



## Purpose:

The main aim of "FaceBiometrics" app is to capture face biometric data for new or existing noncorporate with his/her details. Employee can download Nfccard profile image on their phone or can send the same image to their email. For Nfccard profile, it is necessary to register Nfccard for specific user. Also user has to capture his/her face biometric data and have to upload their signature to generate Nfccard profile. Employee can see the vehicle profile using vehicle number plate and also they can add details of vehicles, add its owner, its driver, its image and can assign number plate.

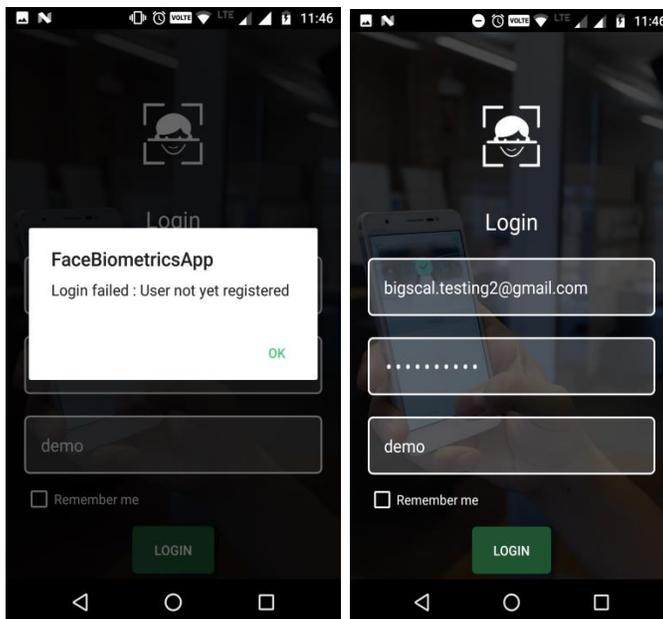
## **Note:**

1. This application needs permission from Gallery, Camera application of device.
2. Internet with good speed is required for this application to function it properly.
3. Make sure image size should be between 60KB & 2MB and image type should be .jpg.

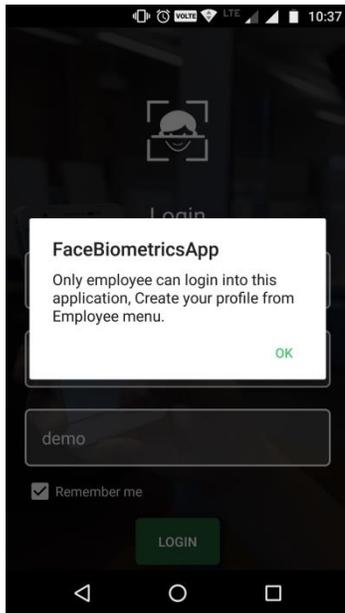
## Steps

### 1. LOGIN activity

- i. To login into this app, user must need to register account from "www.erprebit.com".
- ii. Fill the details with valid credentials for username, password and client name. Click on "Login" button.



- iii. Only employee can login into this application, contact to admin if you are not employee.



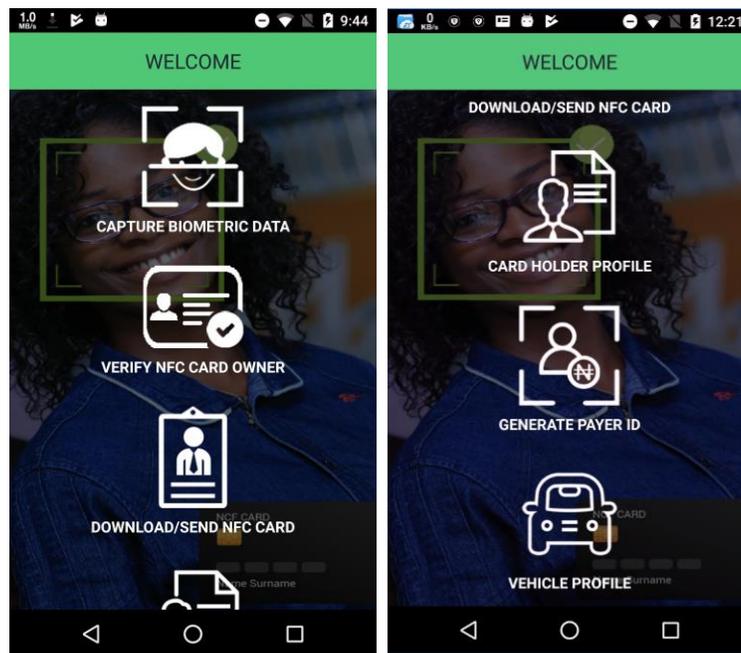
- iv. You are now able to see the next activity : **WELCOME** activity.



## 2. WELCOME activity

This activity has two menus :

- 2.1 CAPTURE BIOMETRIC DATA
- 2.2 VERIFY NFC CARD OWNER
- 2.3 DOWNLOAD/SEND NFC CARD
- 2.4 CARD HOLDER PROFILE
- 2.5 GENERATE PAYER ID
- 2.6 VEHICLE PROFILE

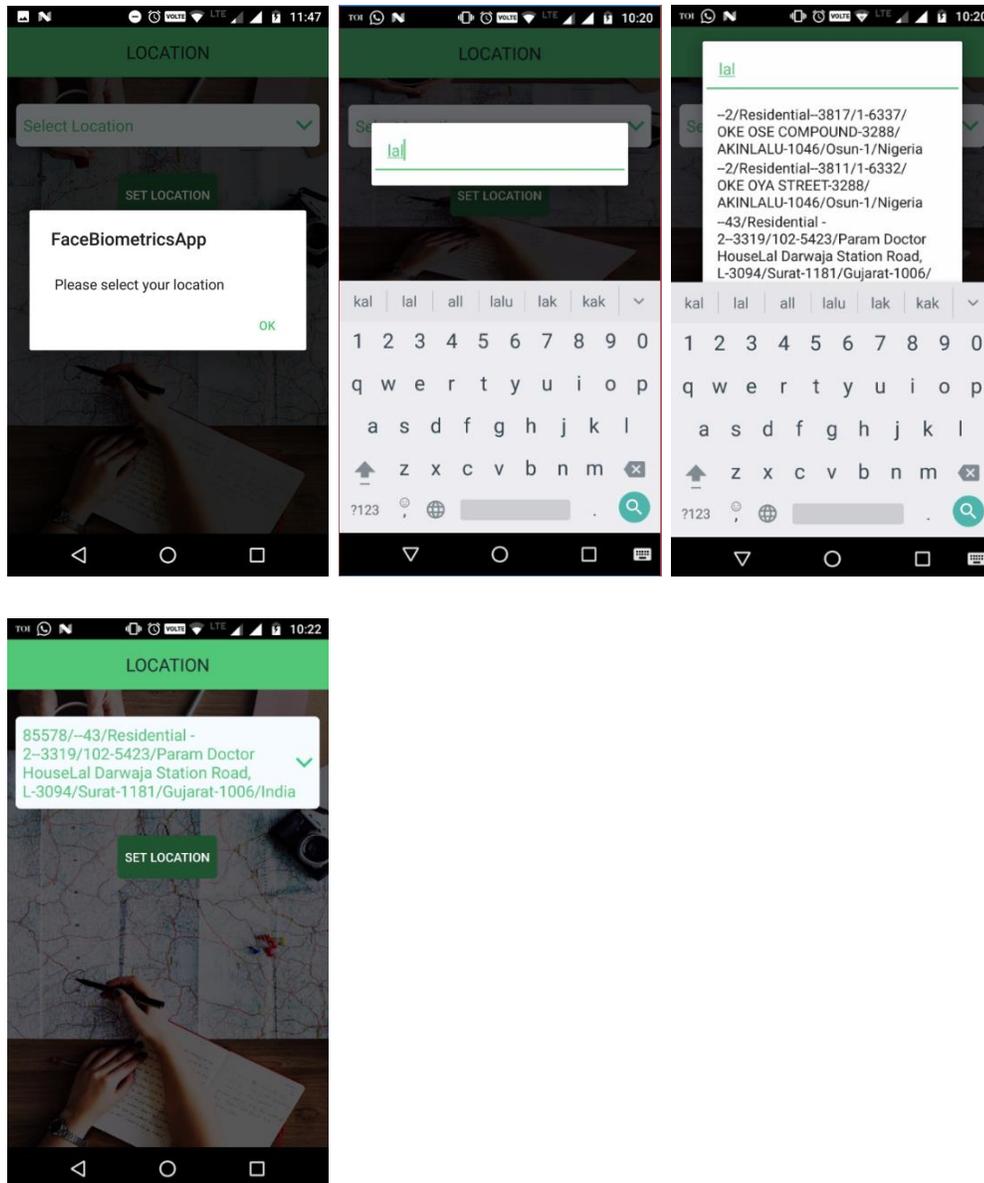




## 2.1 CAPTURE BIOMETRIC DATA

### 2.1.1 LOCATION activity

- i. User need to select enrolment location from this dropdown, if location not exist operator need to create it from web.
- ii. To get your location from dropdown, you need to search your location i.e. type search criteria in search box and then click on search button appear in the below right corner.

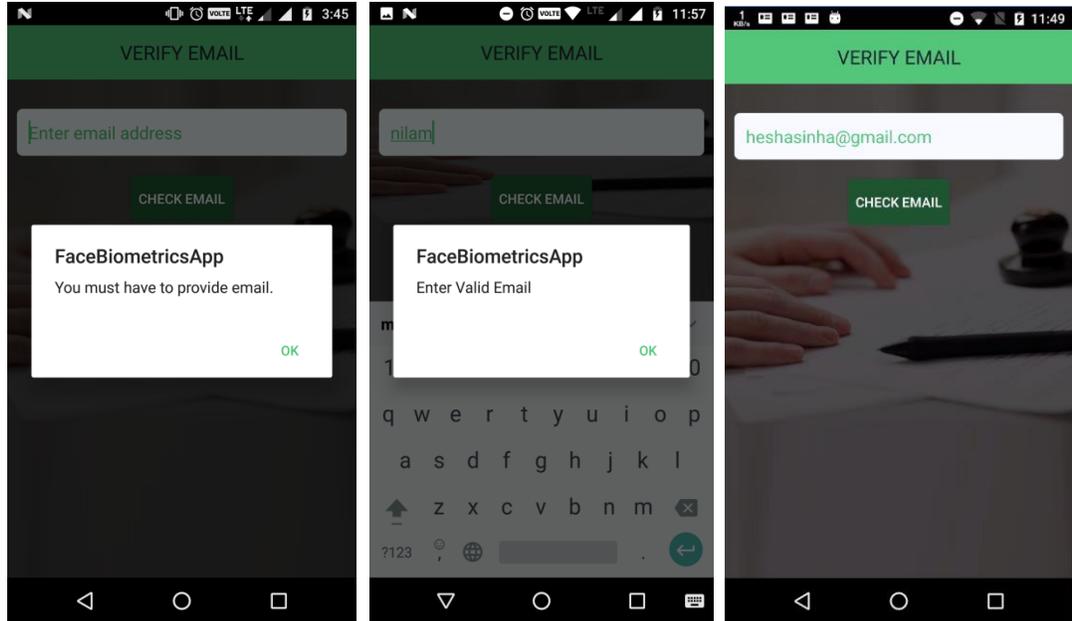


- iii. You are now able to redirect on next activity: **VerifyEmail** activity.



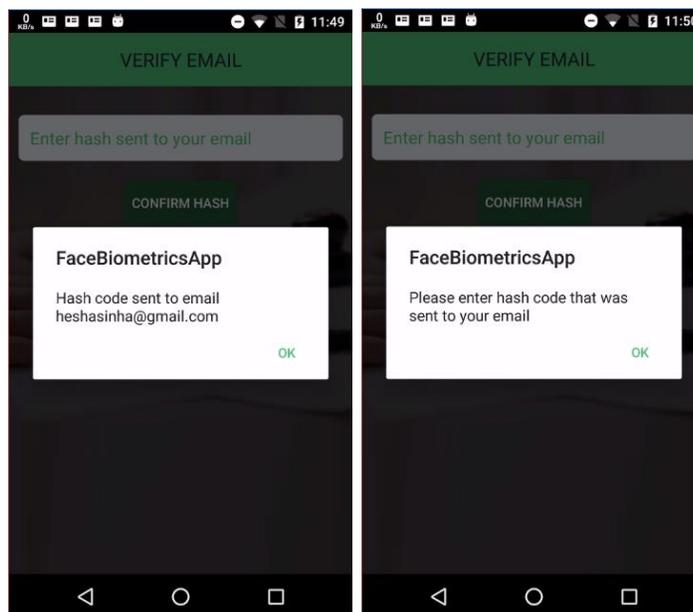
## 2.1.2 VERIFY EMAIL activity

User need to input valid email id of new noncorporate or existing noncorporate.



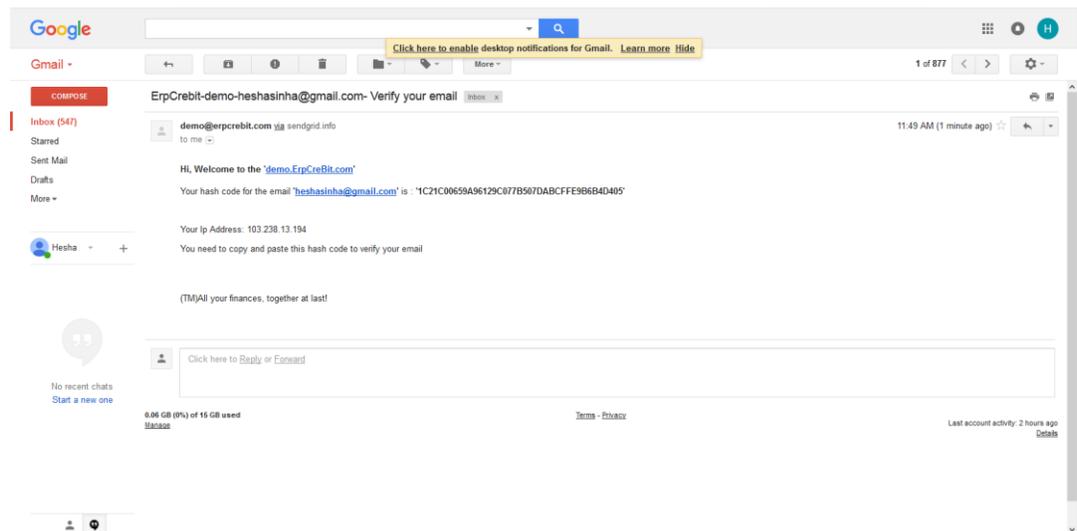
### 2.1.2.1 For new noncorporate

- i. If the email is not registered with "www.erpcrbt.com", hash code sent to the email id at first time you have entered [For new noncorporate].

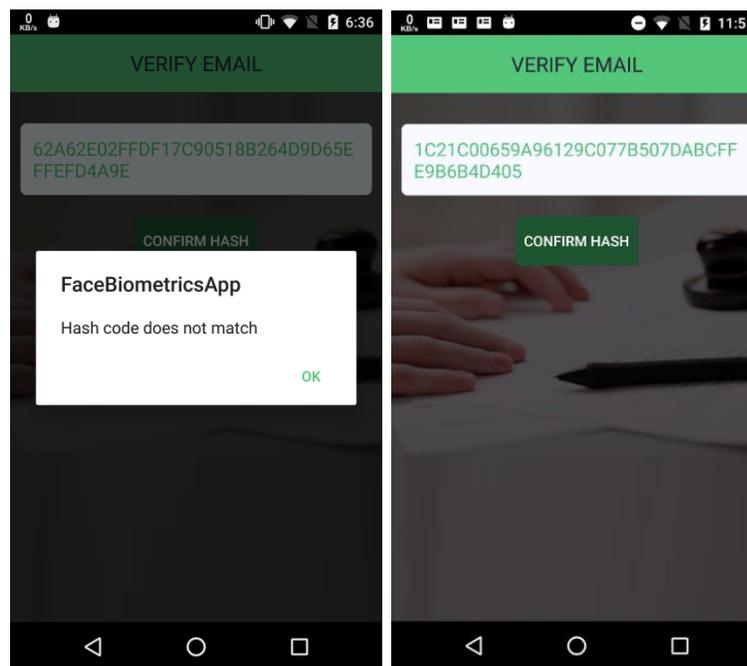




- ii. Check your email to see the hash code and verify your email on erpcrebit.com.



- iii. This activity asking you to verify the email by confirming the hash code which was sent to your email.

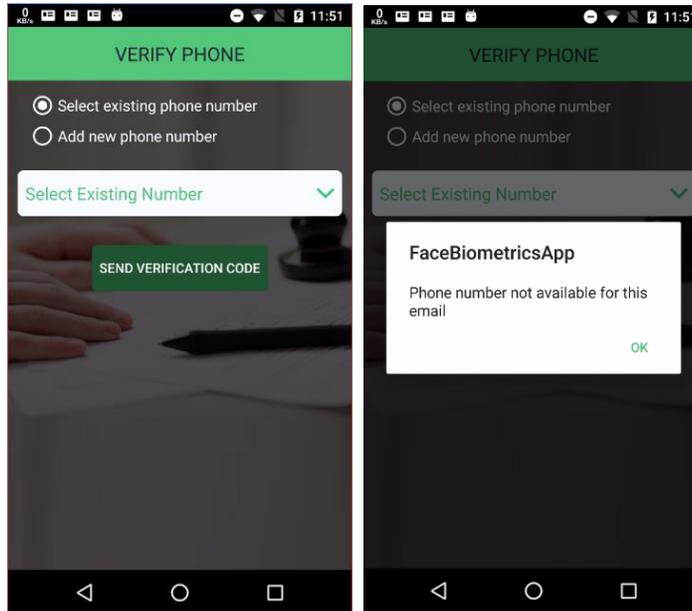


- iv. After hash code matched, user is able to see the next activity : **VERIFY PHONE** activity.

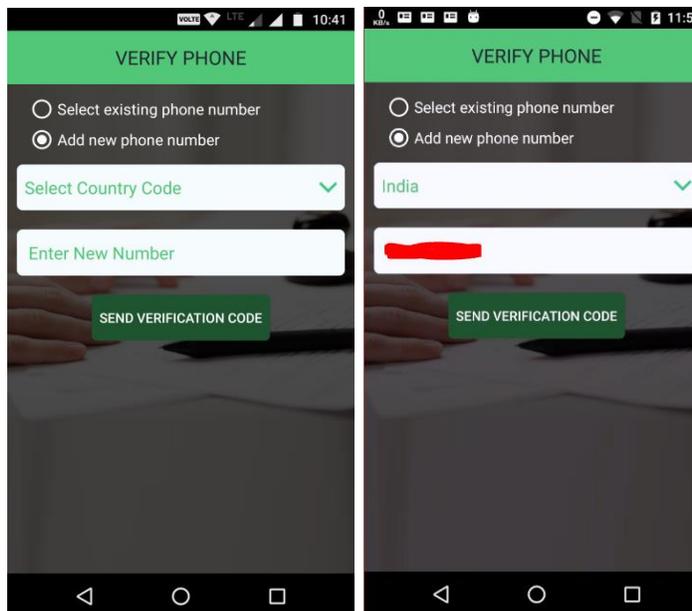
### a. VERIFY PHONE activity



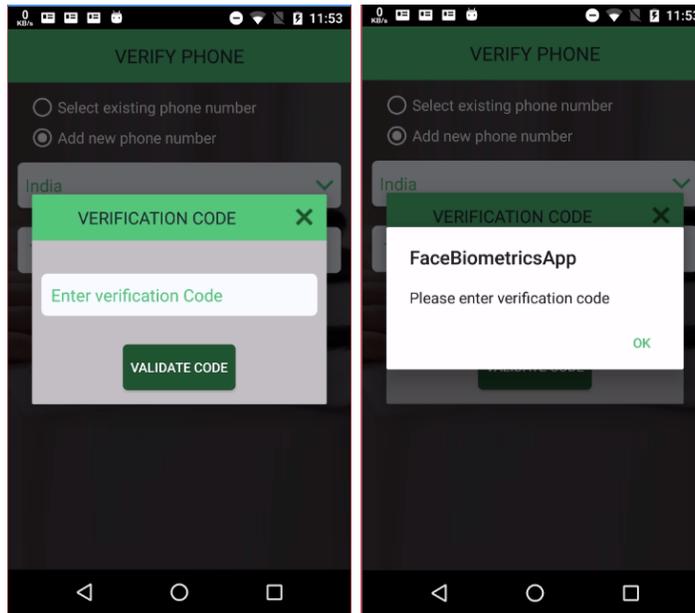
- i. If user has phone number registered with respected email, operator has to select first option i.e.: Select existing phone number and then need to select existing phone number.



