now click on open to view the application.

1 : After installing the app, please type the Login Credentials provided to Staff/Principal.

2 : Staff/Principal can change the password and also verify their mobile using an OTP.

3 : Next, create a 4-digit M-PIN as per your convenience to login into the application (Please **do not forget the password or M-PIN**).

4 : Staff/Principals can use this M-Pin to login into the application from next time.

Step 1:
Login using
credentials
provided to
you.



Illustration of a person sitting at a desk with a laptop, surrounded by colorful geometric shapes and a lightbulb.

Become a member

Mobile number/ ID

7337546526

Password

.....4

Forgot Password?

Login



Illustration of two people celebrating with confetti.

9:41

Verify Mobile Number [Login](#)

Mobile number/ ID

+91 934 593 493

Get OTP

Step 2.1: Provide
your number to get
OTP



Illustration of two people celebrating with confetti.

9:41

Verify Mobile Number [Login](#)

Mobile number/ ID

+91 934 593 493

Verification Code

9

Resend 00:30

Verify

Step 2.2: Enter the OTP
to verify your number



Illustration of a person holding a sign that says 'PASSWORD' with question marks above their head.

9:41

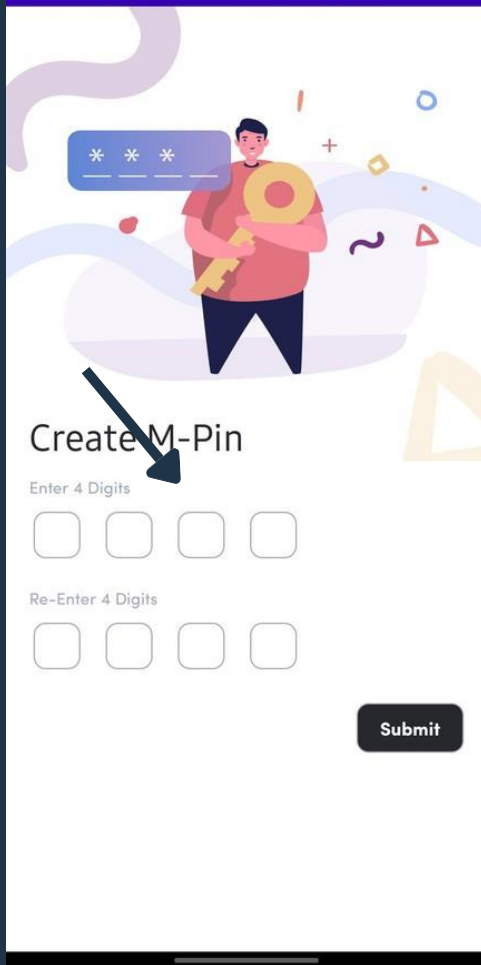
Set New Password

New Password

Confirm New Password

Submit

Step 2.3: Set
password as
required



Create M-Pin

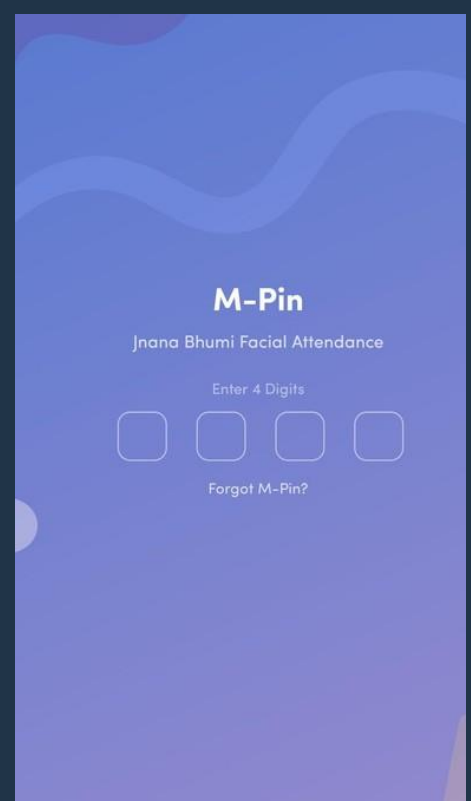
Enter 4 Digits

Re-Enter 4 Digits

Submit

Step 3: Create your MPIN

Step 4: Type the 4 digit MPIN you have set and login into the application.



M-Pin

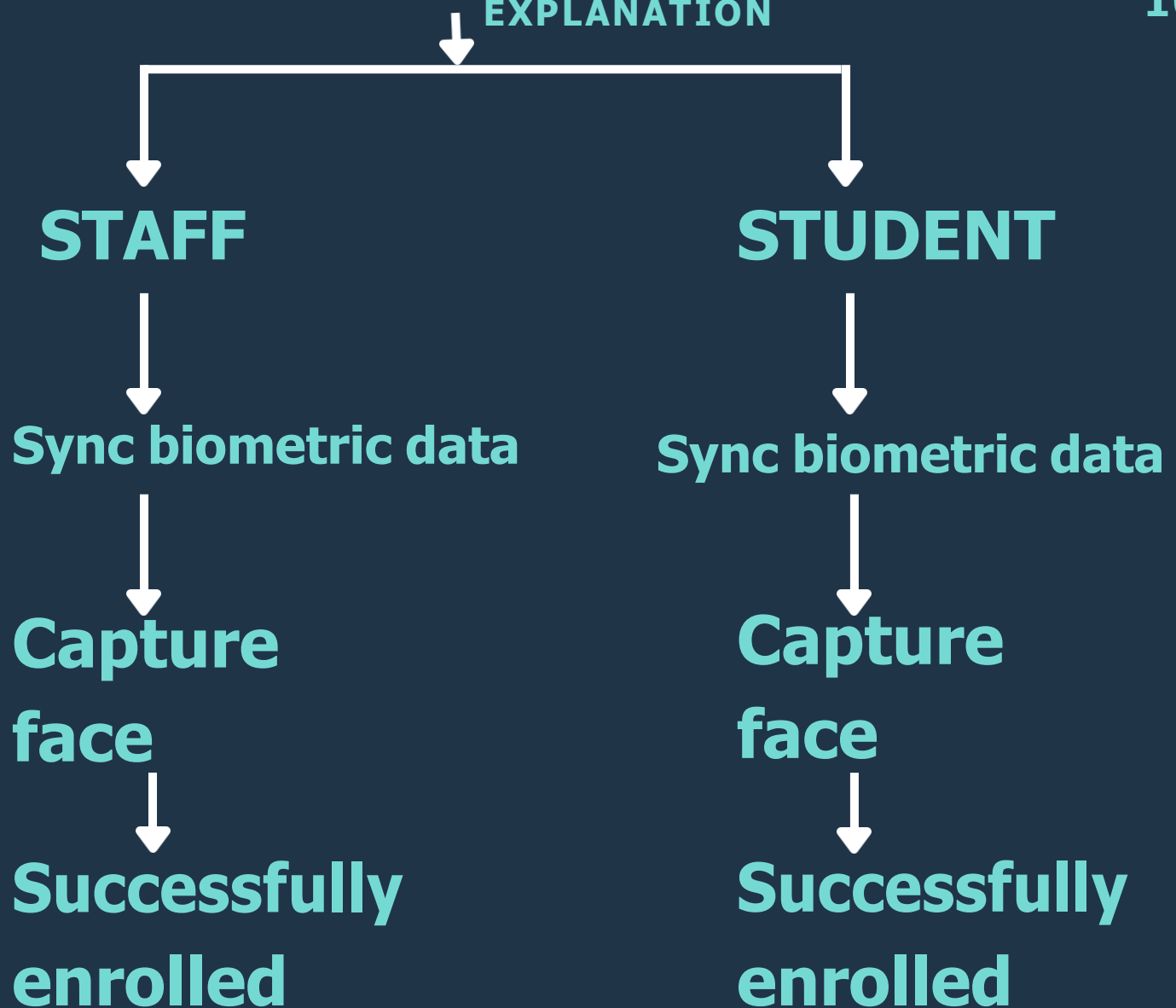
Jnana Bhumi Facial Attendance

Enter 4 Digits

Forgot M-Pin?

- A) **Self-attendance:** to be implemented shortly
- B) **class attendance:** This option is used to take attendance of the class.
- C) **Attendance stats:** This section shows you the statistics about how many classes you've marked attendance for, total students, how many students were present, and how many were absent.
- D) **Face enrollment:** This option is used to enroll students and staff for a particular class.
- E) **Synchronization:** This option is used to sync data of the staff and students of a particular organization/class.
- F) **Pending Synchronization:** This option is used to display the count of the pending enrollments that have to be pushed to the server. Please enable your internet connectivity after enrollment and marking the attendance to sync the data to the server.





Note: Enrollment = Capturing face templates of the staff/students for the attendance marking process.

Face enrollment activity is a one time activity that has to be done for all the students and staff before marking the attendance. Kindly enable the internet connectivity to enroll i.e, capture the images of students and staff.

These are the 2 steps to be followed to enroll yourself as staff/student

1. Data synchronization
2. Student/staff enrollment

Note: Please make sure you have done the synchronization before proceeding to this step.