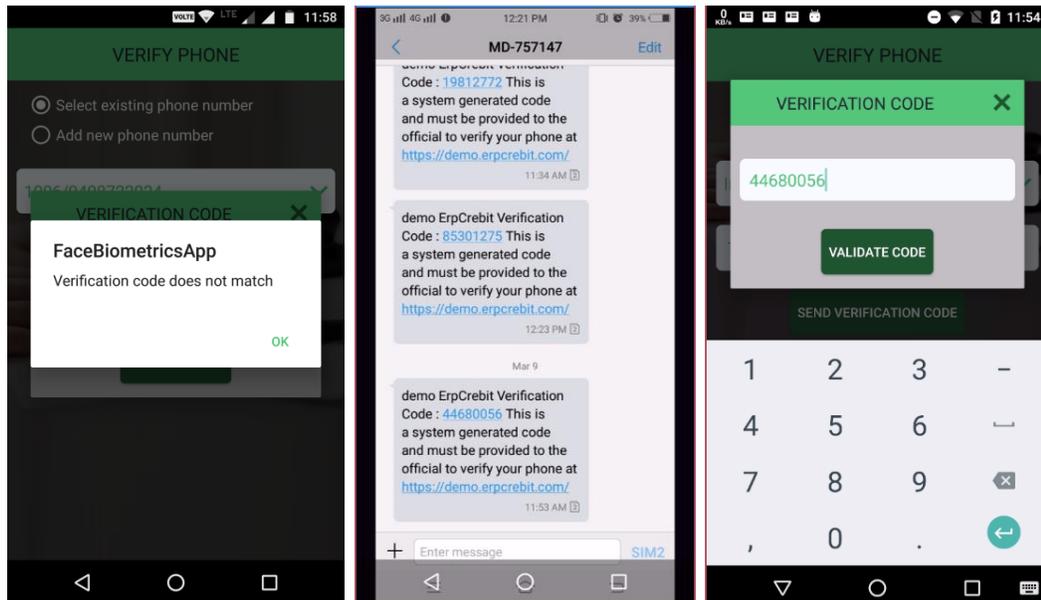
- ii. If phone number of new noncorporate not registered with respected email, operator has to select second option, select country and appropriate phone number of user.



- iii. Click on "Send Verification Code" button



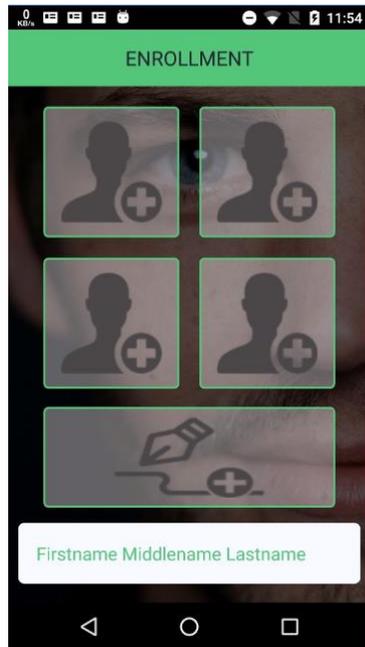
- iv. Dialog will be open, user need to enter valid verification code that was sent to your phone number.



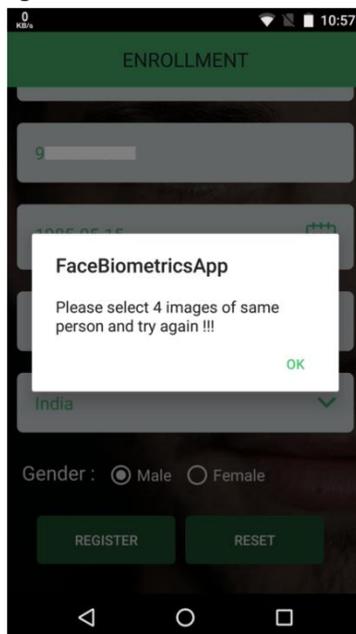
- v. After entering the correct verification code, you are now able to see the next activity **enrollment** activity.

## b. ENROLLMENT activity

- i. You need to enter details of new noncorporate.

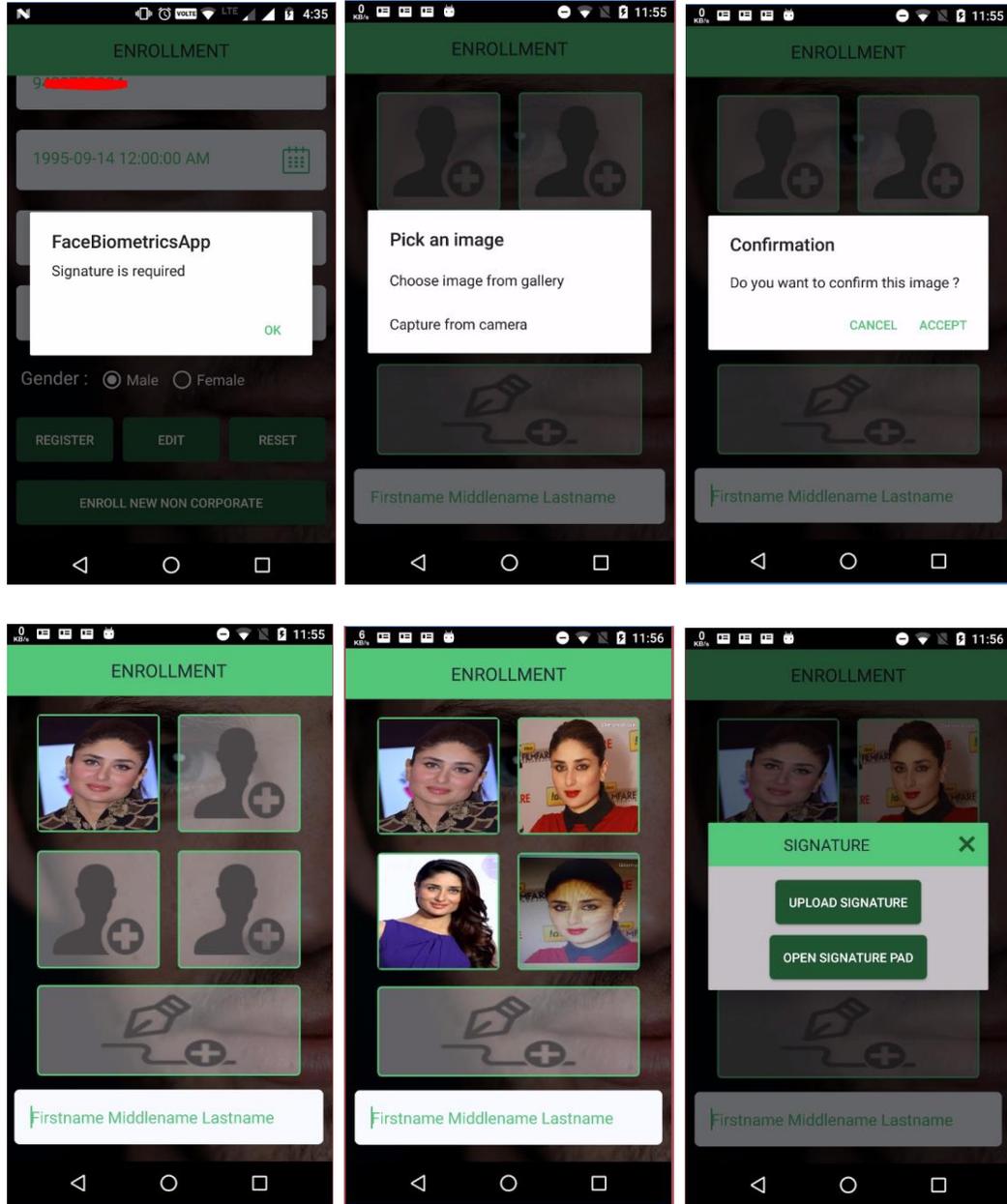


- ii. User must have to select all 4 images of their face. (This is because may be sometime if one of the image is blur or user has uploaded group image, multiple face or no face will be detected and noncorporate face not registered in our db [NoncorporateAttachment, BiometricFace, BiometricFaceAttachment]. Therefore we allowing user to select 4 images of their face).
- iii. User need to select "Country of birth and Nationality" and all images must have different, if you select same image again, will give message "All pics must be different, Don't select same image again!!!".



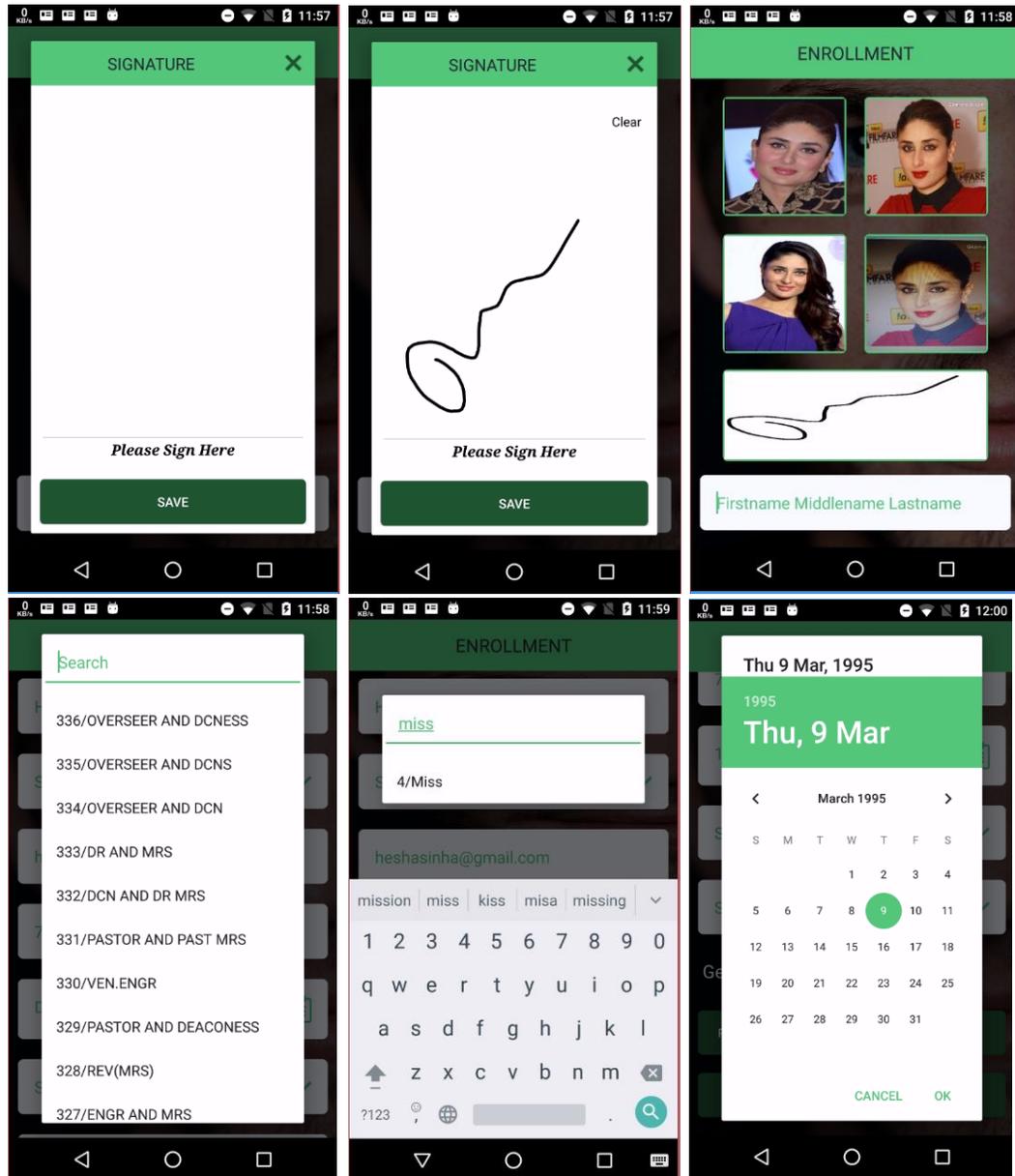


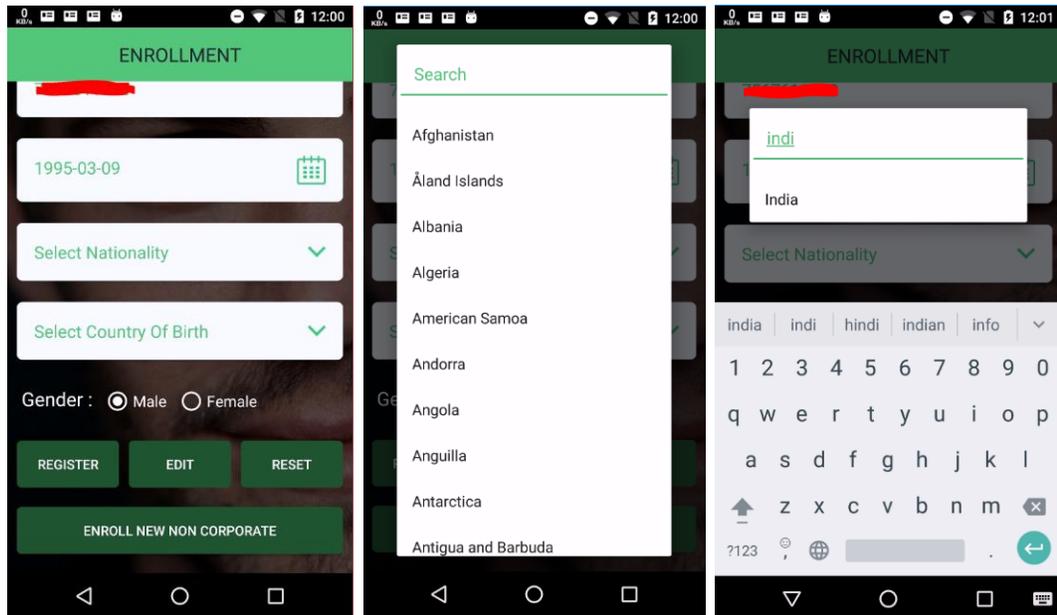
- iv. Provide all valid information about the noncorporate. Here all the fields are required. Click on **RESET** button to reset the values.



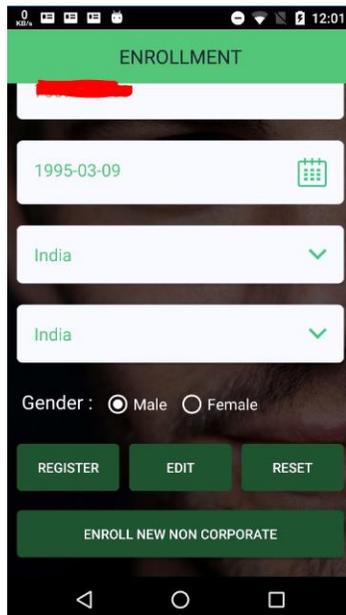


# FACEBIOMETRICS

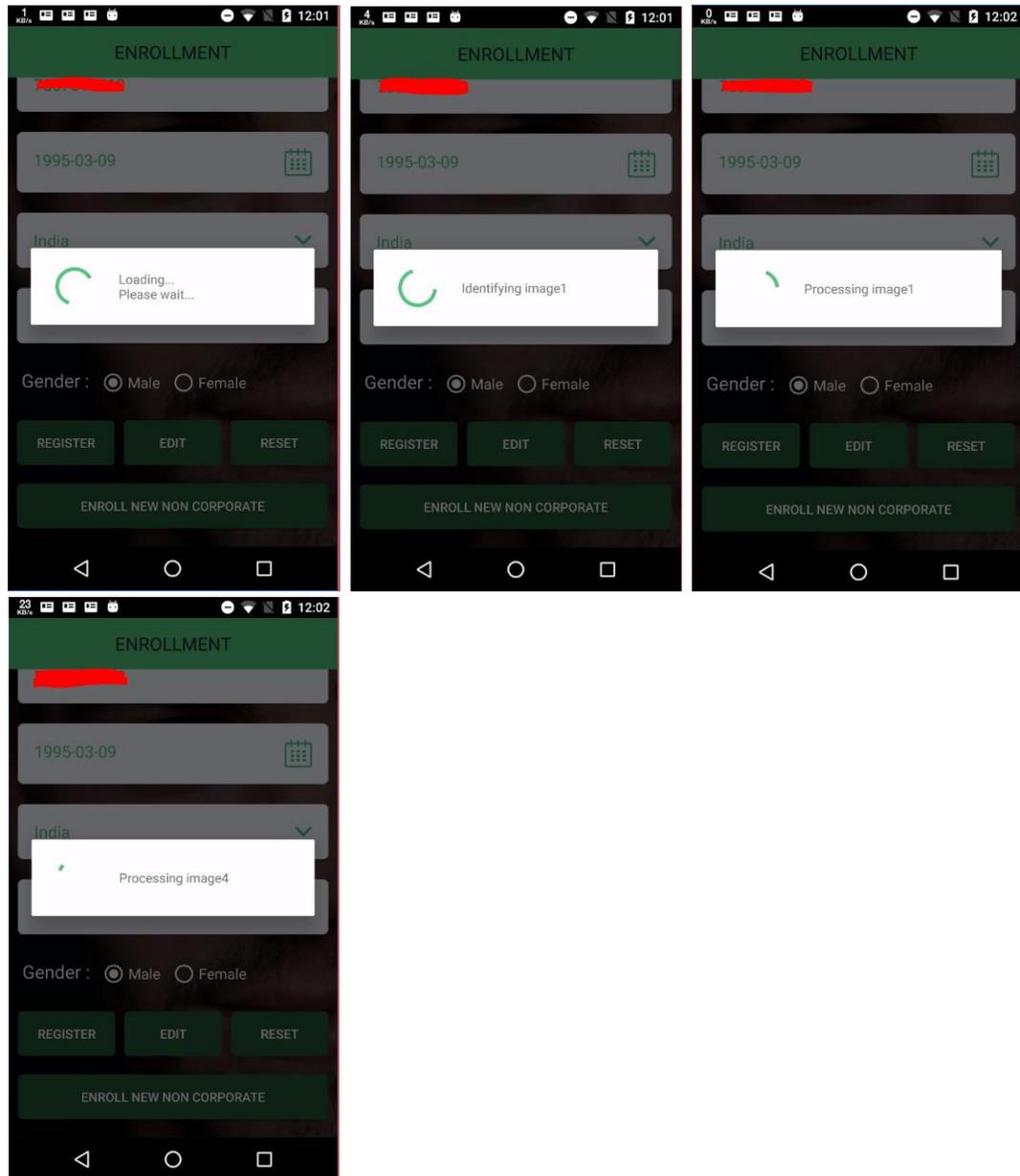




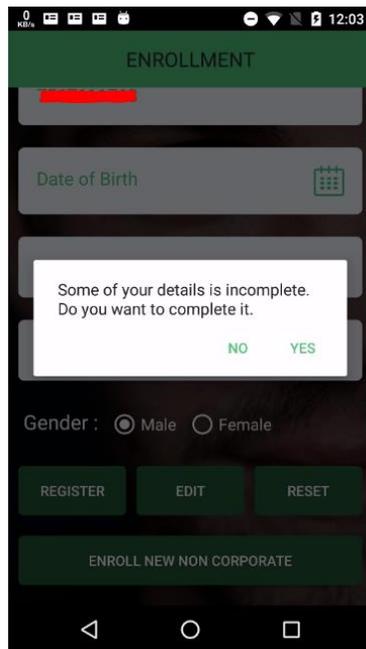
v. Then clicks on **REGISTER** button.