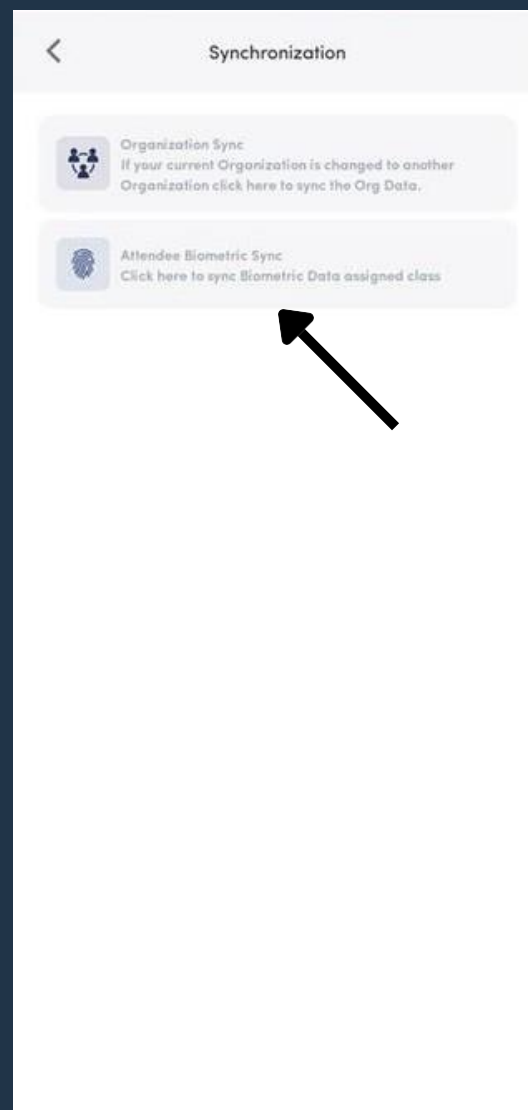
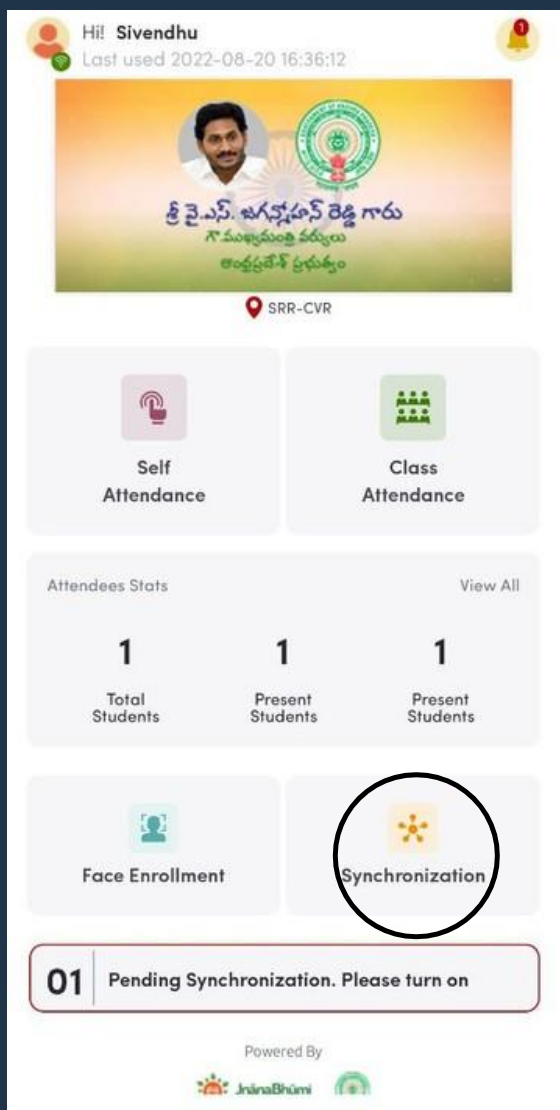
Please find the process of enrollment as mentioned below.

1 SYNCHRONIZATION (DATA OF THE STUDENTS)

(Please wait for a few minutes until the data is synced successfully.) Make sure your internet is turned on for this. process.

6.1.1. Attendance Biometric sync:

- ◆ After logging into the application, on the home screen click on data synchronization option and select attendee biometric data and select the respective class you are assigned to in your college and click on submit.
synchronization--> Attendance Biometric Sync-->Select Class-->Submit.
- ◆ It will pop up as "**Data Sync Success**".
- ◆ It is important to sync the data to the application. So that your class's student details will be synced, and student names will be displayed in the application.
- ◆ You can now move further for face enrollment.



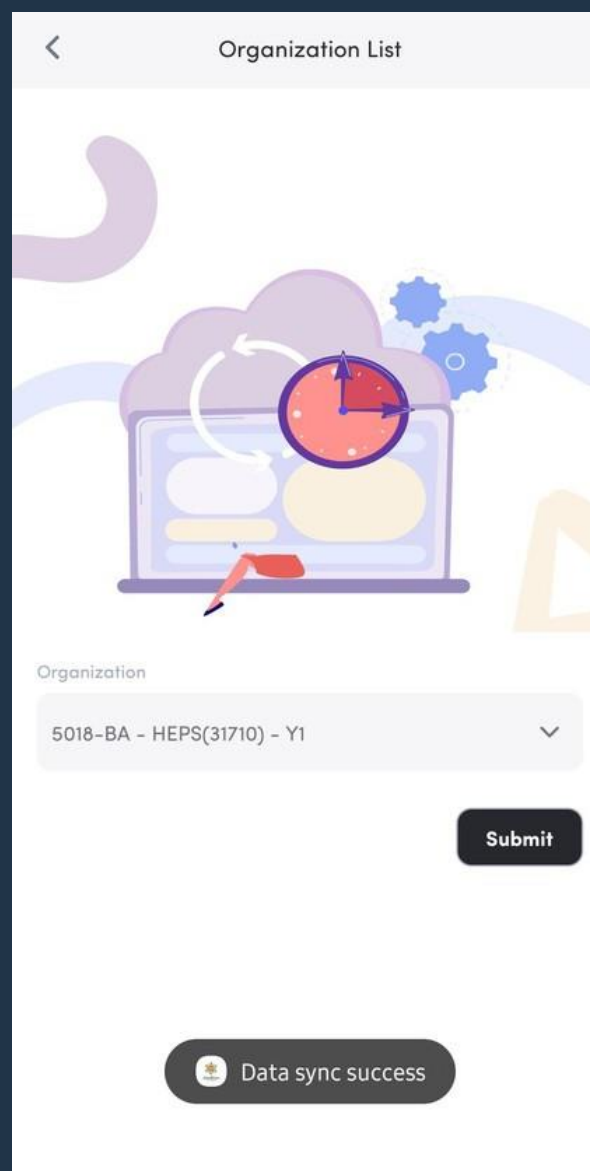
6.1.1. Click on synchronization

6.1.1. Select attendee biometric sync option



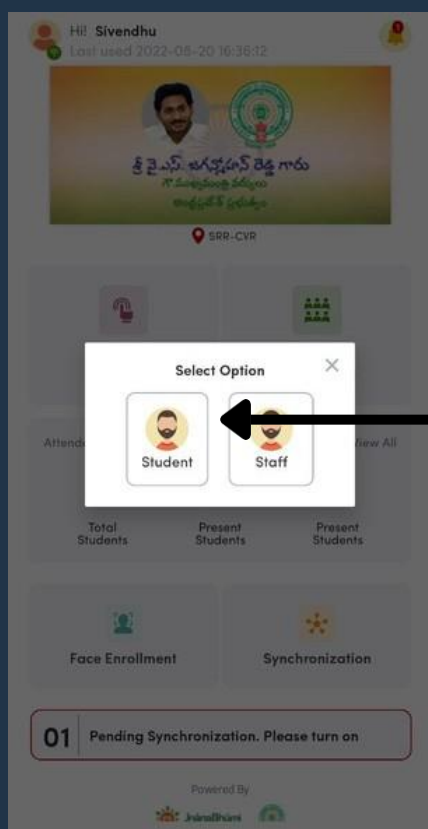
6.1.2. Select the organization from the dropdown menu for which the staff is assigned by the college.