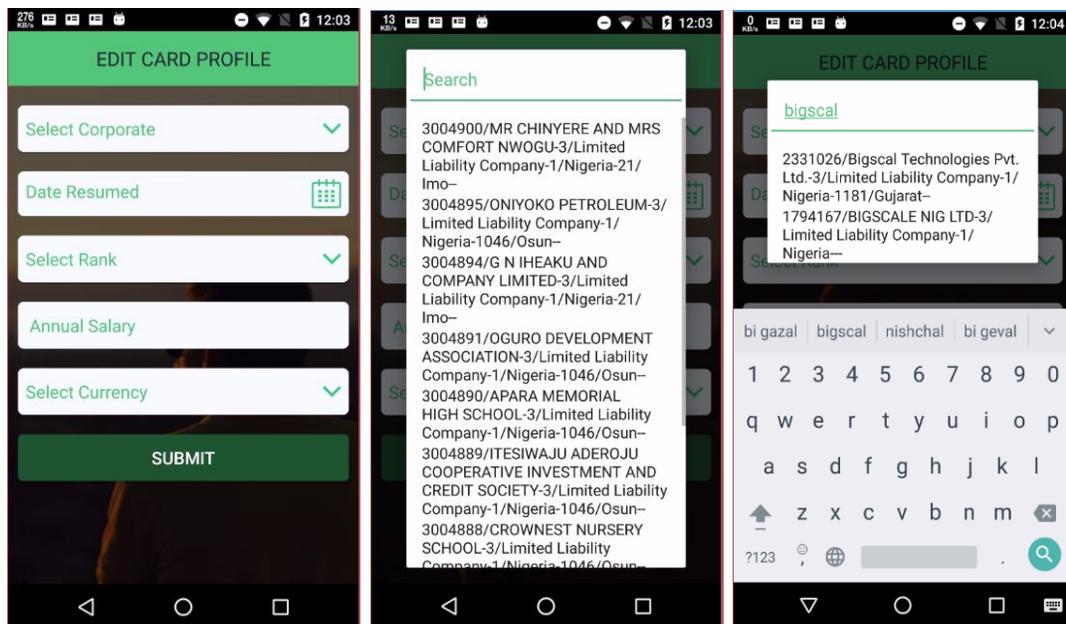
- vi. If face is not verified then, it will check noncorporate exist or not.
- vii. If noncorporate not exist, it will post new noncorporate.
- viii. Then it will process all 4 images, the image which has face detected will be added in azure & noncorporate attachment and signature image will be added to noncorporate attachment.

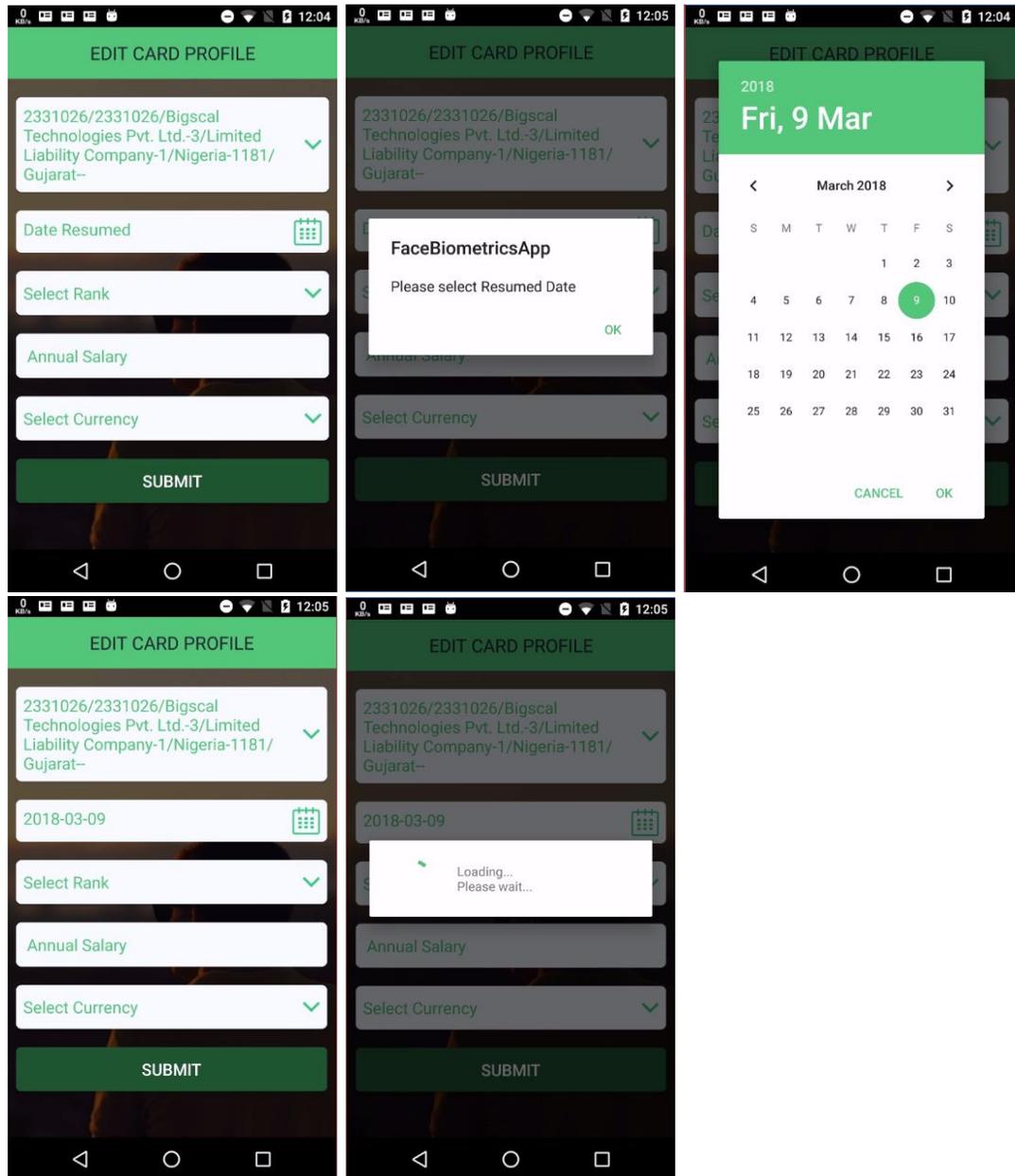


- ix. If face not detected for any of the image, the attachment will not be added for that noncorporate.
- x. After completing image processing, it will display confirmation dialog like "Some of your details are incomplete. Do you want to complete it". Here you must need to click on "YES" to complete the data capturing process.



- xi. If you clicked on **YES** button then it will display following EDIT CARD PROFILE activity. From this form you can post data into Corporate Staffing. Here corporate and resumed date are required, so must need to select it. Rank, annual salary and currency fields are optional. After filled up the form, click on **SUBMIT** button.





- xii. At the end of all process, it will show you the message in dialog like : Person face added for image1, image2, image3, image4.

Signature successfully attached.

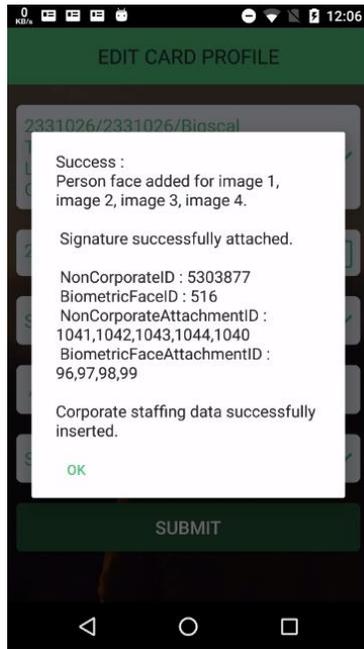
NonCorporateID: xxx

BiometricFacelD: xxx

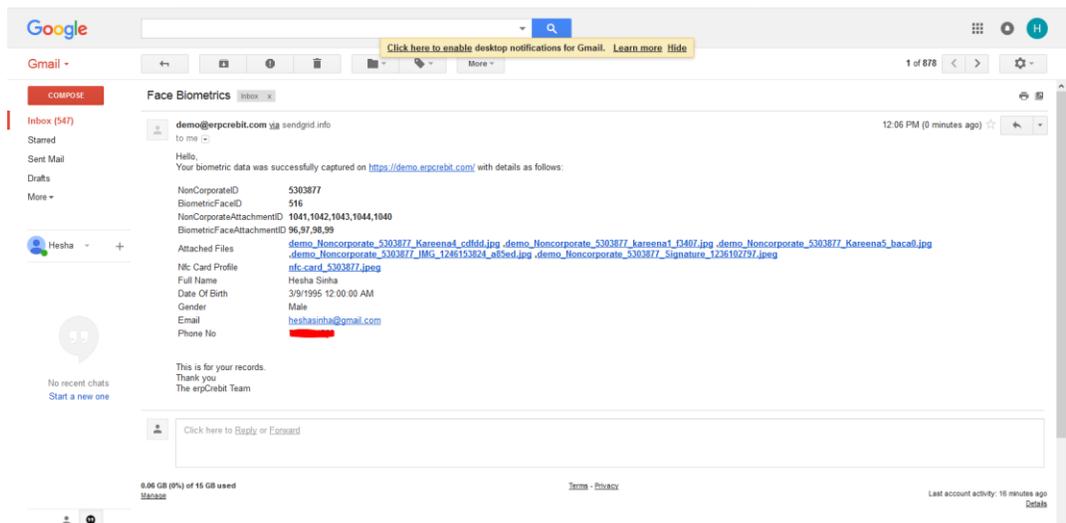
NonCorporateAttachmentID: xxx, xxx

BiometricFaceAttachmentID: xxx, xxx

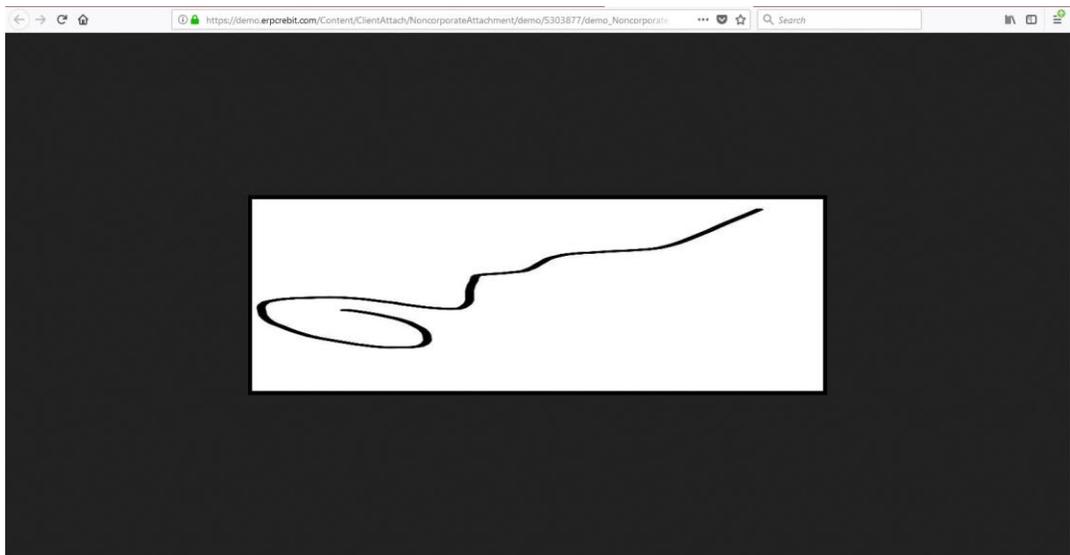
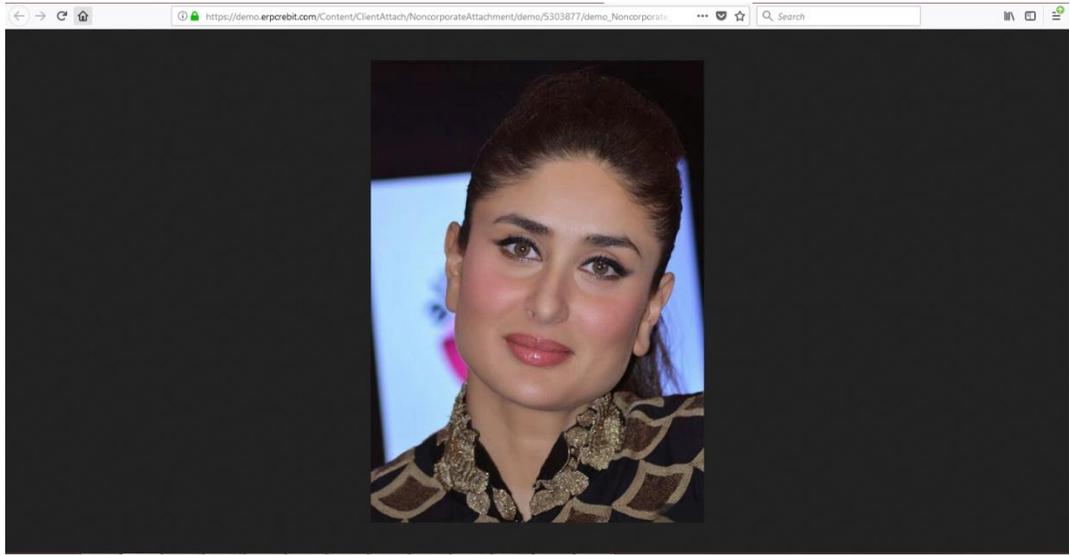
Corporate staffing data successfully inserted.



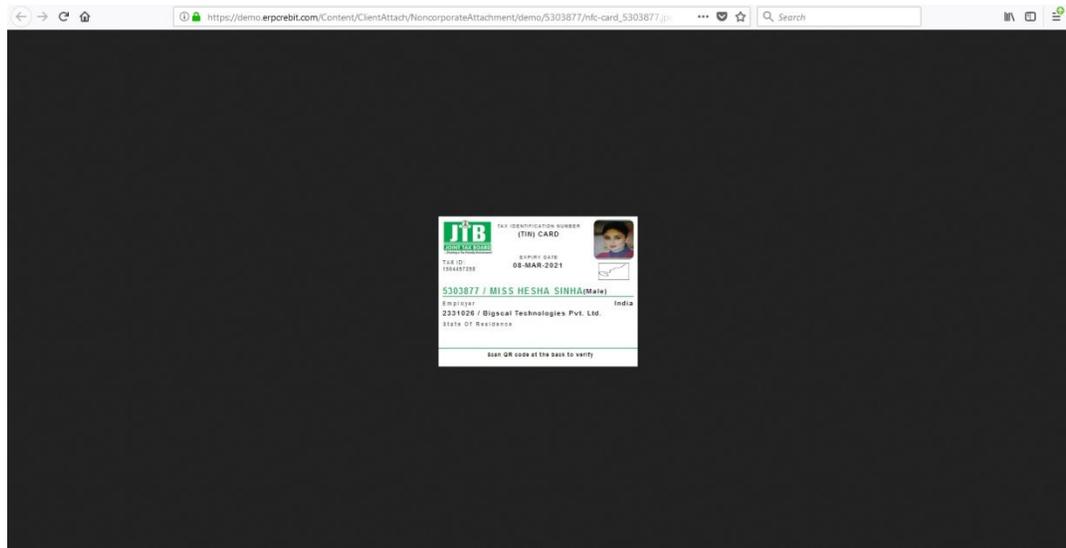
xiii. Also this details will be sent to both : registered user and logged in user(operator).



xiv. Operator can click on the link: Attached Files. When user clicked on link, the image which will added for that user is shown as:

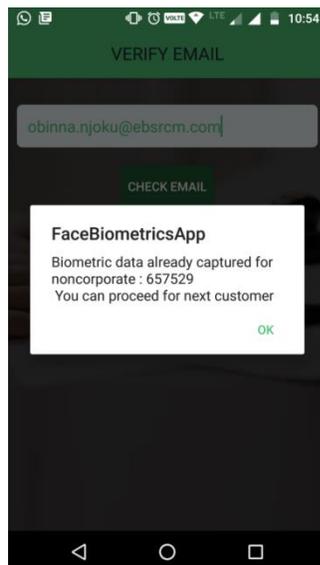


- xv. Click on link: Nfc Card Profile to view nfc card image. If user wants to change his/her face image of nfc card then go through [NFC CARD PROFILE](#) menu.