6.1.3. Click on the submit button, and you will get the message "**Data Sync Success**".



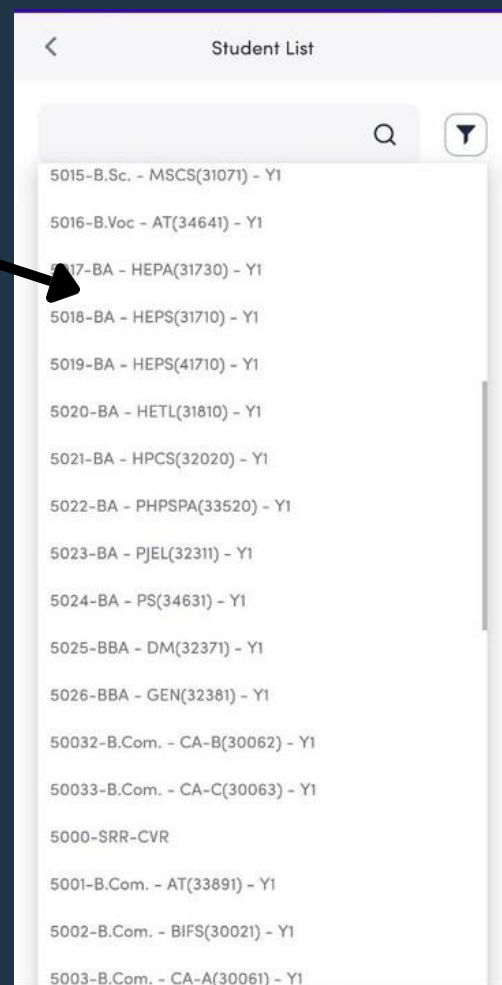
Students enrollment process:

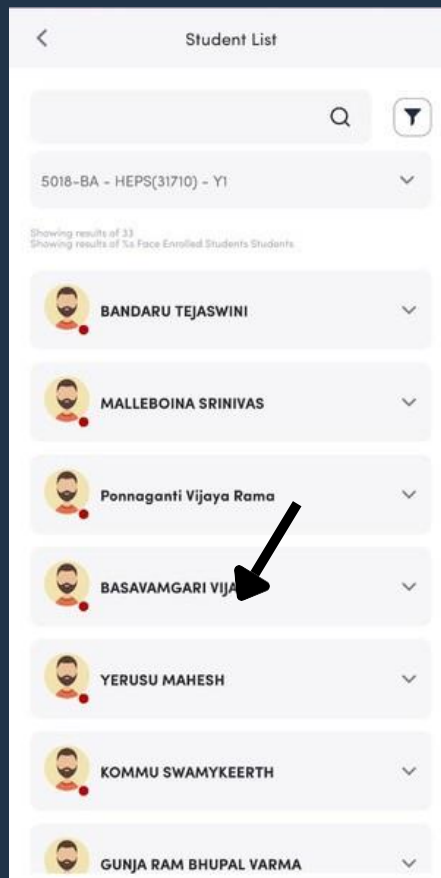
Let us proceed with the student enrollment after the data is synced successfully to the device. **(Please wait for a few minutes until the data is synced successfully.) Make sure your internet is turned on for this process.**



6.2. Select student

6.2.1. Select the organization from the dropdown of which the staff is assigned to by the college.



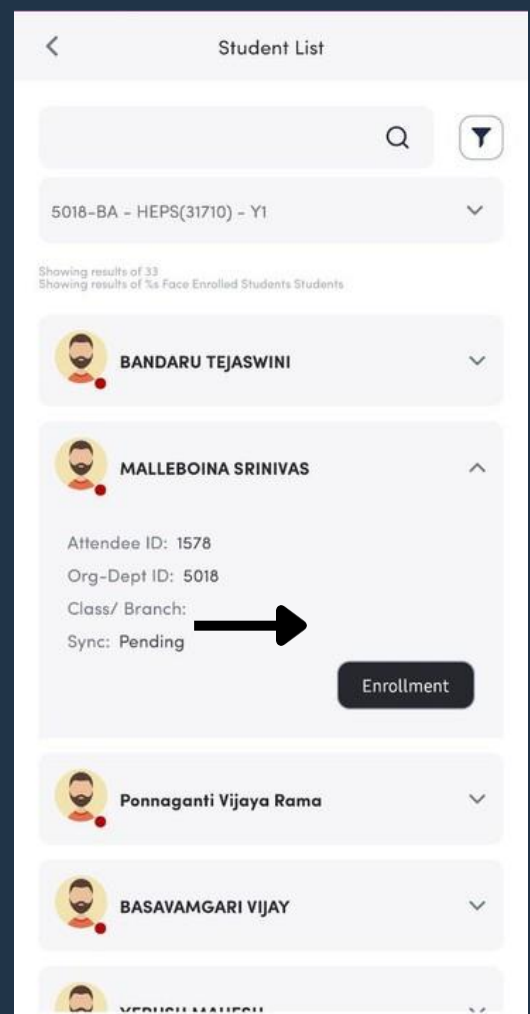


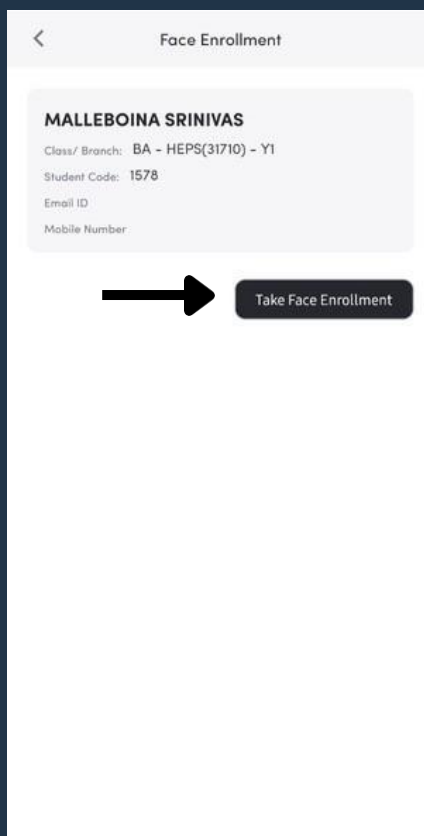
6.2.2. Select the students one by one and complete the enrollment process. Repeat the process for all the students in your classroom.

This list only has all the students who are in your class.

The red dot down the name, near the icon, indicates the student's enrollment is pending or not done yet.

6.2.3. Let us do the student's face enrollment. Press on the enrollment button as shown to start the student's face enrollment.





6.2.4. Validate the details displayed of the student and Click on the **"Take face enrollment" button** to capture the student's face.

6.2.5. Now, click on the start button then the application will capture the student's faces for enrolling.



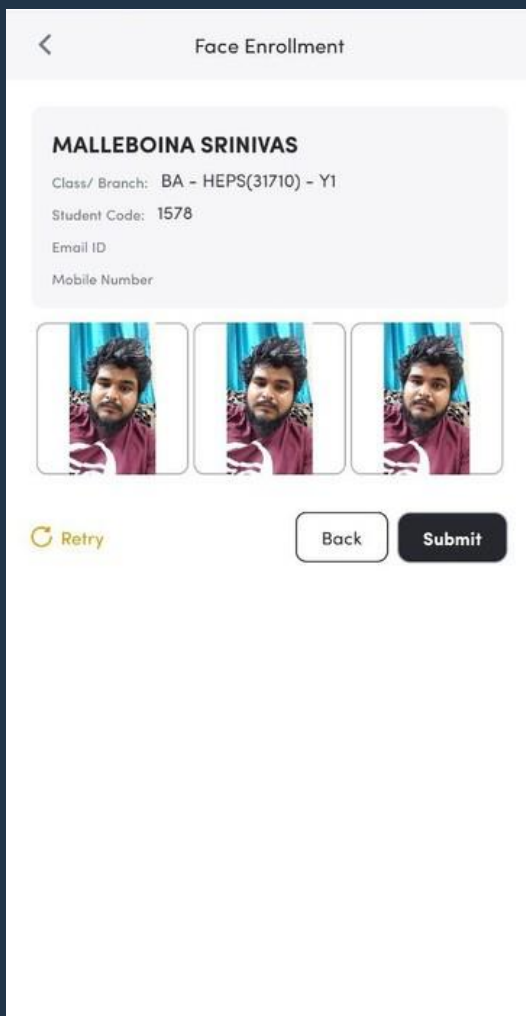


Wait until the box around the student's face displays and turns blue color.

Make sure to follow these rules and regulations for the process and then press "Start"

Instructions to follow while staff/students enrollment

- Make sure your background is clear while doing the enrollment process
- The lightening should be there
- Student and staff should not close their eyes
- Do not tilt or shake your mobile
- Stand properly and open your eyes wide
- Do not look down, up or any side. Look straight into the camera till all the images are captured.
- If the image is not clear, please retry it immediately.
- Mask to be removed
- Please remove specs
- The student should be alone while capturing for enrollment, multiple images should not be there.



Face Enrollment

MALLEBOINA SRINIVAS

Class/ Branch: BA - HEPS(31710) - Y1

Student Code: 1578

Email ID

Mobile Number

Three face template images are shown below the form.

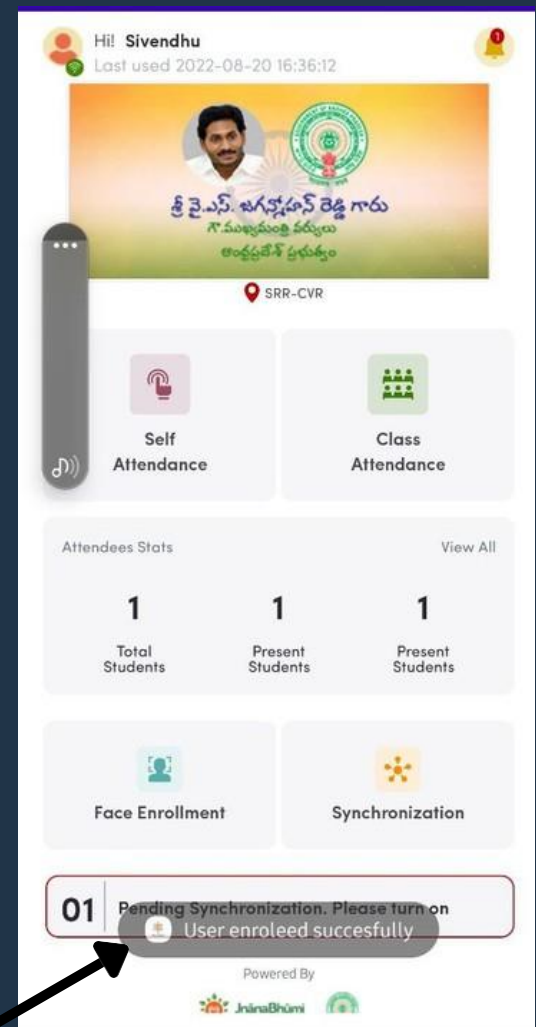
Buttons: **Retry** (with a circular arrow icon), **Back**, and **Submit**.

6.2.6. The face templates were captured successfully, and you can click submit button to successfully enroll students.

We also have an option to retry if the image is not clear and suggested as per the rules suggested above.

6.2.7. After submitting the face templates, you will get a message saying the user enrolled successfully.

Continue the above process for all the students in the class.



7. .FACE ENROLLMENT - STAFF

Face enrollment activity is a single time activity that has to be done for all the students and staff before marking the attendance. Kindly enable the internet connectivity to enroll i.e, capture the images of students and staff.

These are the steps to be followed to enroll yourself as staff/student.

Note: Please make sure you've done the synchronization before proceeding to this step.

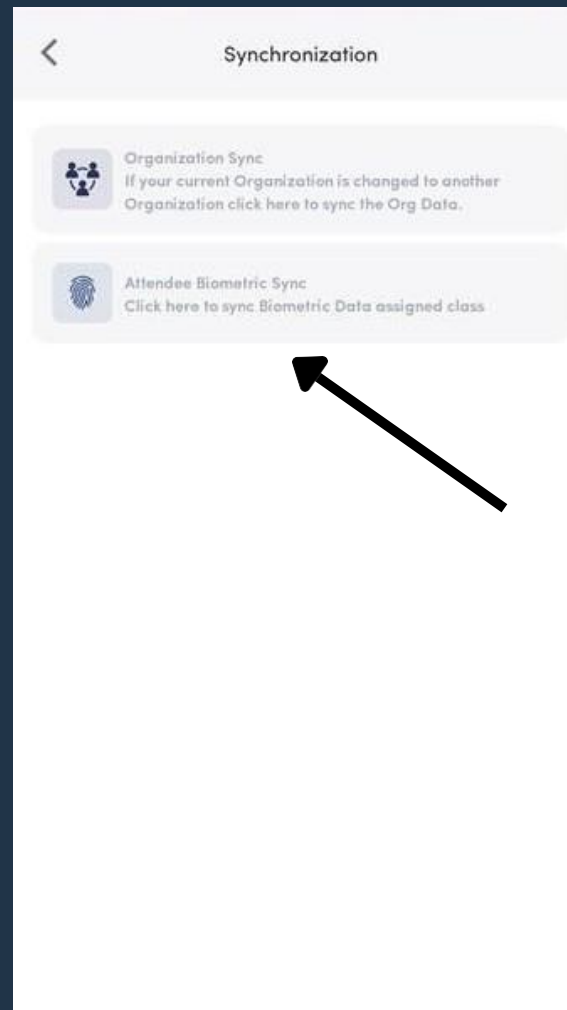
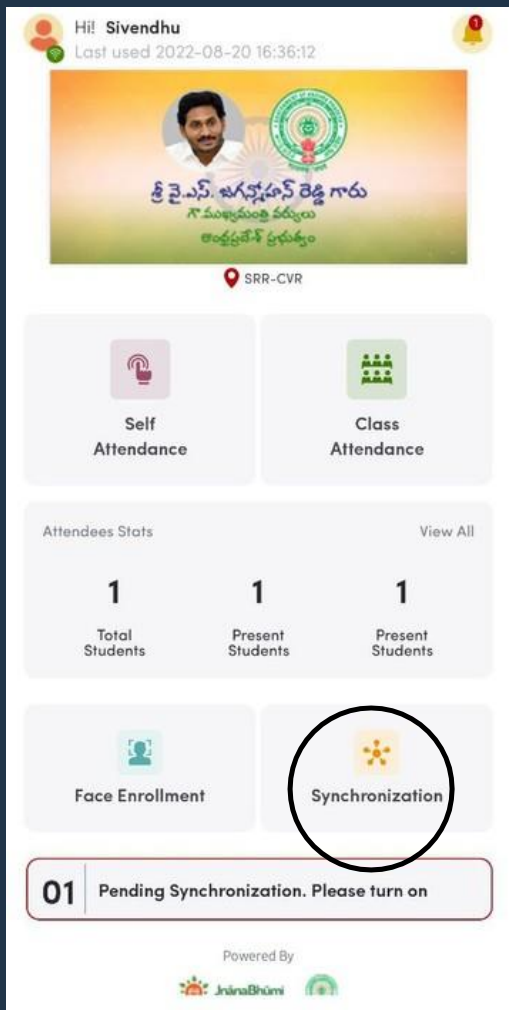
Let's see an example of enrolling staff in the following steps.

7.1. 1.SYNCHRONIZATION OF DATA OF THE STUDENTS

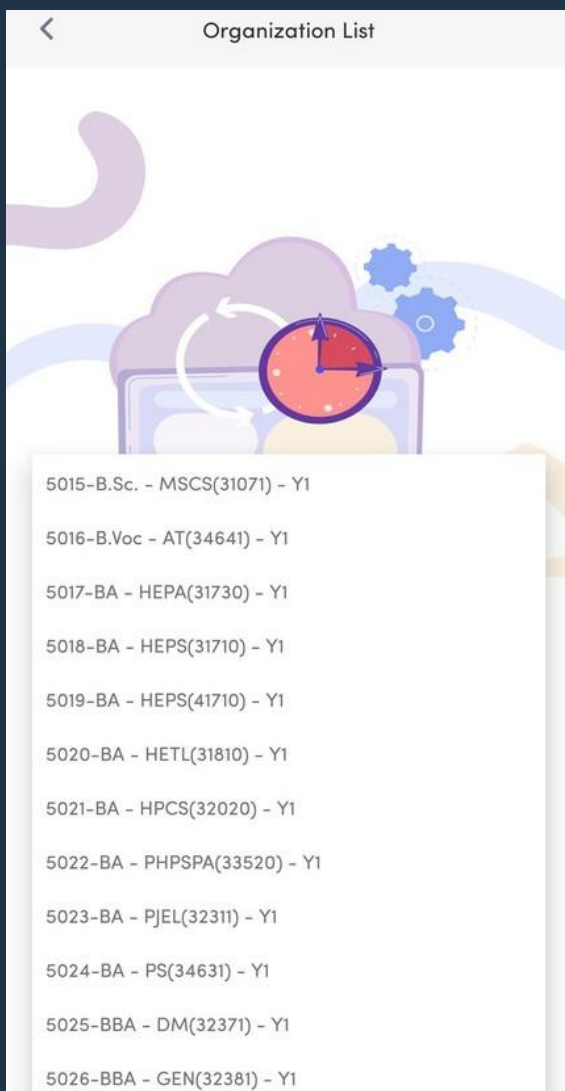
(Please wait for a few minutes until the data is synced successfully.) Make sure your internet is turned on for this. process.

Attendance Biometric sync

- ♦ After logging into the application, on the home screen click on data synchronization option and select attendee biometric data and select the respective class you are assigned to in your college and click on submit.
synchronization--> Attendance Biometric Sync-->Select Class-->Submit.
- ♦ It will pop up as "Data Sync Success".
- ♦ It is important to sync the data to the application. So that your class's student details will be synced, and student names will be displayed to the application.
- ♦ You can now move further for face enrollment.