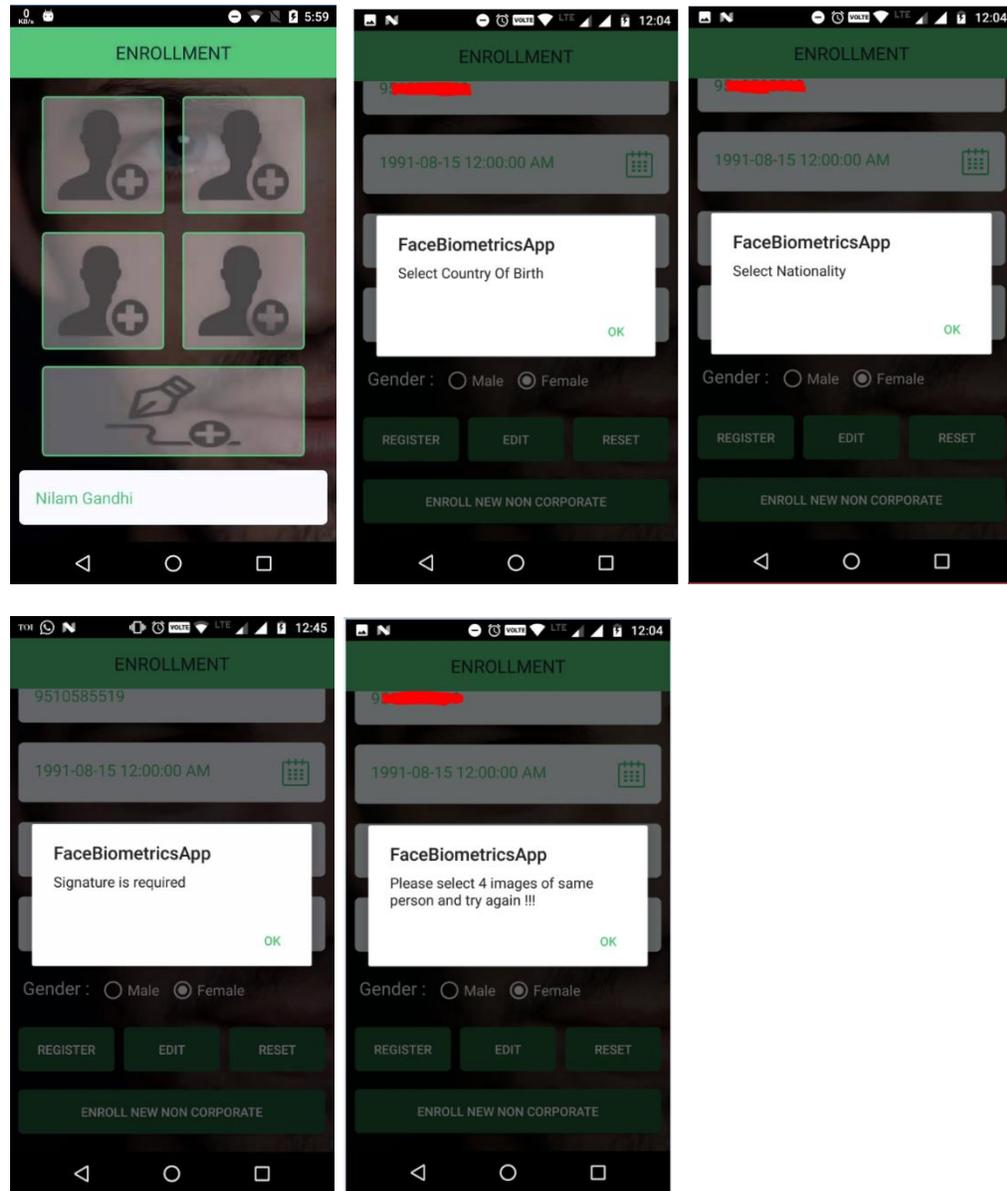


## 2.1.2.2 For existing noncorporate

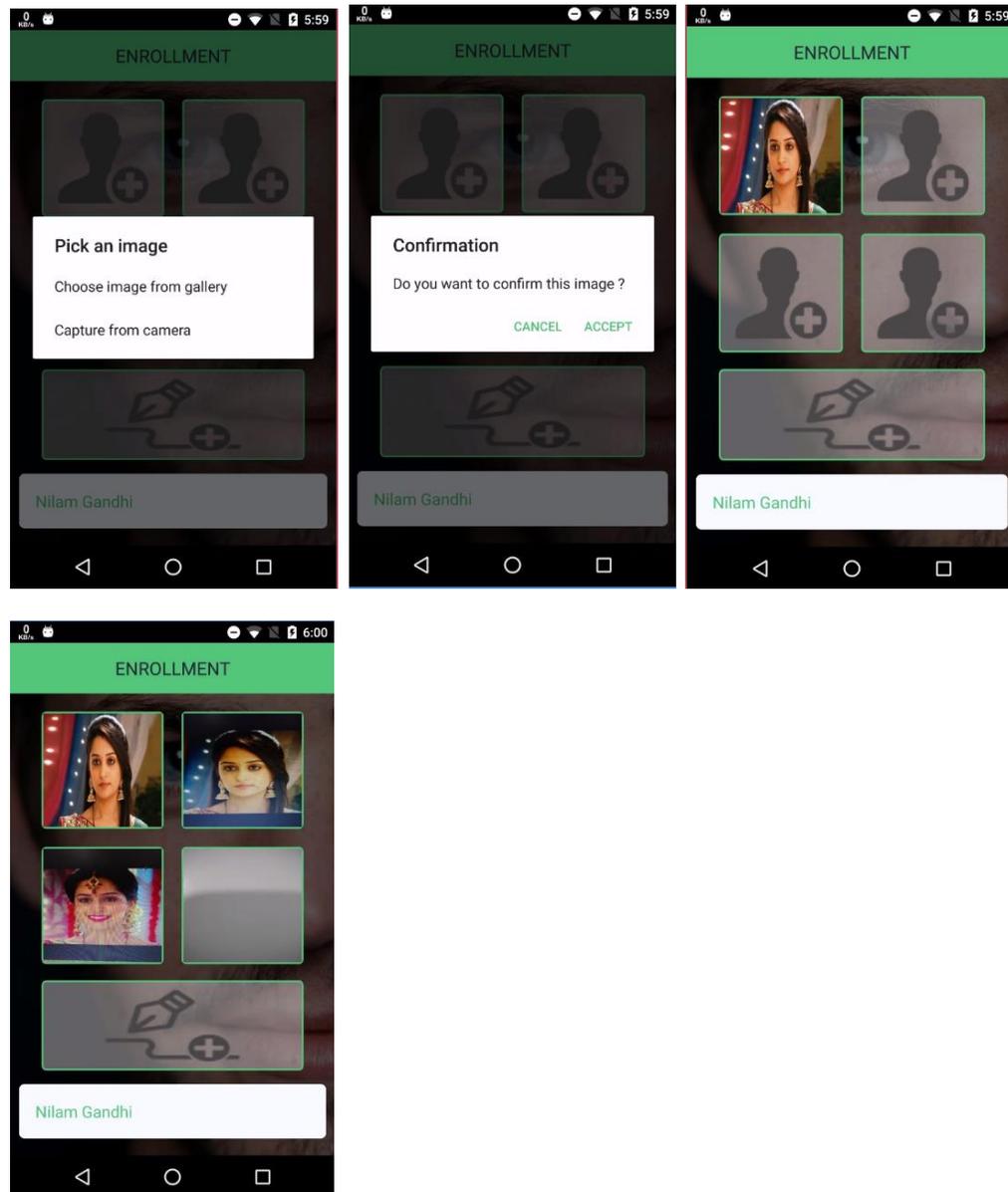
- i. If the email is already exist for noncorporate, then it will check for phone number is verified or not.
- ii. If phone is not verified then it will redirect to phone verification [\[Verify Phone\]](#) and if phone already verified then it checks for face biometrics data exist for this noncorporate or not.
- iii. If biometrics data is already exist for this noncorporate then it will show “Biometric data already captured for noncorporate: xxx” message.



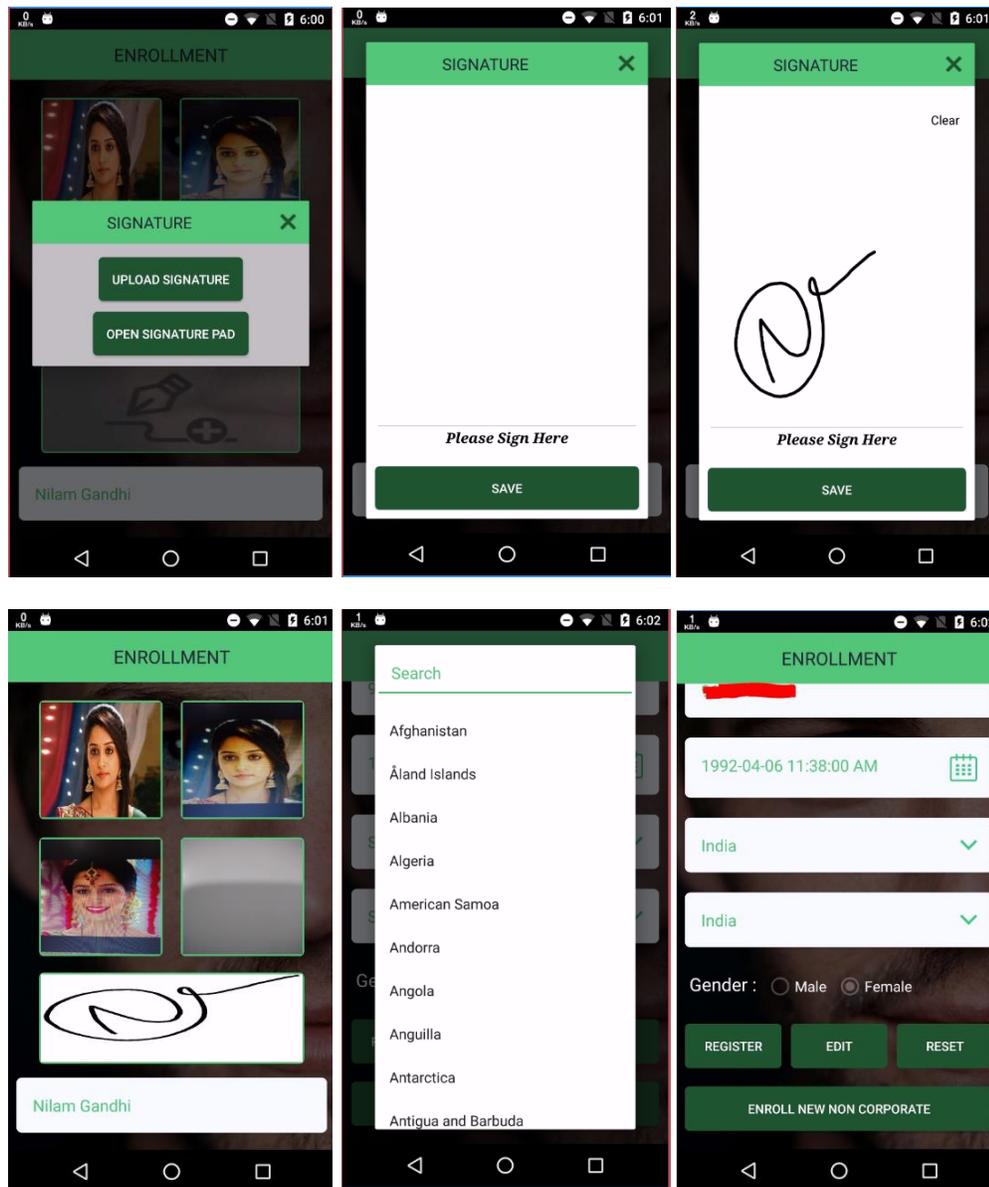
- iv. If biometric data is not exist for this noncorporate and phone is already verified then it will show “Enrollment” activity in which all details should be filled in enrollment form.



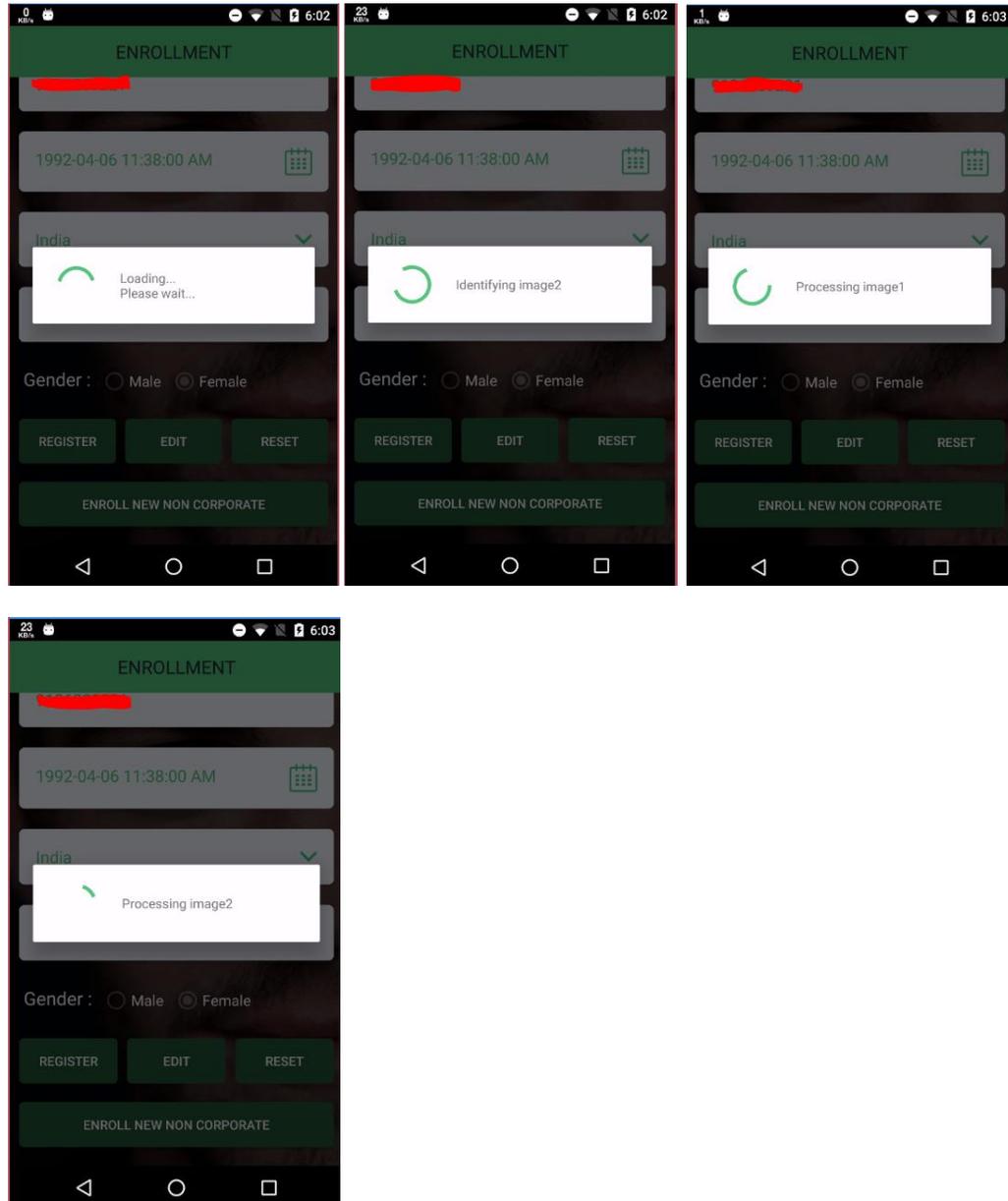
- v. Above are the validations for nationality, country of birth, signature image and for face images.
- vi. You need to upload 4 different face images of same person.



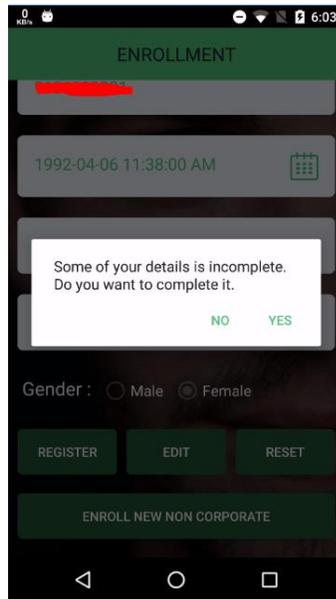
- vii. For signature, click on signature image view. It will open signature dialog with two options: **UPLOAD SIGNATURE** and **OPEN SIGNATURE PAD**. You can either select image of signature from **UPLOAD SIGNATURE** option or draw signature from **OPEN SIGNATURE PAD** option.
- viii. If you select **UPLOAD SIGNATURE** option, then you need to select signature image from gallery or capture signature from camera. Then it will ask for confirmation. Click on **ACCEPT** button to confirm the image or click on **CANCEL** button to cancel the selected image.
- ix. If you select **OPEN SIGNATURE PAD**, you need to draw signature using your finger on signature pad. If you want to clear signature from signature pad then click on **Clear** button. Click on **SAVE** button to confirm the image or click on **CANCEL** button to cancel the signature image.



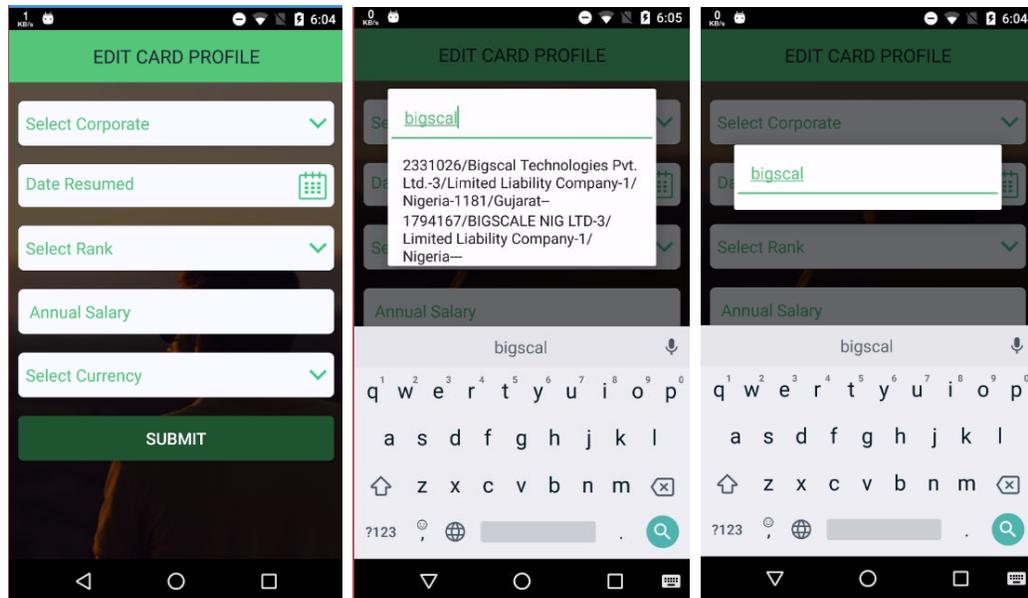
- x. You can also edit above details of existing noncorporate. For that click on **EDIT** button, it will redirect to you on **EDIT DETAILS** activity.
- xi. It will allows you to edit only full name, date of birth and gender. When you click on **SAVE** button, it will open confirmation dialog "Are you sure to edit this details ?". If you clicks on **CANCEL** button then noncorporate details will not be updated. If you clicks on **OK** button then noncorporate details will be updated and it will redirect you to **ENROLLMENT** activity.
- xii. Now you have to click on **REGISTER** button from enrollment activity to save your biometrics data. This app will verifies, all the detected images are of same person or not. If you select any of the image of different person then it will display alert like "Image XX not matched with image XX. Make sure all the image is of same person".

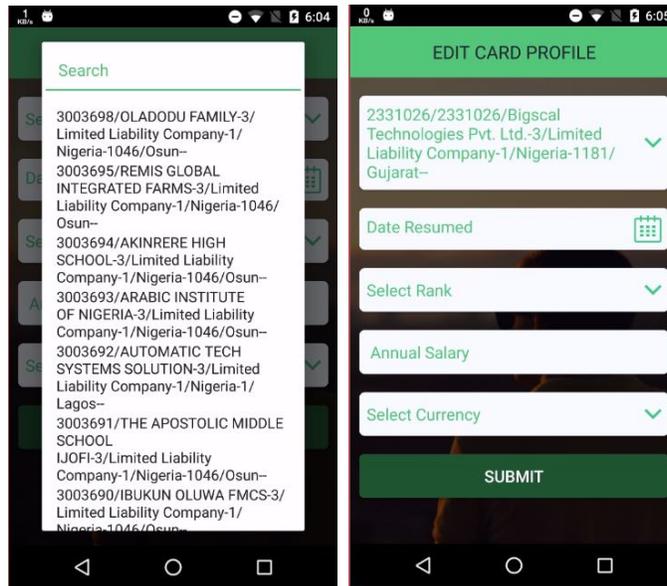


- xiii. If your corporate staffing data not exist then it will display dialog like "Some of your details is incomplete. Do you want to complete it.". Here you must need to post corporate staffing data, if you want to successfully capture biometric data and get nfc card image. So, click on **YES** button from dialog.

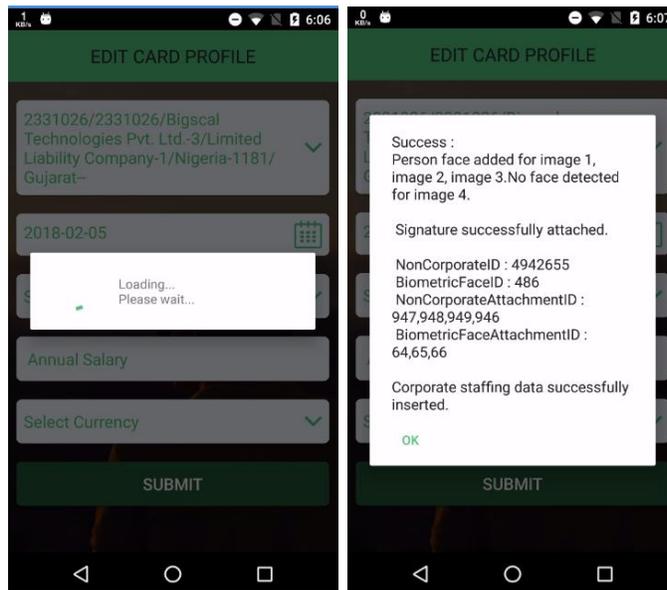


- xiv. If you clicked on **YES** button then it will display following **EDIT CARD PROFILE** activity. From this form you can post data into Corporate Staffing. Here corporate and resumed date are required, so must need to select it. Rank, annual salary and currency fields are optional.



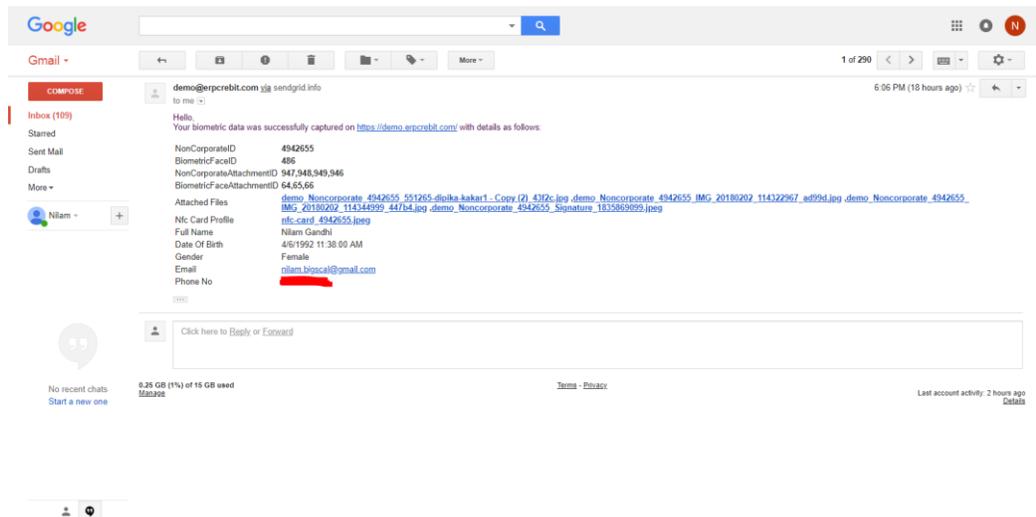


- xv. After filling the form, you need to click on **SUBMIT** button. It will display following success message.

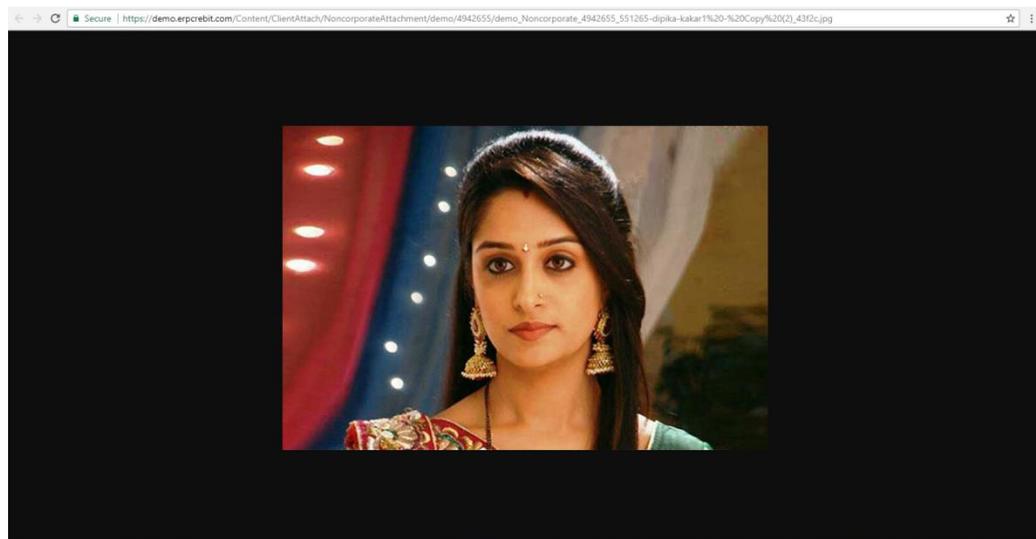




xvi. Also this details will be sent to both : registered user and logged in user(operator).

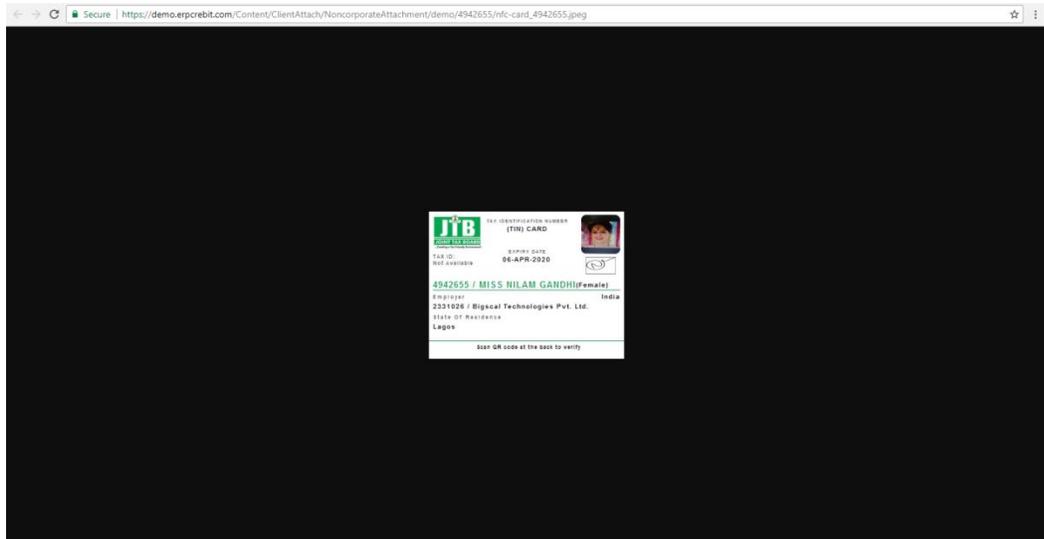


xvii. You can click on the link: Attached Files to view attached images :





xviii. User need to click on the link: Nfc Card Profile to get his/her Nfc Card image.



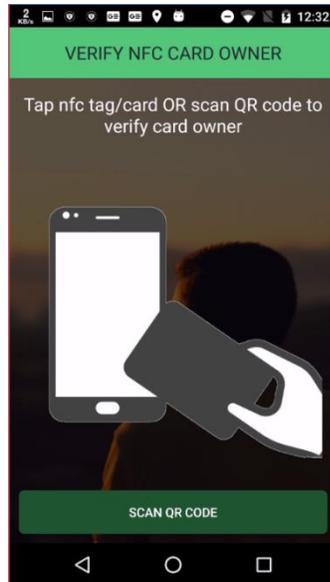


## 2.2 VERIFY NFC CARD OWNER

This option is use to verify nfc card owner.

### 2.2.1 VERIFY NFC CARD OWNER activity

- i. User need to **Tap NFC Card** against the back or front of the device OR **Scan QR Code**(that is available on the nfc card) to verify card owner.

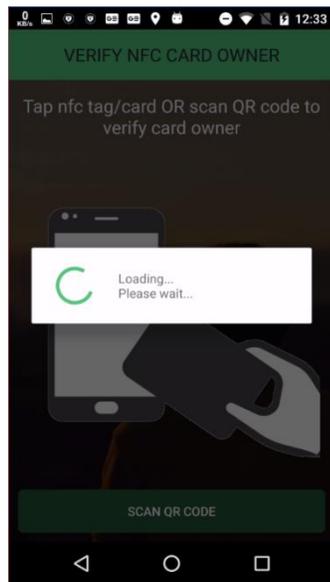


If you clicks on **SCAN QR CODE** button then, you need to scan QR code like following:

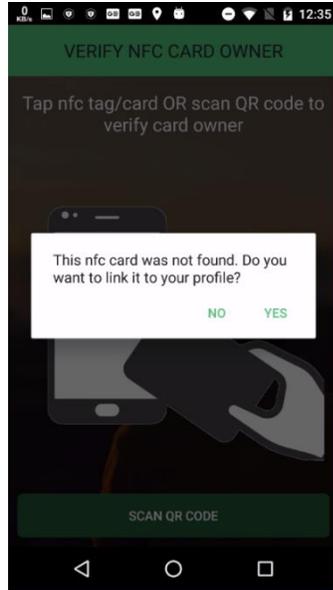




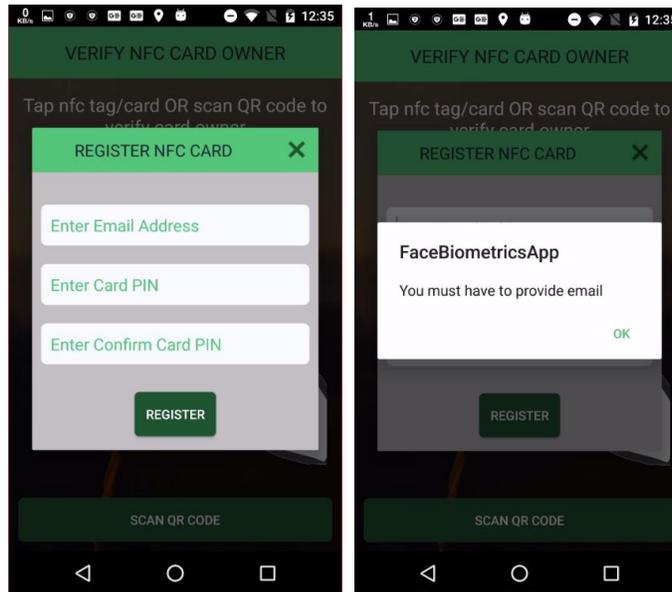
If you tap nfc card then, it will display following:



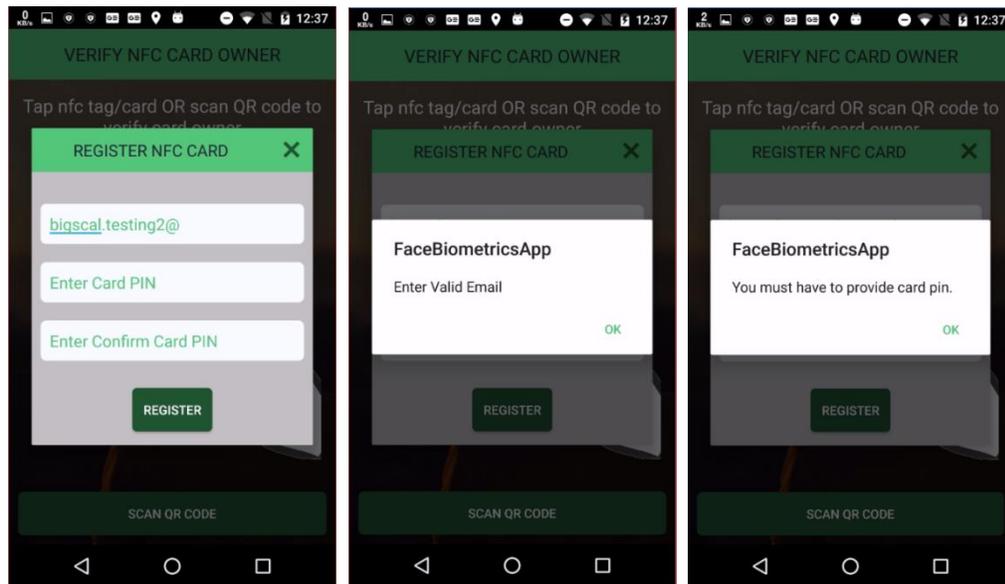
- ii. When you tap card, it will check nfc card data exist or not. If data not exist then it will show error message like "This nfc card was not found. Do you want to link it to your profile?". Click on "**YES**" button to register nfc card and Click on "**No**" button to close the dialog.



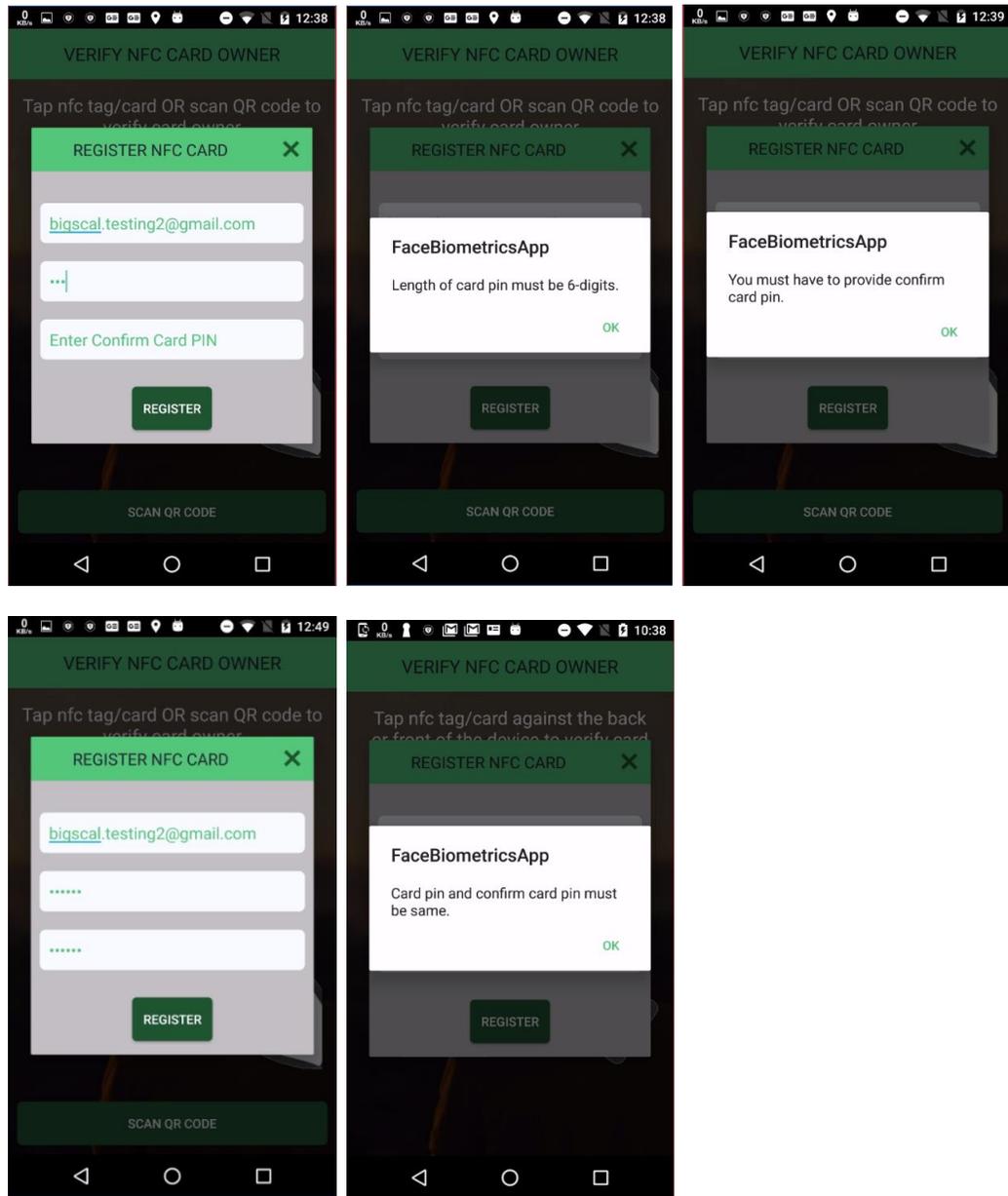
- iii. If you clicked on "**YES**" button then it will display dialog. User need to insert their email address in "Enter Email Address" textbox and . Then click on "**REGISTER**" button. If you click on "**REGISTER**" button without entering email then it will display error message like "You must have to provide email".



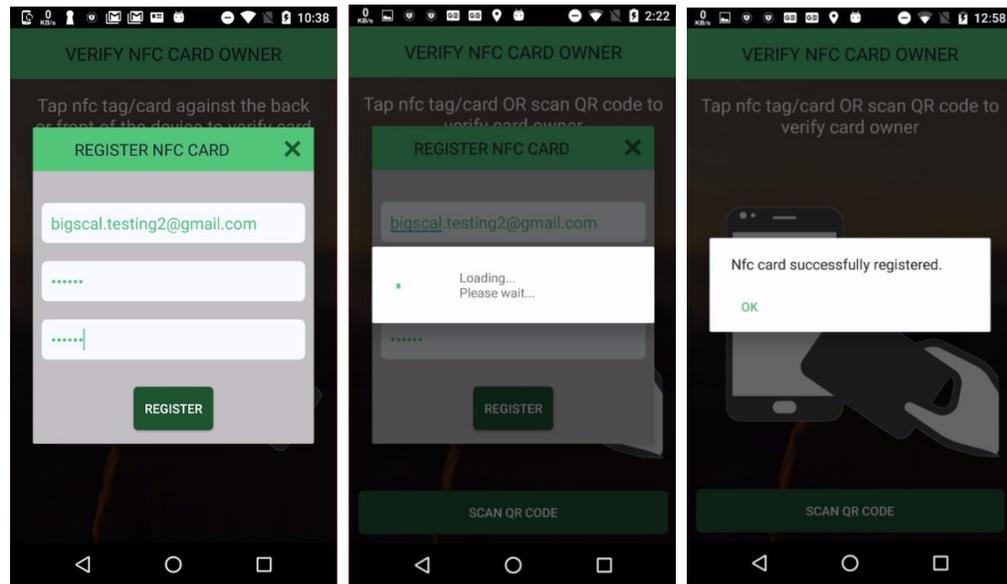
- iv. If your entered email is wrong then it will display error message like "Enter Valid Email". If you clicked on "**REGISTER**" button without entering card pin then, it will display error message like "You must have to provide card pin".



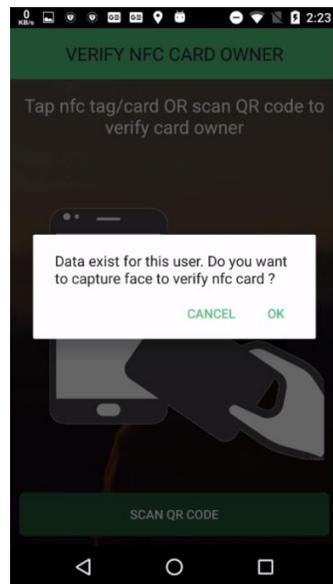
- v. Length of card pin and confirm card pin must be 6-digit. You must have to provide confirm card pin and that should be same with card pin.



- vi. If customer not exist with your entered email then display error message like "NonCorporate customer does not exist with this email-address, create as a new record."
- vii. If customer exist with your entered email then it will link your nfc card with your profile and display success message like "Nfc card successfully registered".