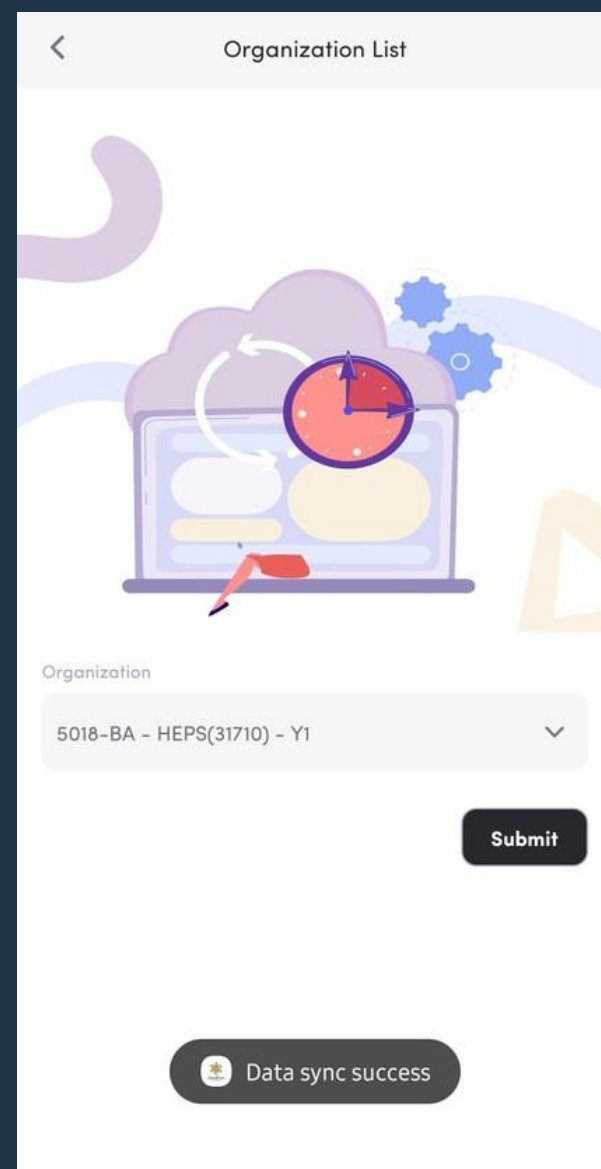


7.1.1. Select
attendee
biometric sync

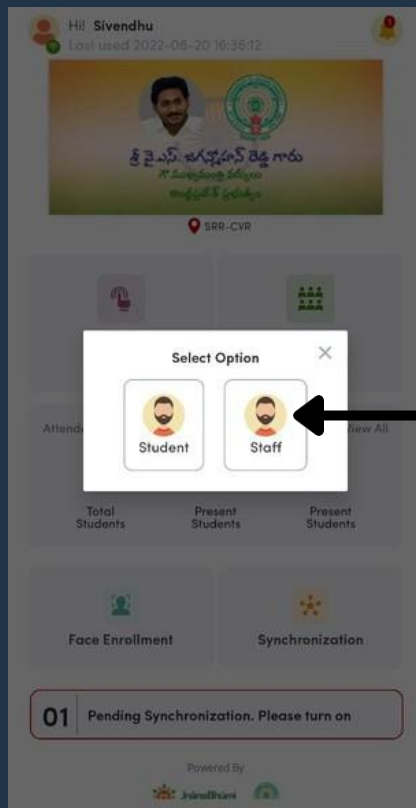


7.1.2. Select the organization from the dropdown menu which has your class information.

7.1.3. Click on submit to get the message "Data Sync Success".



Let us proceed with the staff enrollment after the data is synced successfully to the device. (Please wait for a few minutes until the data is synced successfully). Make sure your internet is turned on for this process. 22



7.2. Select staff

7.2.1. Select the organization from the dropdown menu which has your class information.



Repeat the student enrollment process now to enroll the staff also. Follow the same similar steps from 6.2.2 - 6.2.7 to enroll a staff successfully into the class.

NOTE:

--> A Green dot near the icon means the student or the staff is already enrolled in the class using the face capture.

--> A red dot near the icon means the enrollment process is still on hold and waiting till the process is done.

--> Also, please wait about 10-15 minutes to successfully sync data into the server for the color to turn from red to green.

8 .ATTEDANCE MARKING ACTIVITY

Once the enrollment of the students and staff face templates is completed and updated to the server with the help of the internet, we can do the attendance marking activity.

To check, go to enrollment and check the color of the icons,

Green: it indicates all the data has been moved to the server successfully.

STEPS TO BE FOLLOWED WHILE MARKING ATTENDANCE:

Step 1: Verify staff authorization

Step 2: Take students' attendance

Step 3: Perform random liveliness

Step 4: Take group image of the class to complete the attendance marking.

Step 5: Attendance is marked successfully.

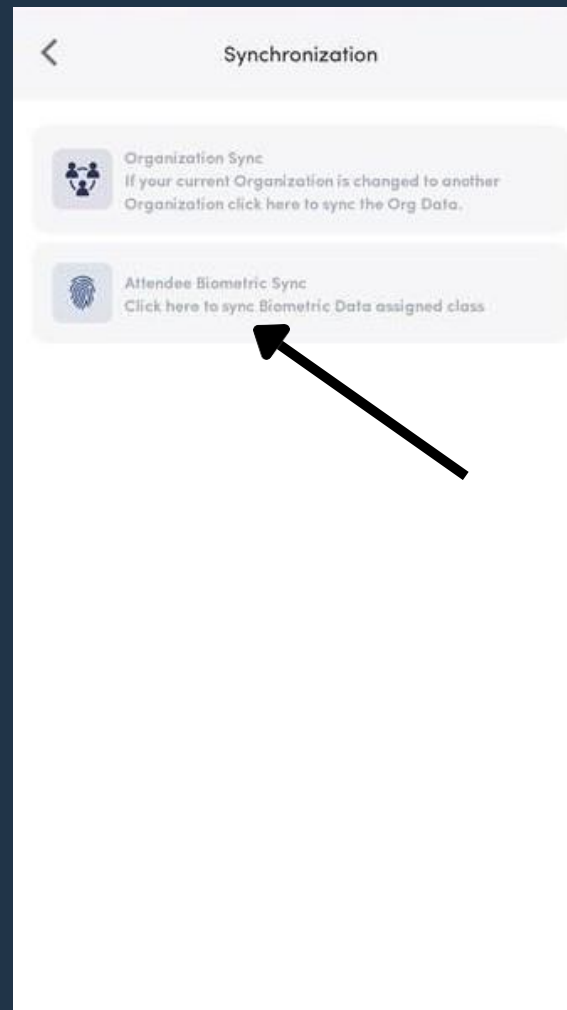
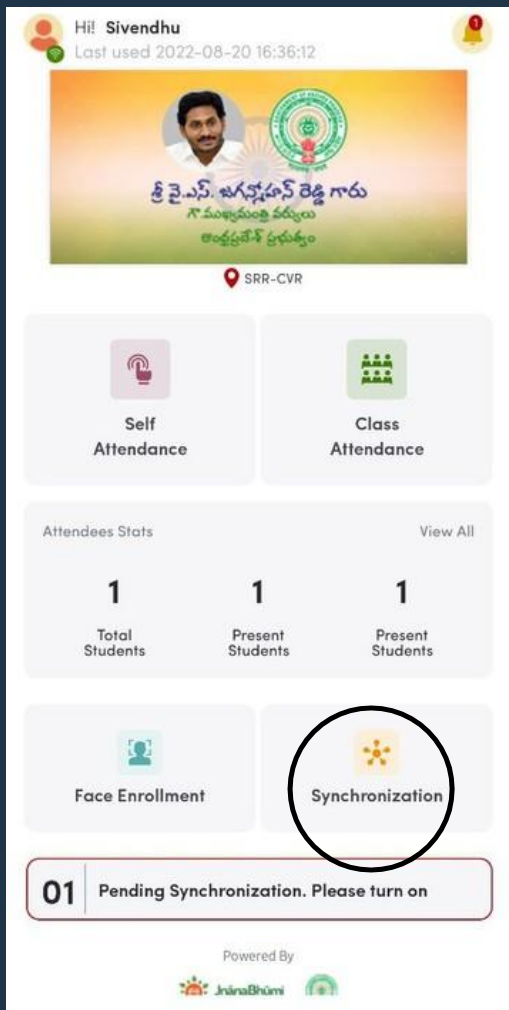
Let us see an example of marking attendance for staff and the students in the following steps.

8.1. 1.SYNCHRONIZATION OF THE DATE OF THE STUDENTS

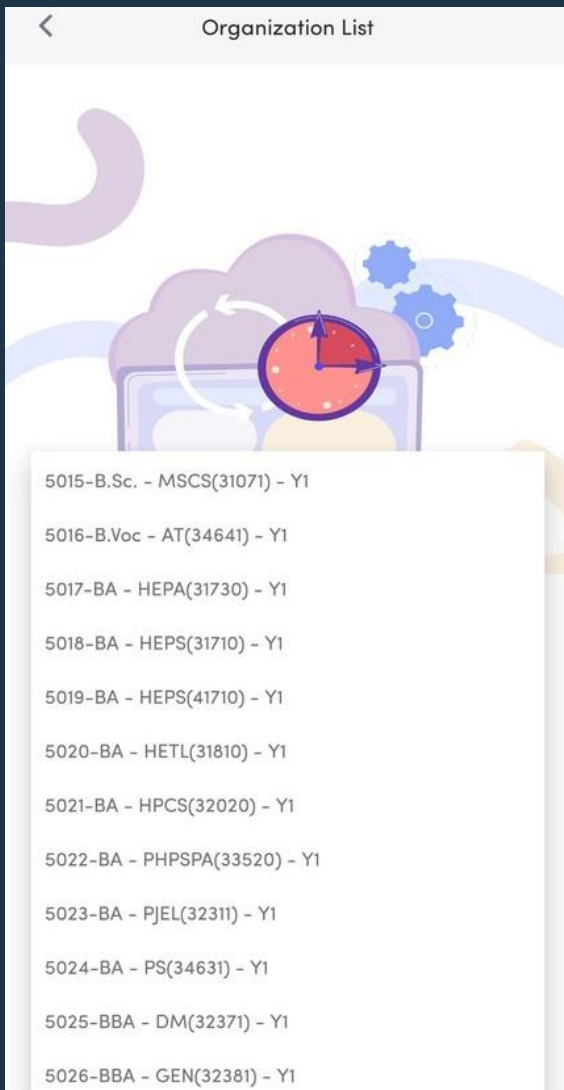
(Please wait for a few minutes until the data is synced successfully.) Make sure your internet is turned on for this. process.