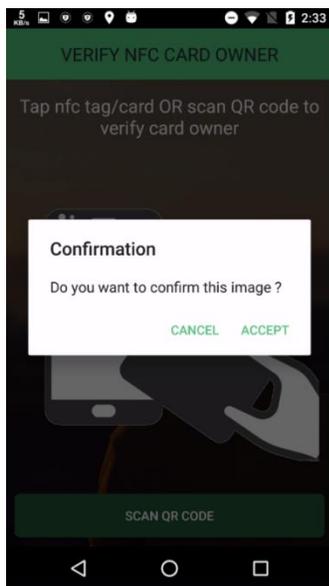
- viii. If data exist then it will check noncorporate attachment data exist or not.
- ix. If attachement data exist then it will display dialog "Data exist for this user. Do you want to capture face to verify nfc card ?". If you want to cancel it, then click on "**CANCEL**" button.



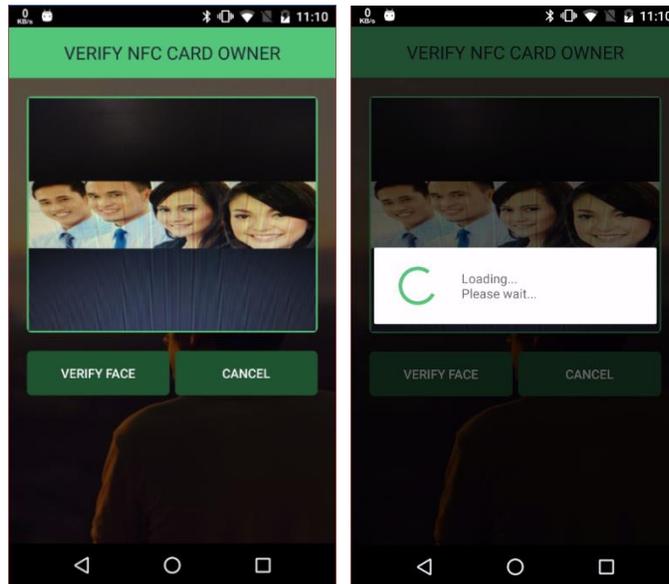
- x. If you want to proceed further then click on "**OK**" button. When you clicks on "**OK**" button then it will open camera in your device.
- xi. Here you need to capture face of nfc card user.



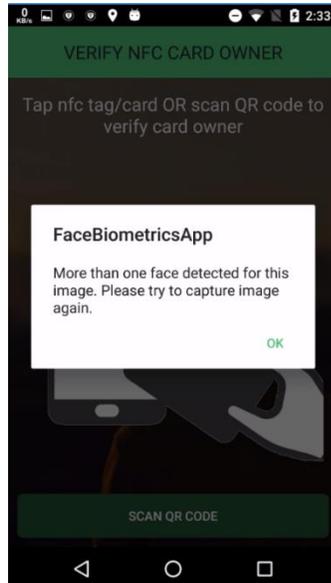
- xii. After capturing face, if you want to cancel captured image then click on close(X) sign and if you want to confirm captured image then click on right sign.
- xiii. Then it will display confirmation dialog "Do you want to confirm this image".



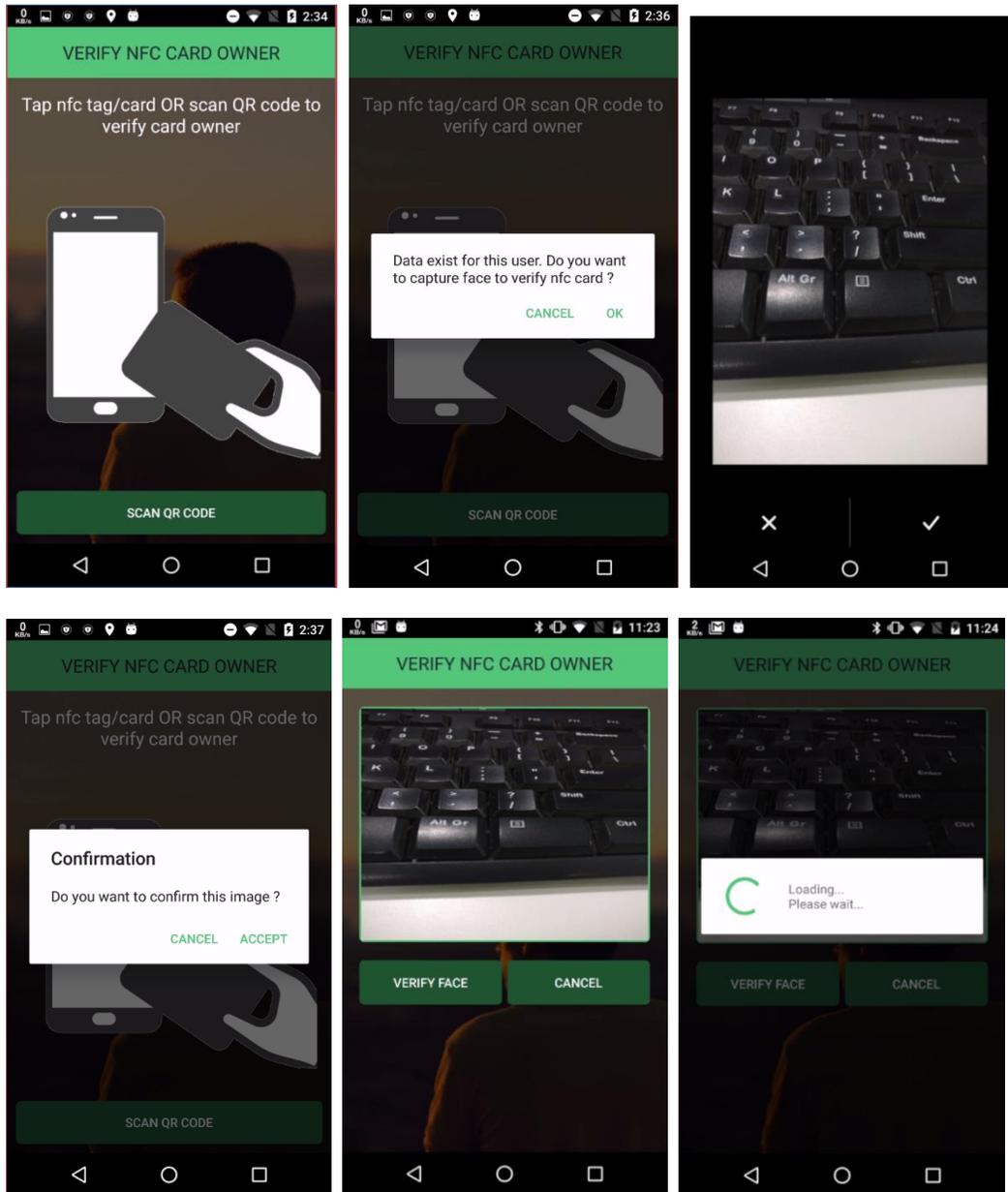
- xiv. Click on "**ACCEPT**" button to confirm the image and proceed further. After clicking on "**ACCEPT**" button, captured image will be displayed on image view.
- xv. Now to verify captured image with nfc card owners, clicks on "**VERIFY FACE**" button.

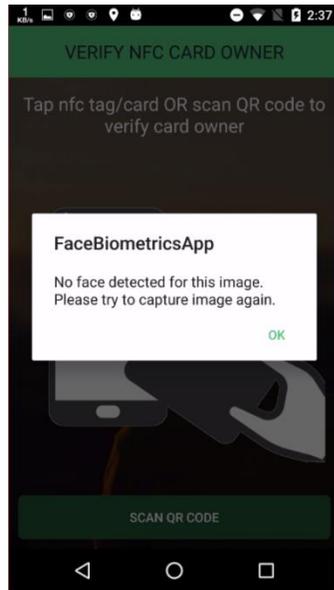


- xvi. After clicking on "**VERIFY FACE**" button, it will detect face from captured image and verifies captured image with tapped nfc card.
- xvii. If more than one face detected from image then, it will display error message "More than one face detected for this image. Please try to capture image again".

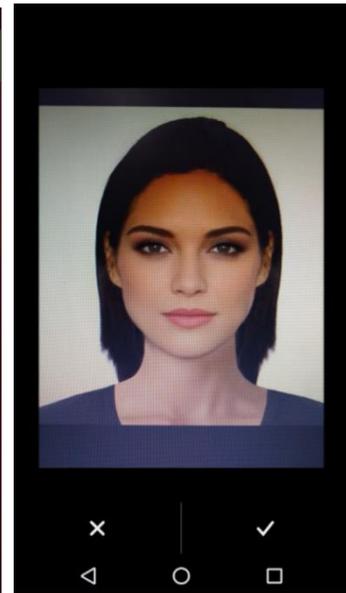
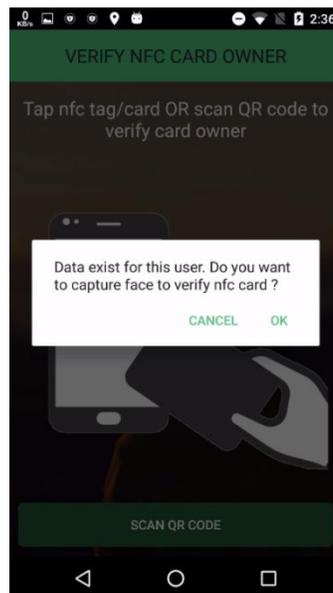
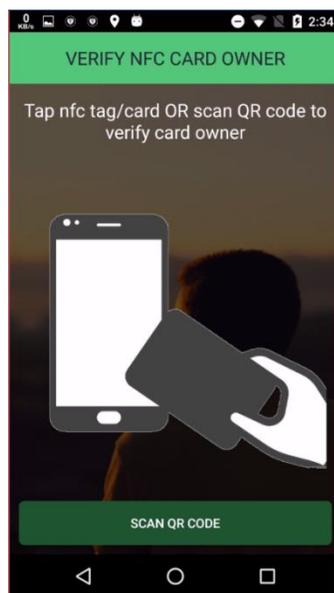


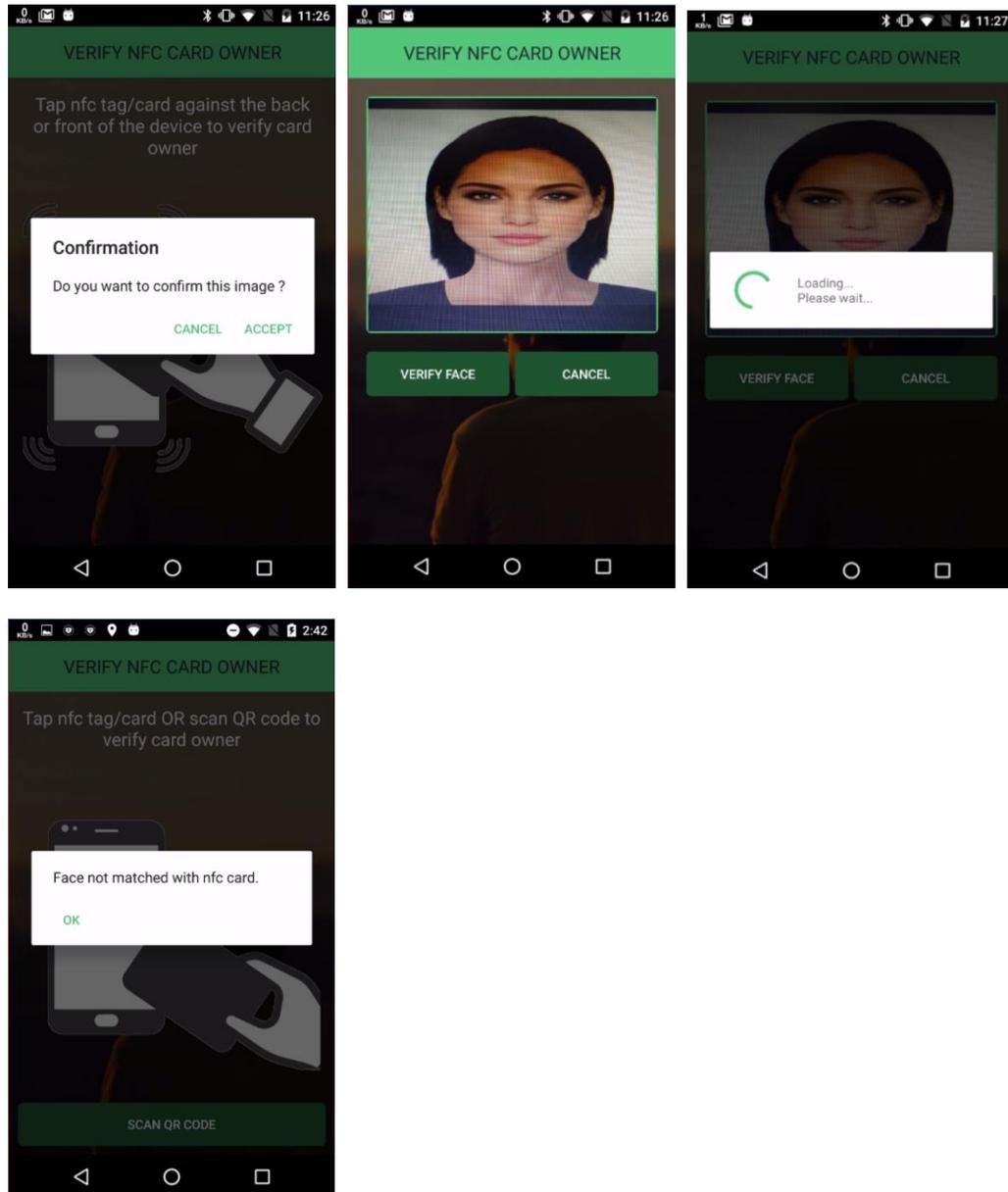
- xviii. If no face detected from image then, it will display error message "No face detected for this image. Please try to capture image again".





- xix. If captured face not matched with nfc card owners face then, it will display error message "Face not matched with nfc card".

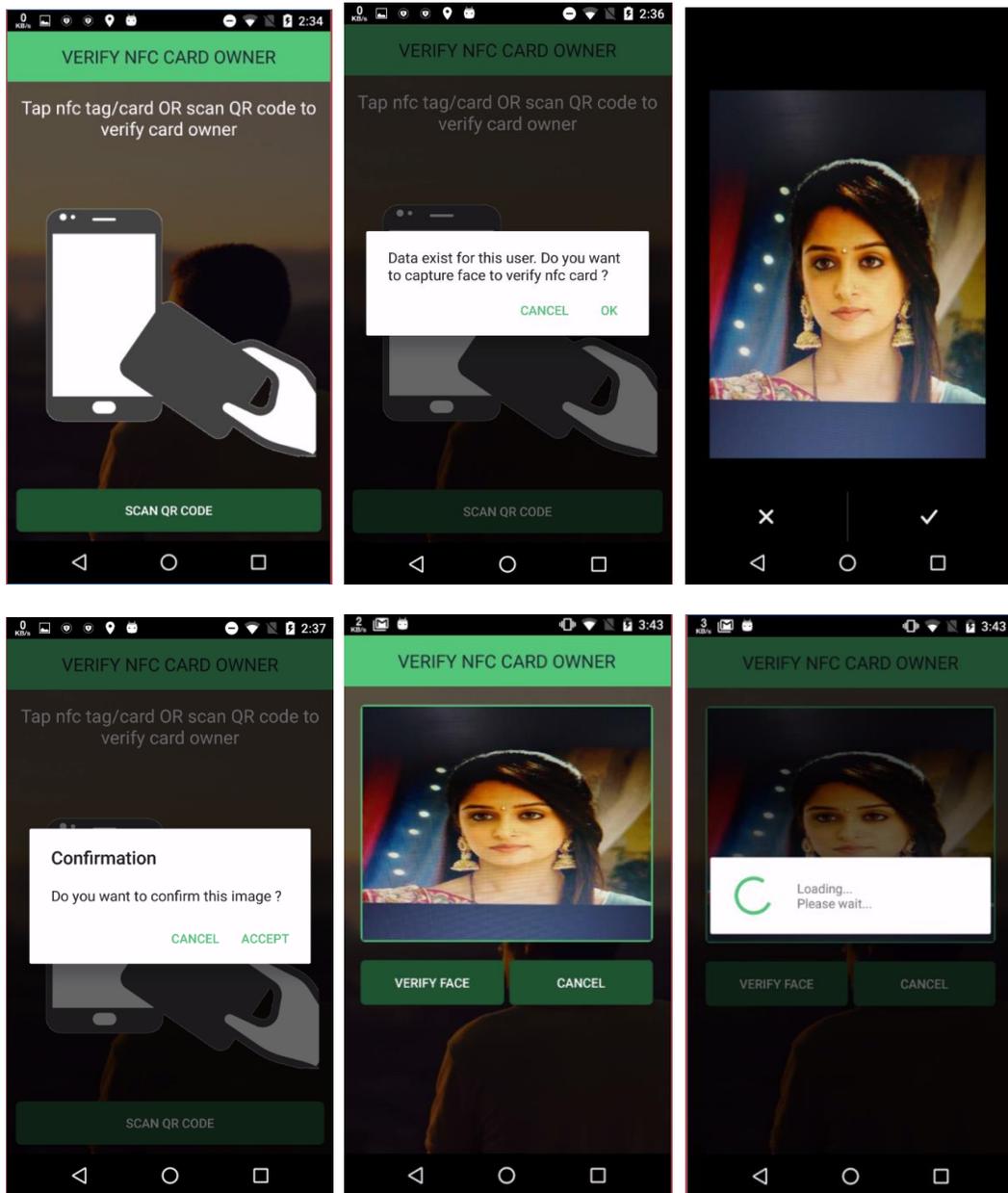


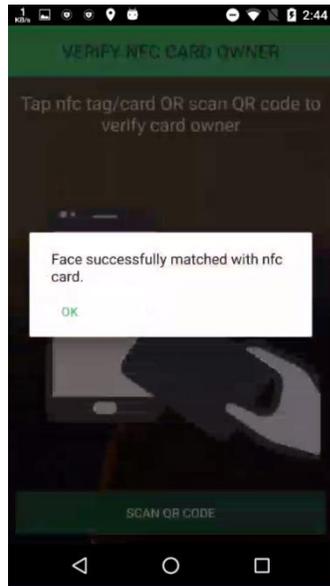


- xx. If captured face matched with nfc card owners face then, it will display success message "Face successfully matched with nfc card".



# FACEBIOMETRICS





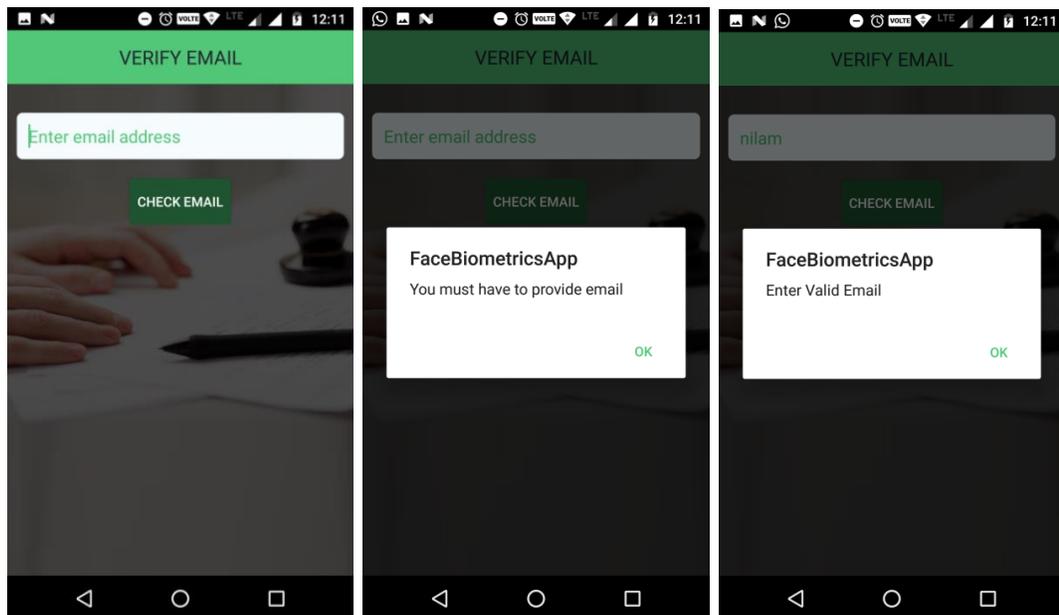


## 2.3 DOWNLOAD/SEND NFC CARD

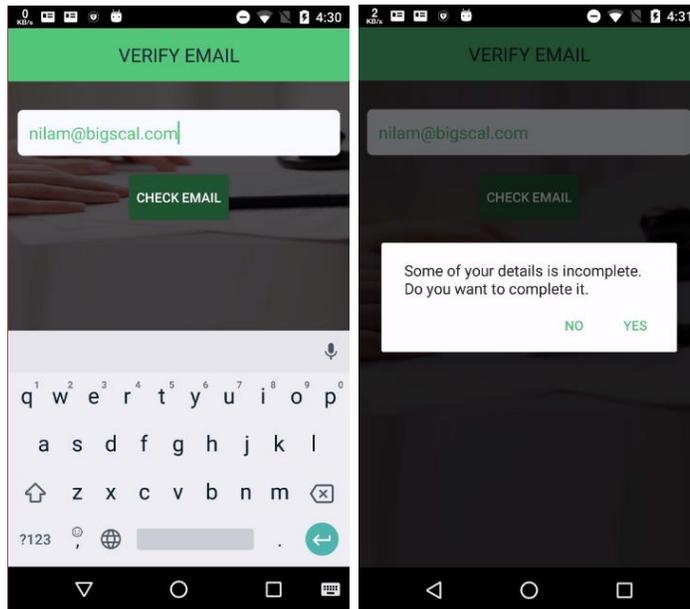
This option use for those users whose face biometric data already captured and Nfccard registered, and either his/her signature is captured or not.

### 2.3.1 VERIFY EMAIL activity

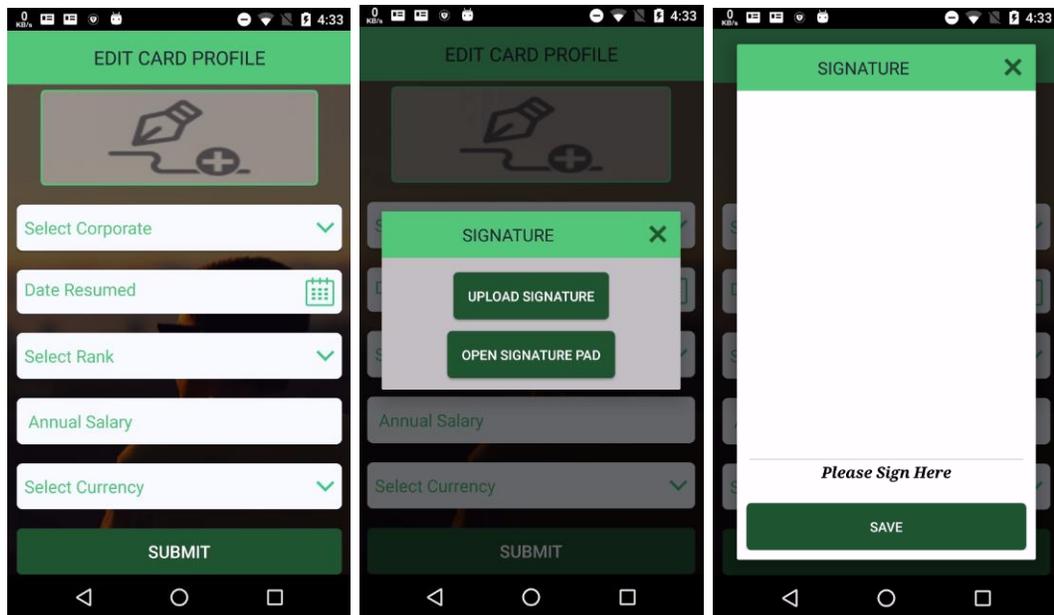
- i. User need to input valid email id of existing noncorporate in verify email activity.
- ii. If user clicks on **Check Email** button without entering email then, it will show error message "**You must have to provide email**" and if entered email format is wrong then, it will show "**Enter Valid Email**" error message.

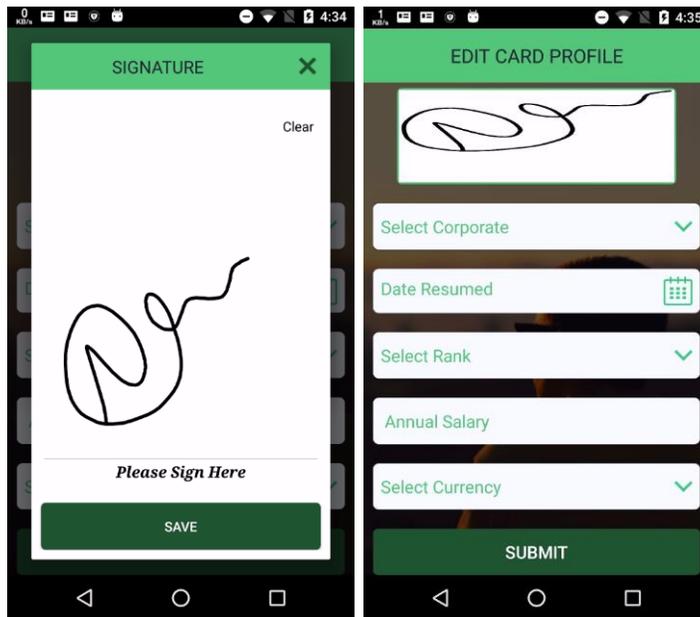


- iii. If record exist in corporate staffing and some of nonCorporate details incomplete then it will display message like "Please complete your NonCorporate detail from web Or Contact to Admin".
- iv. If record not exist in corporate staffing for entered email Or signature is null then, it will show error message like "Some of your details is incomplete. Do you want to complete it".

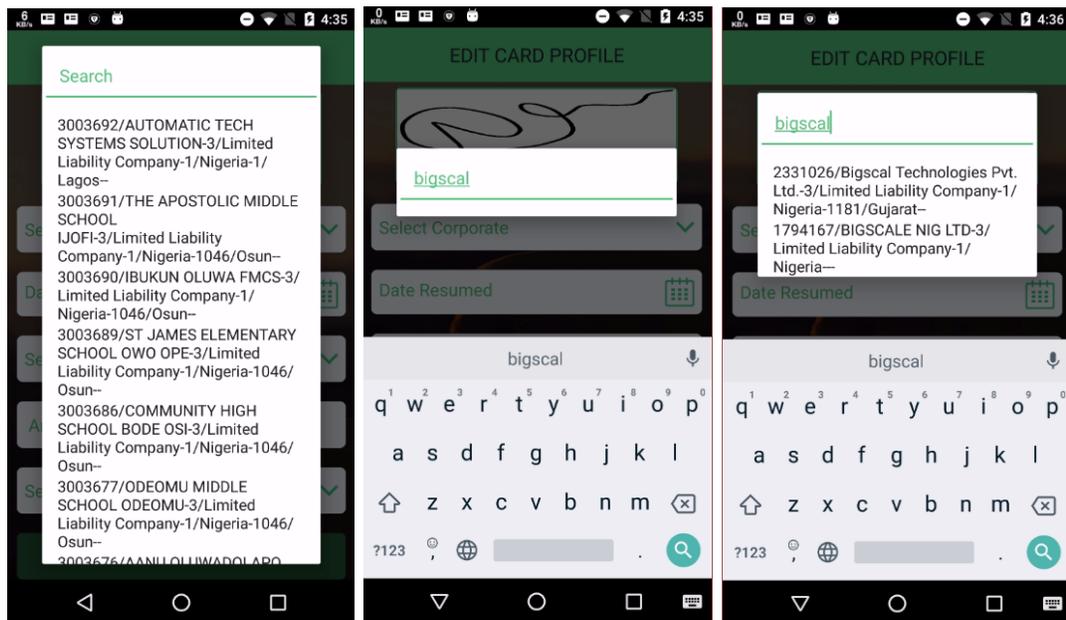


- v. If you clicked on **YES** button then it will display following **EDIT CARD PROFILE** activity. From this form you can post data into Corporate Staffing. Here corporate and resumed date are required, so must need to select it. Rank, annual salary and currency fields are optional. If signature is null then also this activity display signature view. You can capture your signature either using "**Upload Signature**" or "**Signature Pad**".

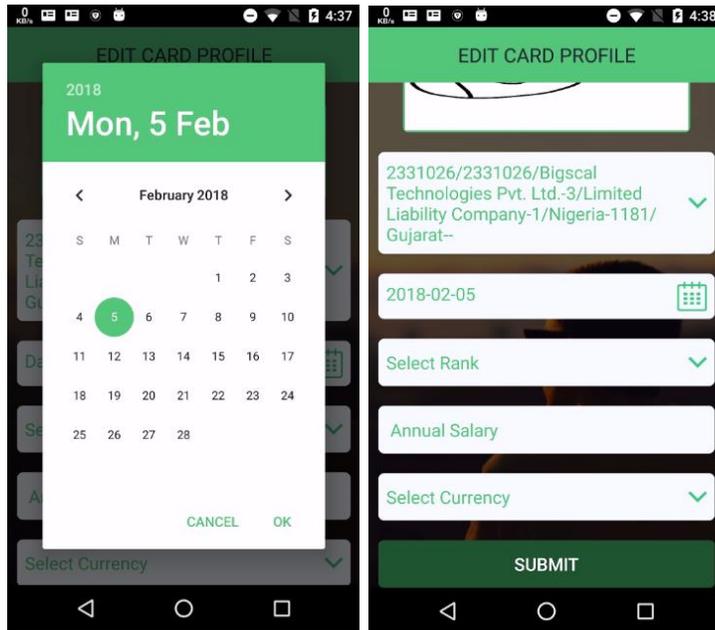




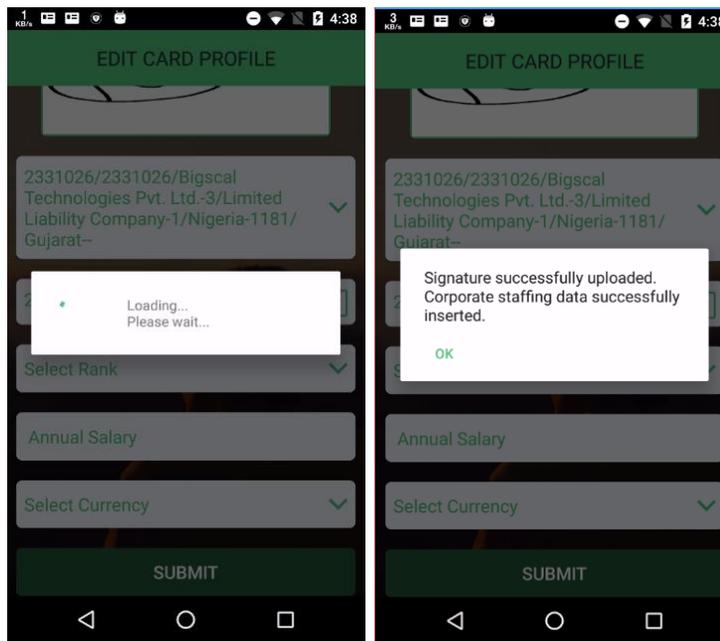
- vi. Click on "Select Corporate" and search for corporate. After displaying search result, you can choose your corporate and confirm it.



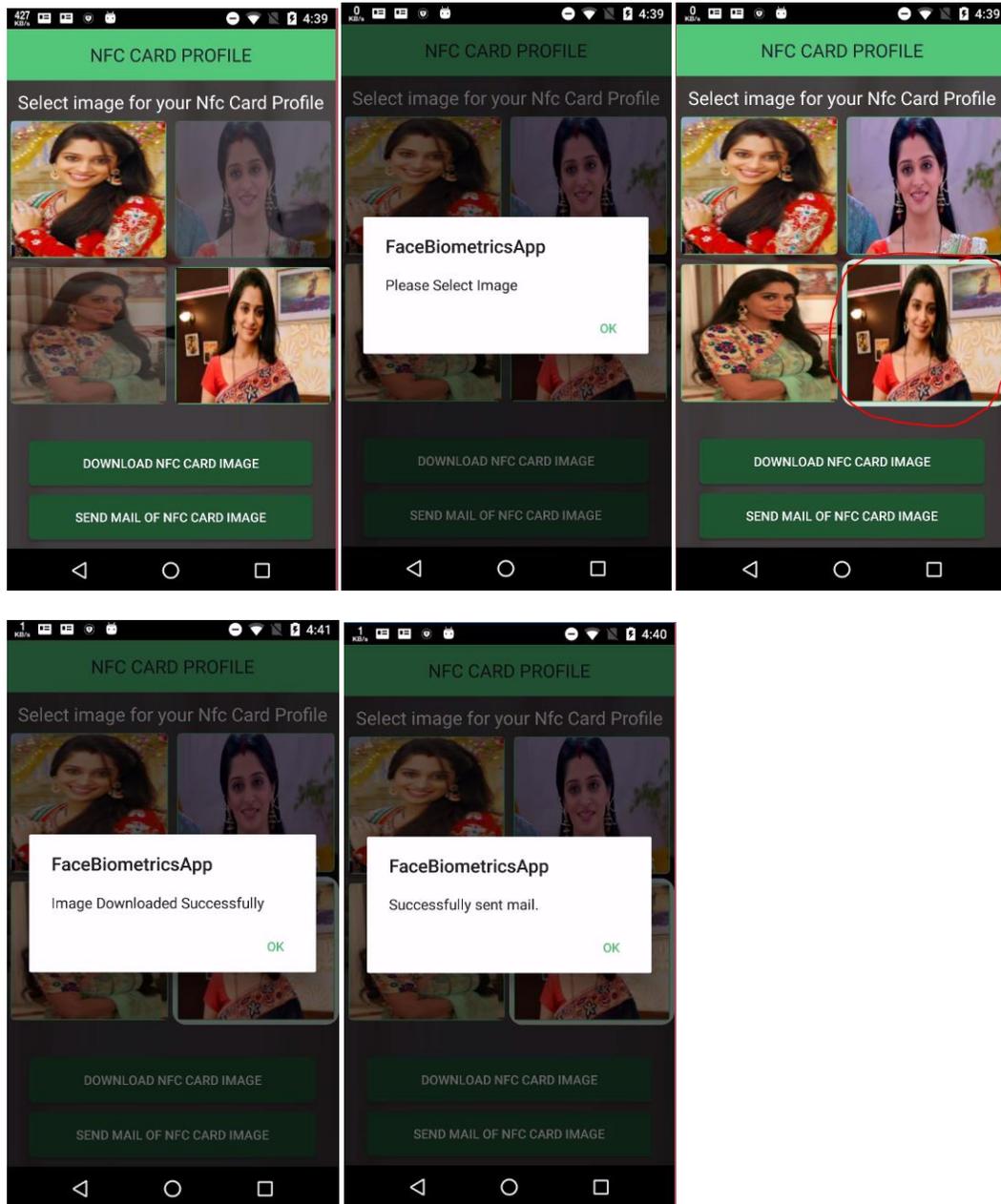
- vii. Now select resumed date from date picker and click on **OK** button. After filling form click on **SUBMIT** button to post data.



- viii. After clicking on Submit button, it will post data and display message like "Signature successfully uploaded. Corporate staffing data successfully inserted."



- ix. When you click on **OK** button, you will able to view **NFC CARD PROFILE** activity. From this activity you can choose any one image for your nfc card. Select any one image and then you can also download Nfccrad profile by clicking on **DOWNLOAD NFC CARD IMAGE** button and you can also send image in mail using **SEND MAIL OF NFC CARD IMAGE** button. Click on **DOWNLOAD NFC CARD IMAGE** button.





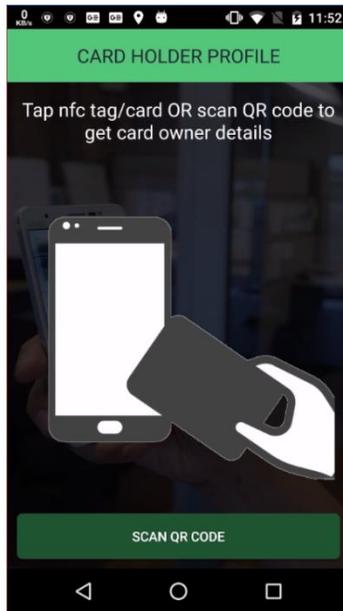
## 2.4 CARD HOLDER PROFILE

This option is use to view details like NonCorporate, NonCorporate Attachment, NonCorporate Marital Profile, Customer Email, Customer Phone, NonCorporate Location, Medical Profile, Corporate Staffing, NonCorporate Occupation, NonCorporate Passport, NonCorporate Driving License, NonCorporate Tax Classification, Nfc Card Details.

- i. Click on **CARD HOLDER PROFILE** menu from following activity :



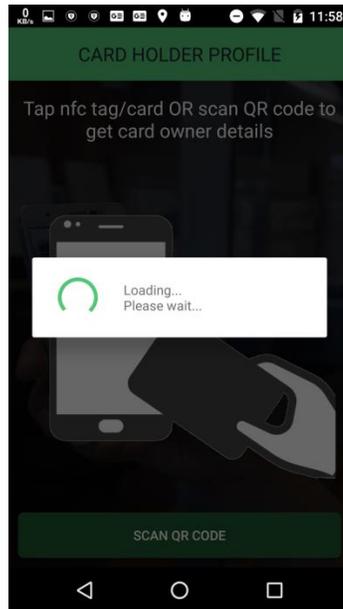
- ii. User need to **Tap NFC Card** against the back or front of the device OR **Scan QR Code**(that is available on the nfc card) to view the card owner details.



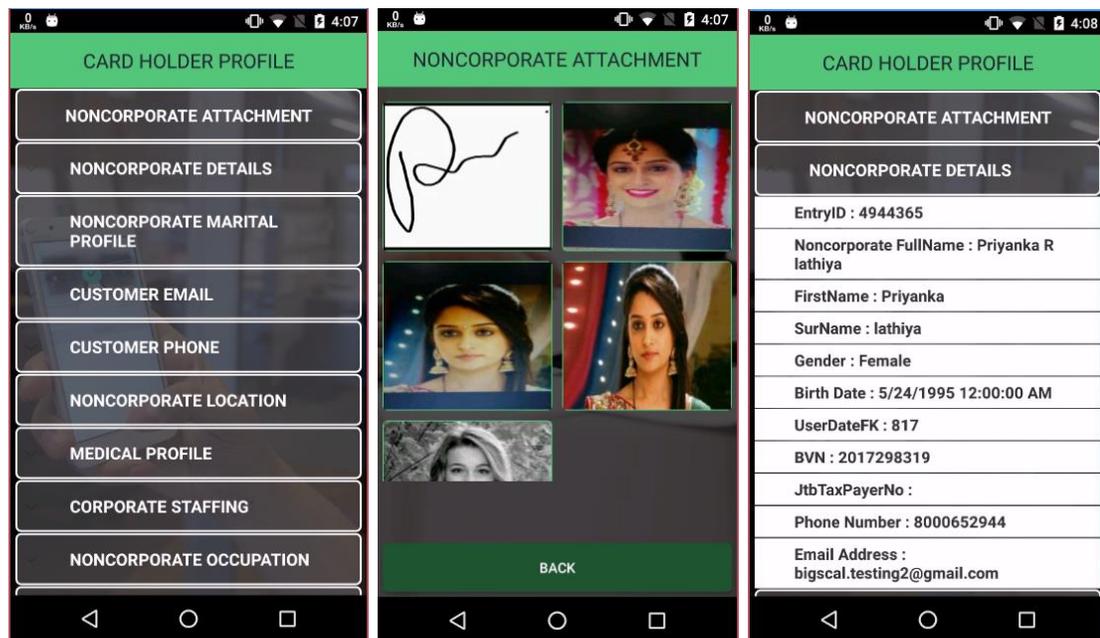
If you clicks on **SCAN QR CODE** button then, you need to scan QR code like following:



If you tap nfc card then, it will display following:



- iii. When you tap card OR scan QR code, it will check nfc card data exist or not. If data exist then it will display following "Card Holder Profile" activity. From this activity you can view details by collapsing the menus.