Attendance Biometric sync

- ♦ Let's focus on the attendance biometric sync now.
- ♦ Before marking the attendance, click on synchronization to get the student's data from the server to the mobile level with the help of internet.
- ♦ **synchronization--> Attendance Biometric Sync-->Select Class-->Submit.**
- ♦ After submit we can see a pop-up as **"Data Sync Success"**.
- ♦ It is important to sync the data to the application. So that the face templates will be synced from the server to Mark the attendance
- ♦ You can now move further for face attendance.

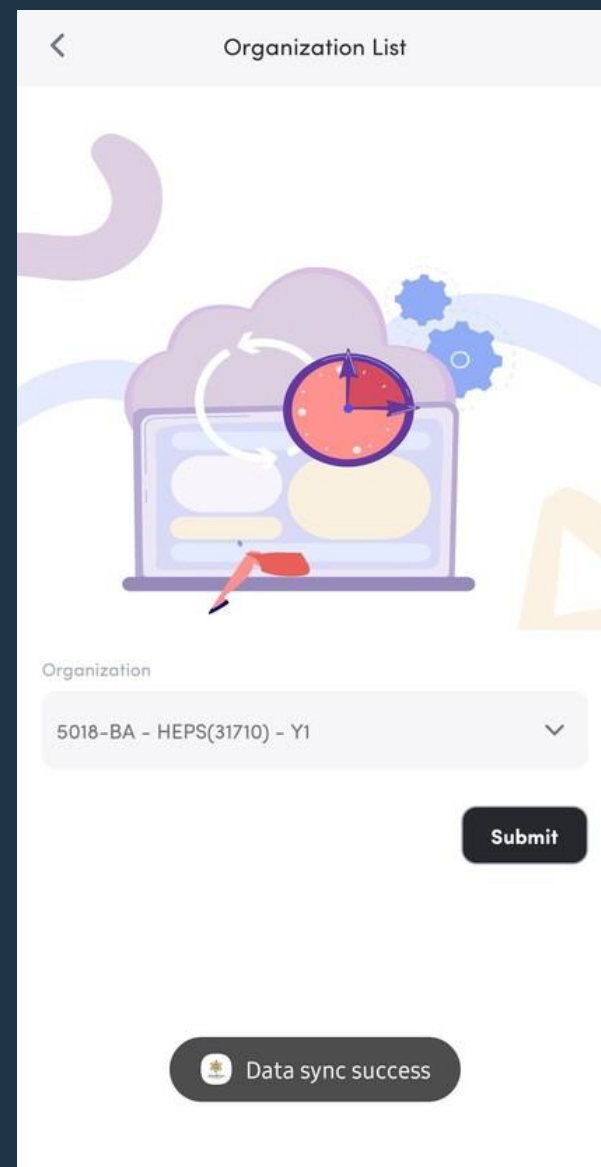


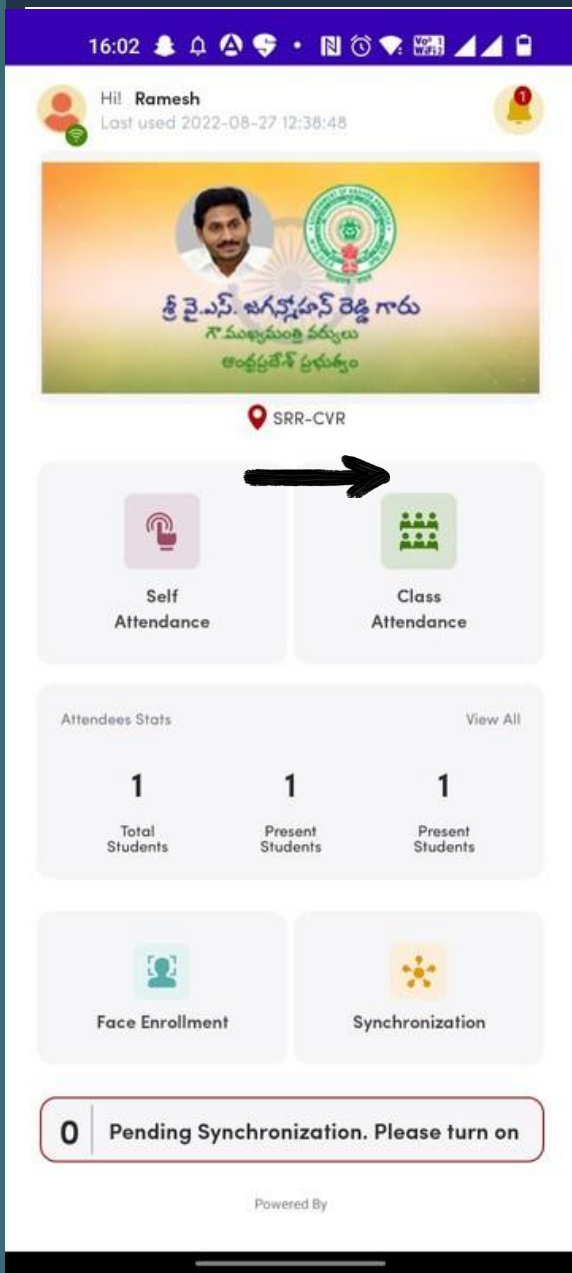
8.1.1. Select
attendee
biometric sync



8.1.2. Select the organization from the dropdown menu of the class to sync the face data.

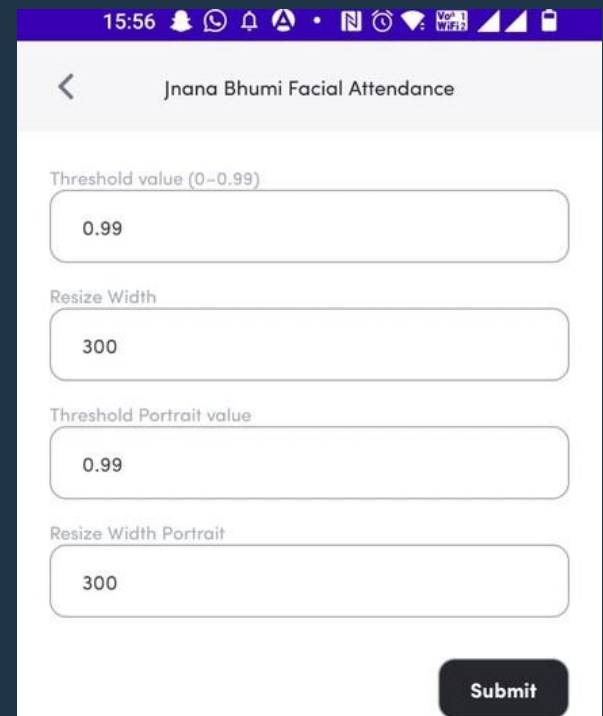
8.1.3. Click on submit button, a pop-up will be shown as "**Data Sync Success**".



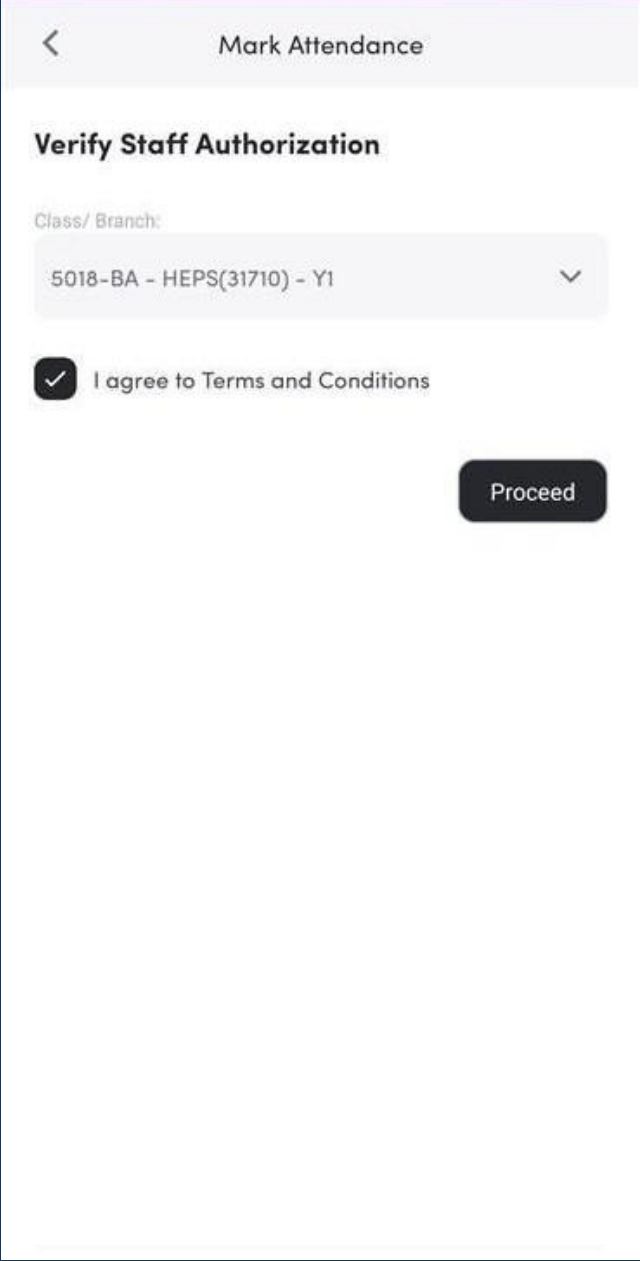


8.1.4. click on the class Attendance to mark the attendance of the students

8.1.5. IN ATTENDANCE MARKING PAGE CLICK ON SETTINGS ICON TO ADJUST THE THRESHOLD MANUALLY. BY DEFAULT, THE THRESHOLD VALUE IS SET AS 0.99 AND THE RESIZE RANGE CAN BE INCREASED UP TO 850 TO MARK MORE FACES IN ONE SCREEN.



8.2. The staff authenticity validation :



The screenshot shows a mobile application interface for marking attendance. At the top, there is a back arrow and the title 'Mark Attendance'. Below this, the section 'Verify Staff Authorization' is displayed. Underneath, the label 'Class/ Branch:' is followed by a dropdown menu showing the selected option '5018-BA - HEPS(31710) - Y1'. Below the dropdown, there is a checkbox that is checked, with the text 'I agree to Terms and Conditions' next to it. At the bottom right of the form, there is a dark button labeled 'Proceed'.

8.2.1. select the classroom for which the staff have to mark the attendance for.



8.2.2. Now, the camera invokes and does the facial recognition of the staff to check the authenticity of the staff.

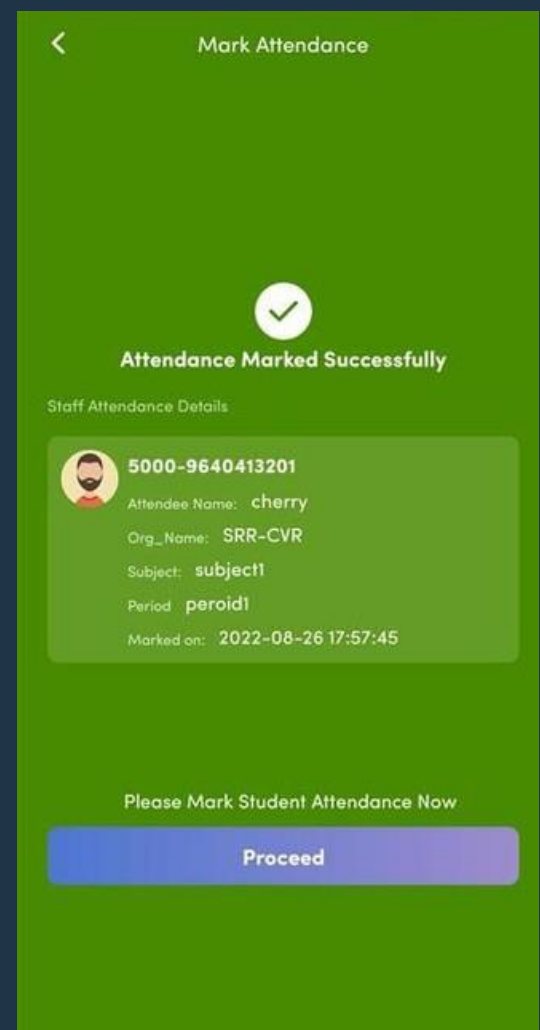
The staff can see a blue circle until the staff face is identified, and their name will be displayed below the box.



8.2.3. After the staff name pops up, the app will automatically verify the authorization, and you will proceed to the further step.

8.2.4. A pop-up saying "Attendance marked successfully" will be displayed in this way.

This means marking the staff attendance is done and now staff can proceed to mark the student's attendance.

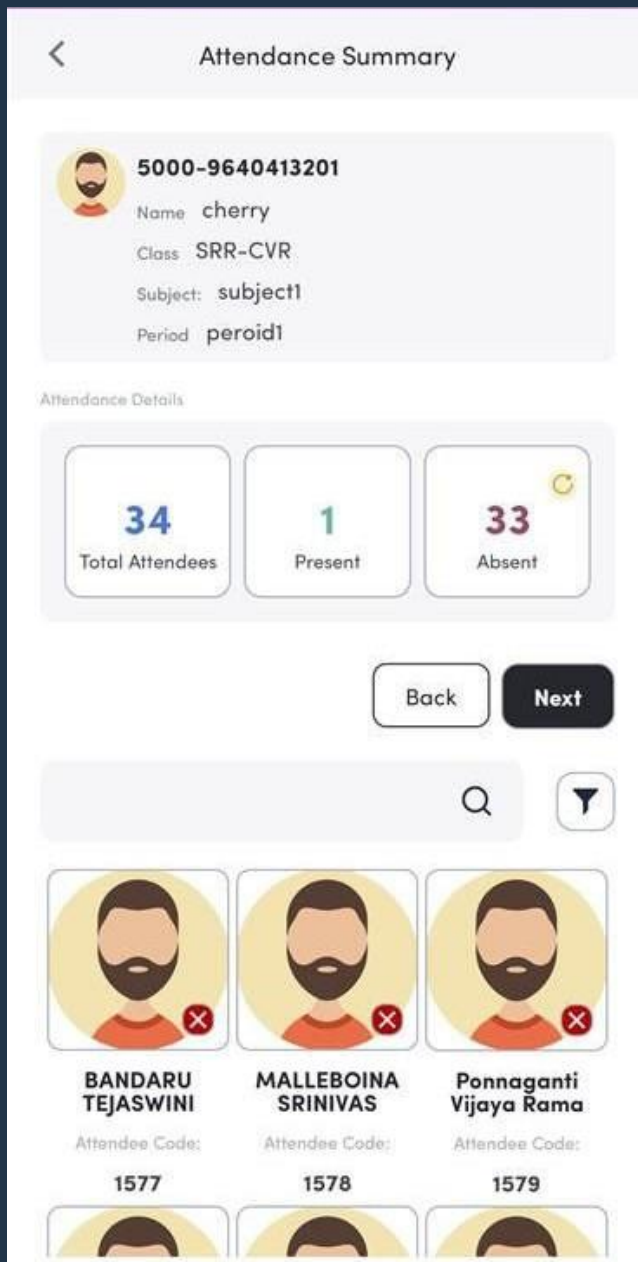




8.2.5. After proceeding to the next step, here the application captures the group face identification for all the students in the class.

The staff have to turn the camera towards the students and hold until all the faces, i.e. the students' faces are recognized and number keeps on increasing above.

This confirms that the student's live face matches with the face templates.



8.2.6. Then the attendance summary with total, present, absent is shown.

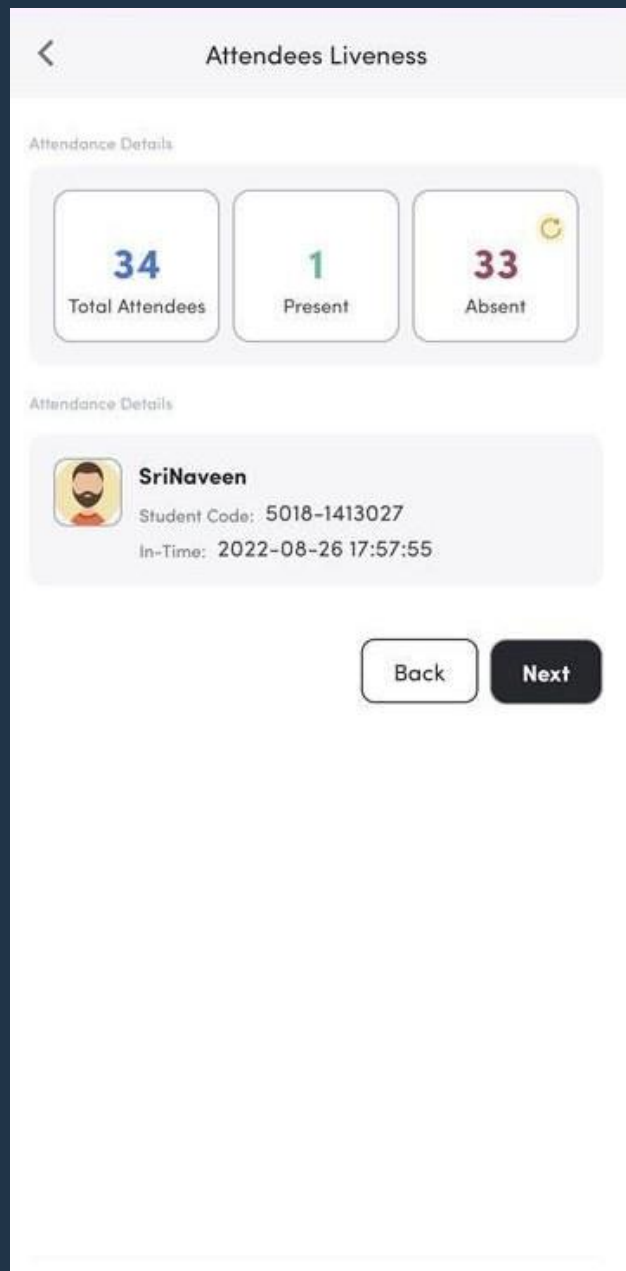
In the below, they can also check the names of present and absent .

Green Represents Present student count.
Red Represents absent student count



8.2.7. In this image, we can see that there's only 1 student present in the class.

There's a green tick that resembles that the student is present in the class. And, the red is for absence.



8.2.8. Then the application checks for the random liveliness with 3 random names of the students.

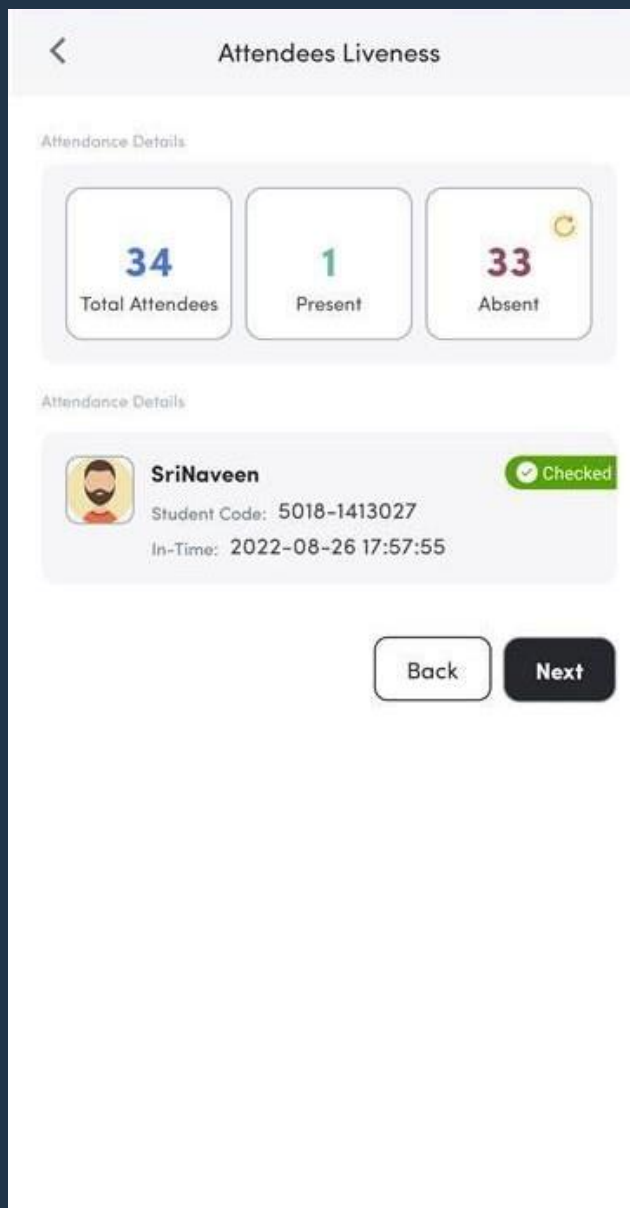
As there is only 1 student in the list present the application is asking for the student's liveliness.



8.2.9. The liveness will check whether the student is really i.e., physically there in the class or not.

If the person is not real it will display as fake instead of name.

if it is not the same person , it shows Liveness failed



8.3. After the liveliness is done, the application will display a message saying "checked".

Now, press the next option.



Crucial Process: Click class image

8.3.1 After the liveness is done, the camera opens, Then click the image of the class and submit

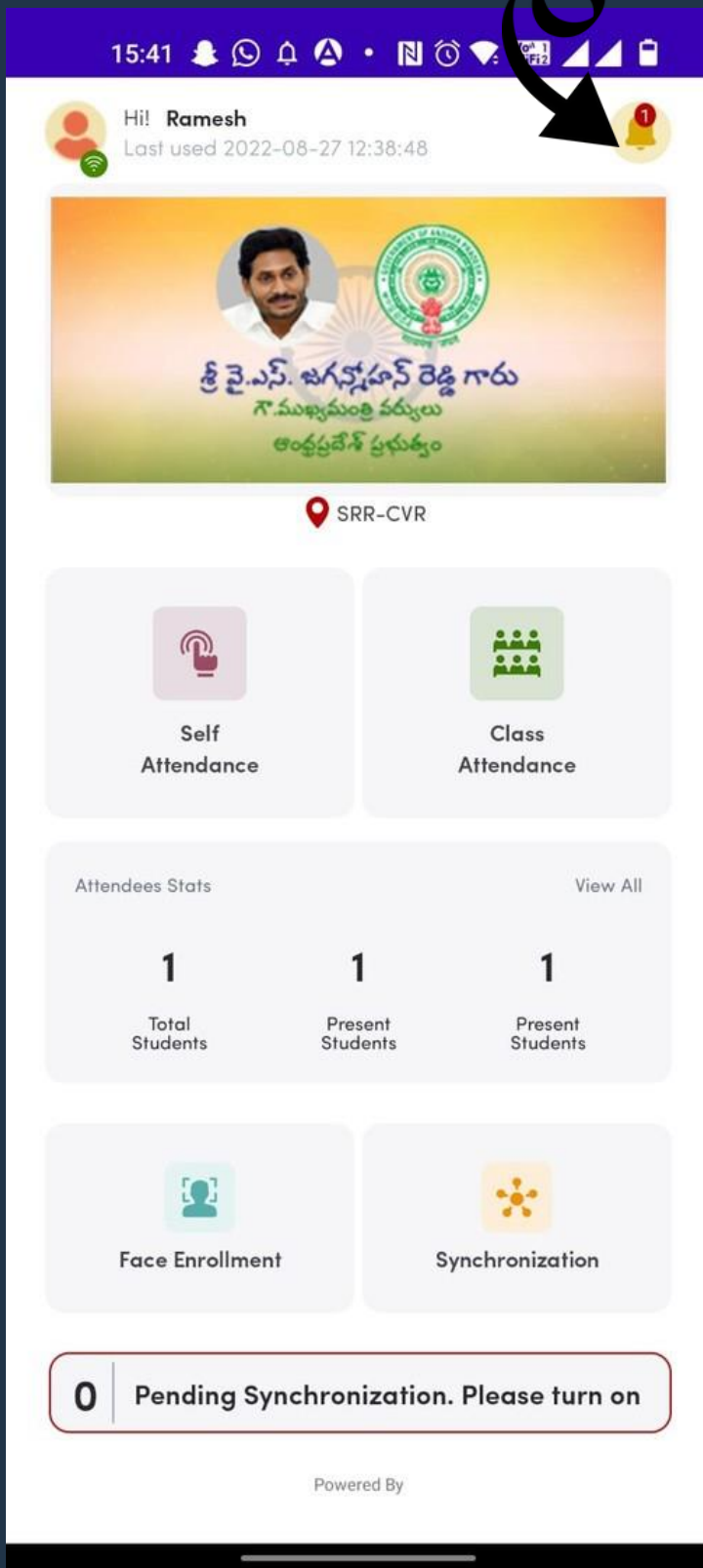
**Unless this images
is not submitted
attendance will not
be marked to the
staff and students**

Now, press on the tick button to proceed further.



8.3.2. Attendance summary will be displayed.

Marking student's attendance is successfully done.



9. Grievance & Feed Back :

In the home screen click on top right corner, to give the feed back or any issue regarding the application.

The screenshot shows a mobile application interface for reporting a grievance. At the top, the status bar displays the time 15:34 and various icons. The app's header is a dark blue bar with a back arrow and the title 'Report'. Below this, the section is titled 'Feedback/Grievance'. There are two main input fields: 'Type of Issue' and 'Description'. The 'Type of Issue' field is a dropdown menu with 'Attendance Marking' selected. The 'Description' field is a large text area with a placeholder text 'Click here to type your response in 300 words.'. A 'Submit' button is located at the bottom right of the form.

15:34

Report

Feedback/Grievance

Type of Issue

Attendance Marking

Description

Click here to type your response in 300 words.

Submit

9.1. Select the type of issue and give the description in 300 words and click on submit.

Your ticket has been successfully sent to the team

NOTE: Internet connectivity is needed to submit this

Document History

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Date	version	Change	
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+

+

↩

Prepared By:

Date

Ashrith Munikuntla & Sivendhu Palla

26-08-2022

FOR SUPPORT PLEASE CONTACT

NAME: HATUL BHATT

PHONE NUMBER: 7674898869

HOW TO SOLVE ISSUES:

1. IF LOG IN SCREEN ISSUES

ANS: UNINSTALL THE APPLICATION AND LOGIN AGAIN.

2. IF ENROLLMENTS ARE NOT UPDATED?

ANS: TURN ON THE INTERNET AND WAIT IN THE HOMESCREEN

3. THRESHOLD SETTING??

ANS: IN ATTENDANCE MARKING PAGE CLICK ON SETTINGS ICON TO ADJUST THE THRESHOLD MANUALLY. BY DEFAULT THE THRESHOLD VALUE SET AS 0.99 AND THE RESIZE RANGE CAN BE INCREASED UP TO 850 TO MARK MORE FACES IN ONE SCREEN