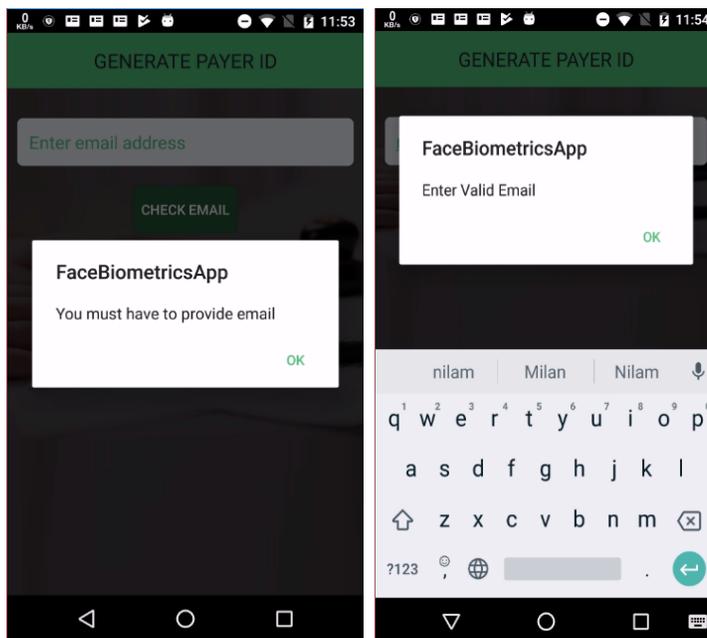
## 2.5 GENERATE PAYER ID

This option is use to generate Payer ID of particular user.

- i. Click on **GENERATE PAYER ID** menu from following activity :

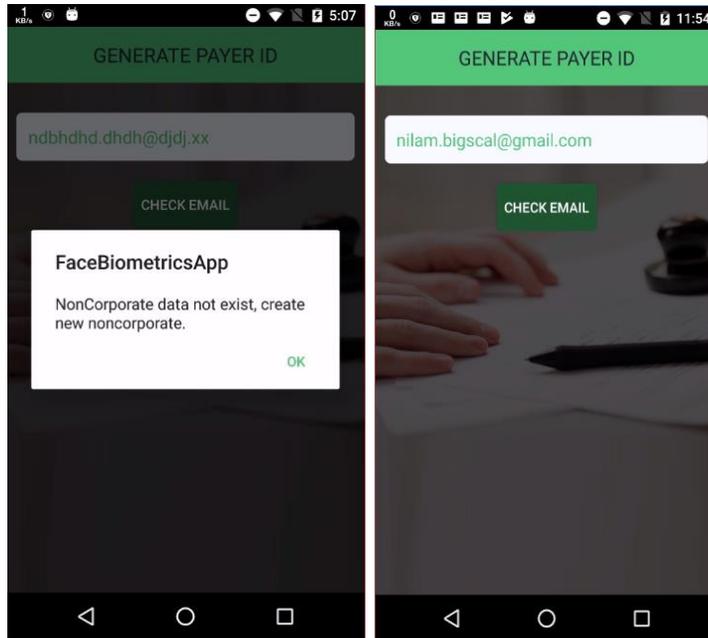


- ii. You need to enter proper email address in "Enter email address" input box and click on **CHECK EMAIL** button.

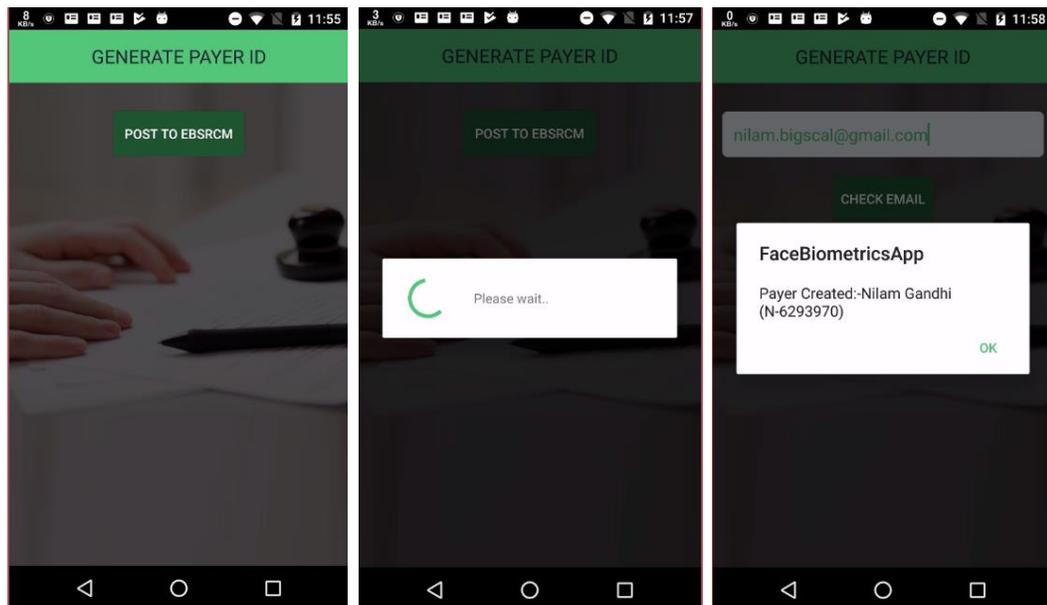


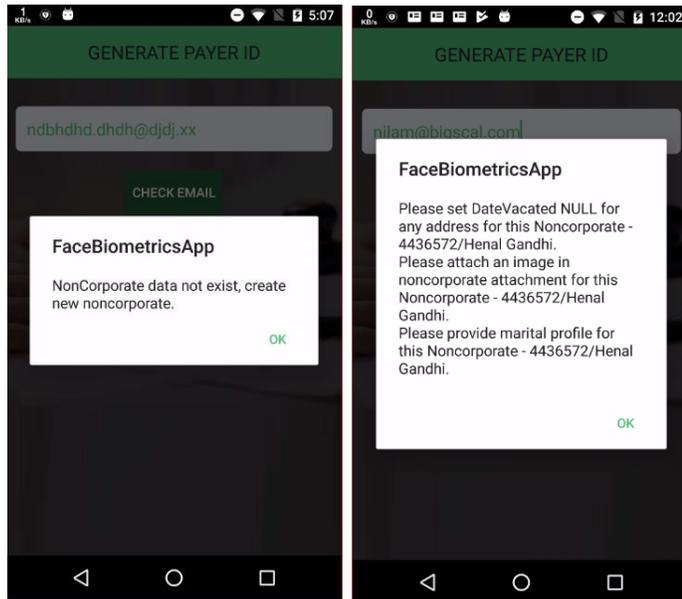


- iii. If noncorporate not exist for entered email then will display message "Non Corporate data not exist, create new noncorporate".



- iv. If noncorporate exist for entered email then, it will display **POST TO EBSRCM** button. Now click on **POST TO EBSRCM** button to generate Payer ID of user. If all non corporate details are completed then it will successfully generate Payer ID and display button "Payer Created:-XXX(XXX)". If noncorporate details are not completed then it will display error message.







## 2.6 VEHICLE PROFILE

There are following submenus in this “Vehicle Profile” menu.

- a) Vehicle Profile
- b) Add Vehicle
- c) Add Owner
- d) Add Driver
- e) Vehicle Attachment
- f) Add Plate Number
- g) Assign Plate Number



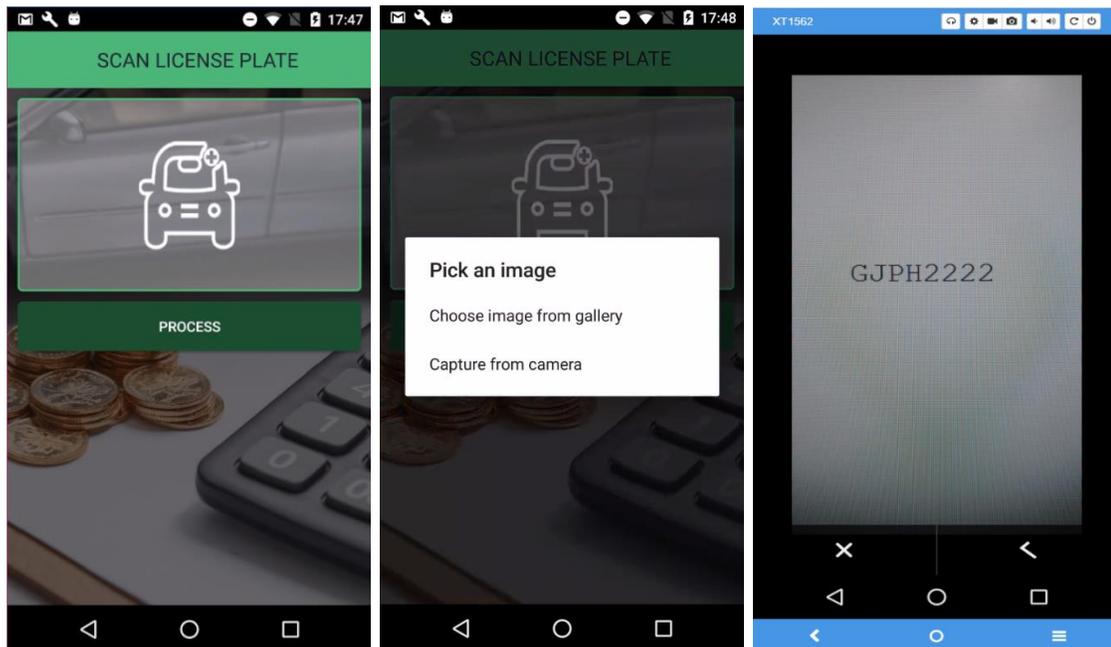


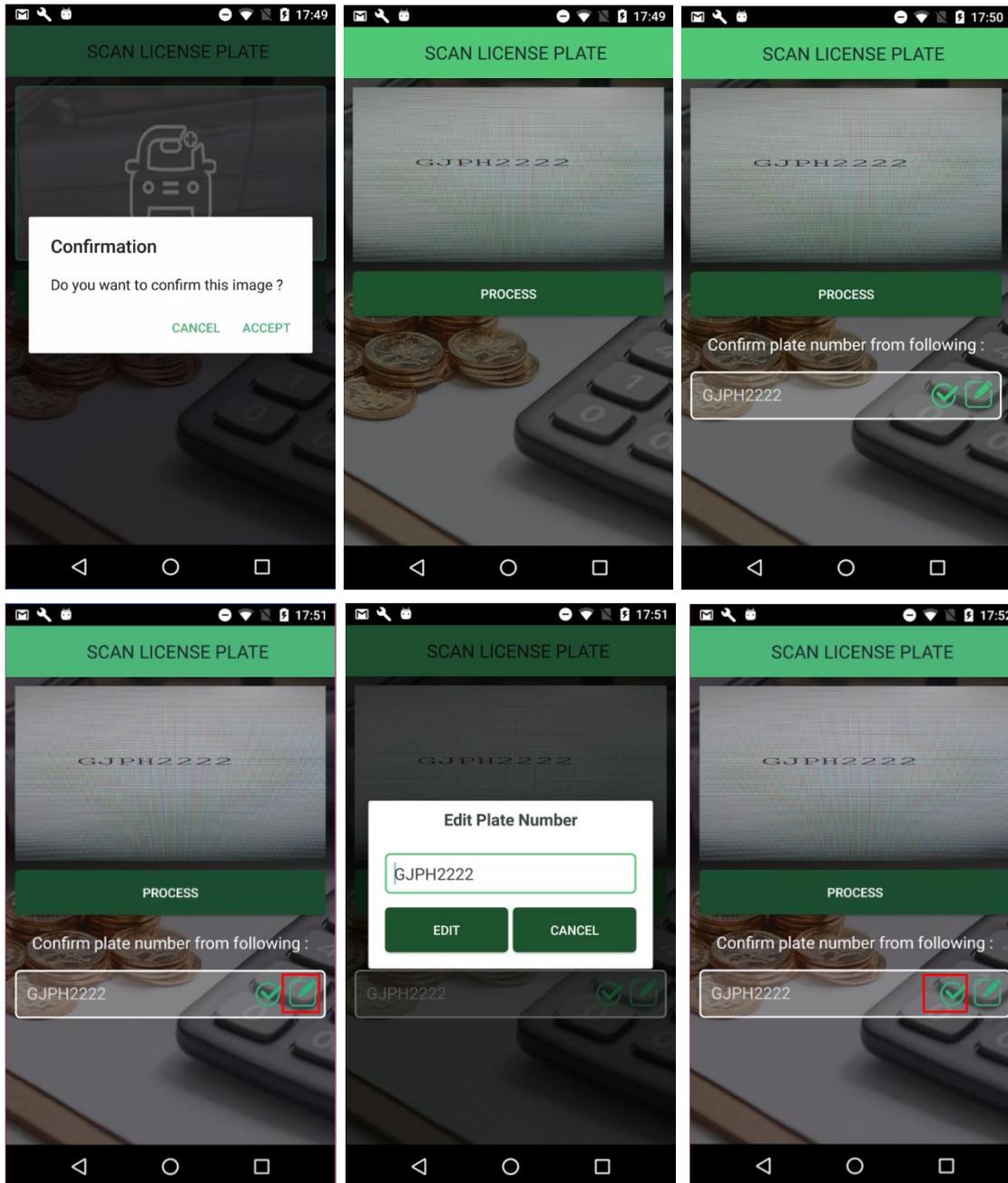
## a) Vehicle Profile

This menu is used to see vehicle profile by scanning vehicle license plate number. You can also insert traffic violation for that vehicle.

1. Pick the image of vehicle license plate number either from "Choose image from gallery" or "Capture from camera" option.
2. Click on **Accept** button to confirm image.
3. Click on **Process** button to get plate number from image.
4. It will display result of detected words in list. Here you can edit it by clicking on **Edit** icon button(if you wants edit).
5. Then click on **Confirm** icon and confirm plate number.
6. After confirmation, it will display full details related to vehicle like images of vehicle, details of vehicle (colour, brand, type, engine number etc.), details of vehicle owner, details of vehicle driver, details of fees and also traffic violation details.
7. At the bottom of the screen it will display "**ADD NEW TRAFFIC VIOLATION**" button. Click on it to insert traffic violation.
8. Then it will display traffic violation form in dialog. You needs to select violation type from the drop down. It will display penalty charge of that particular violation type and if penalty charge not defined then it will display error message like "**Traffic Violation Charge does not defined for this violation type**".
9. You can also attach multiple attachments by clicking on "**Click To Add Attachment**" button.
10. Then click on **ADD** button.

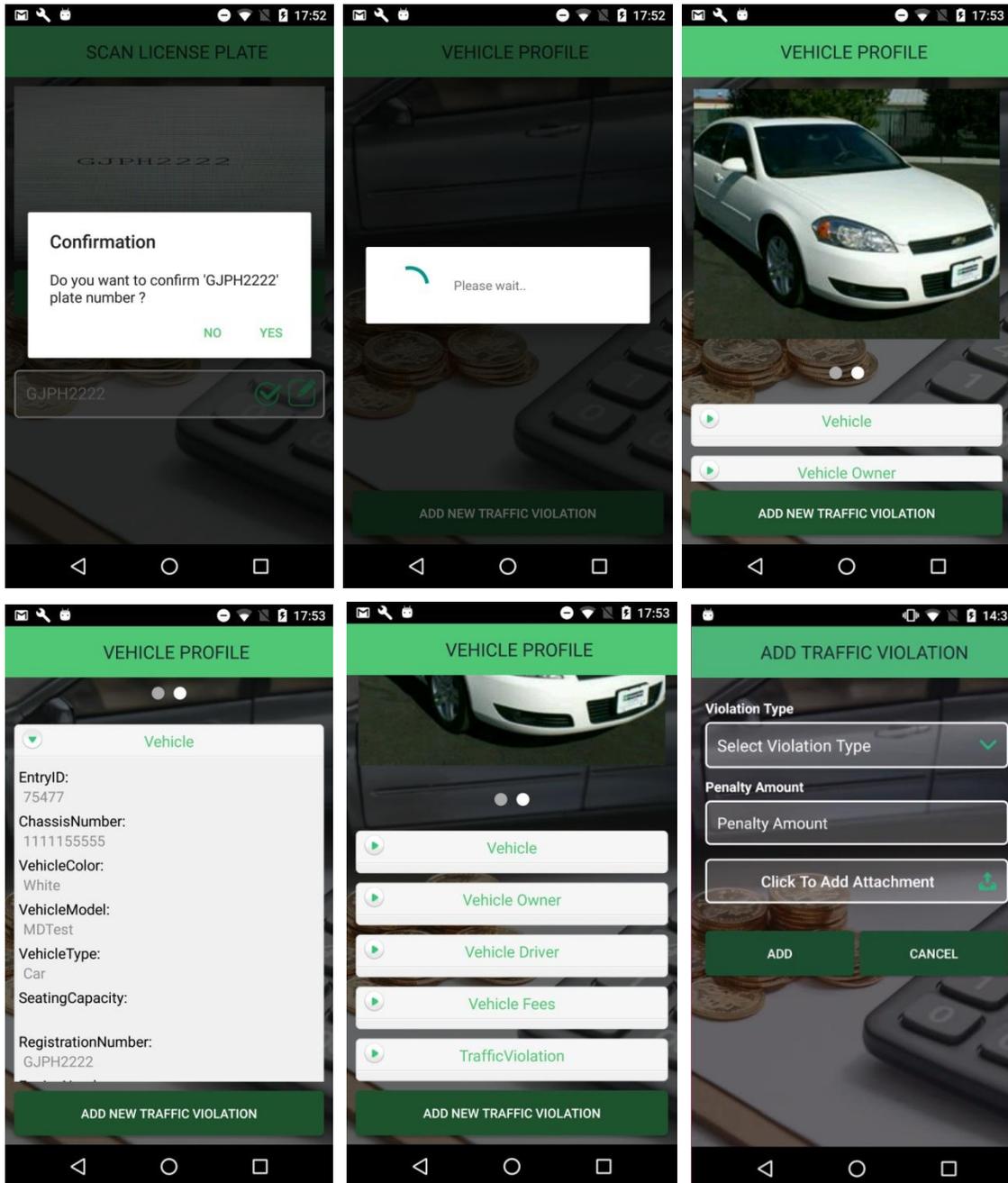
At the end, It will display message, "Traffic Violation added successfully." and traffic violation notice will be send on vehicle owner and driver mail account.

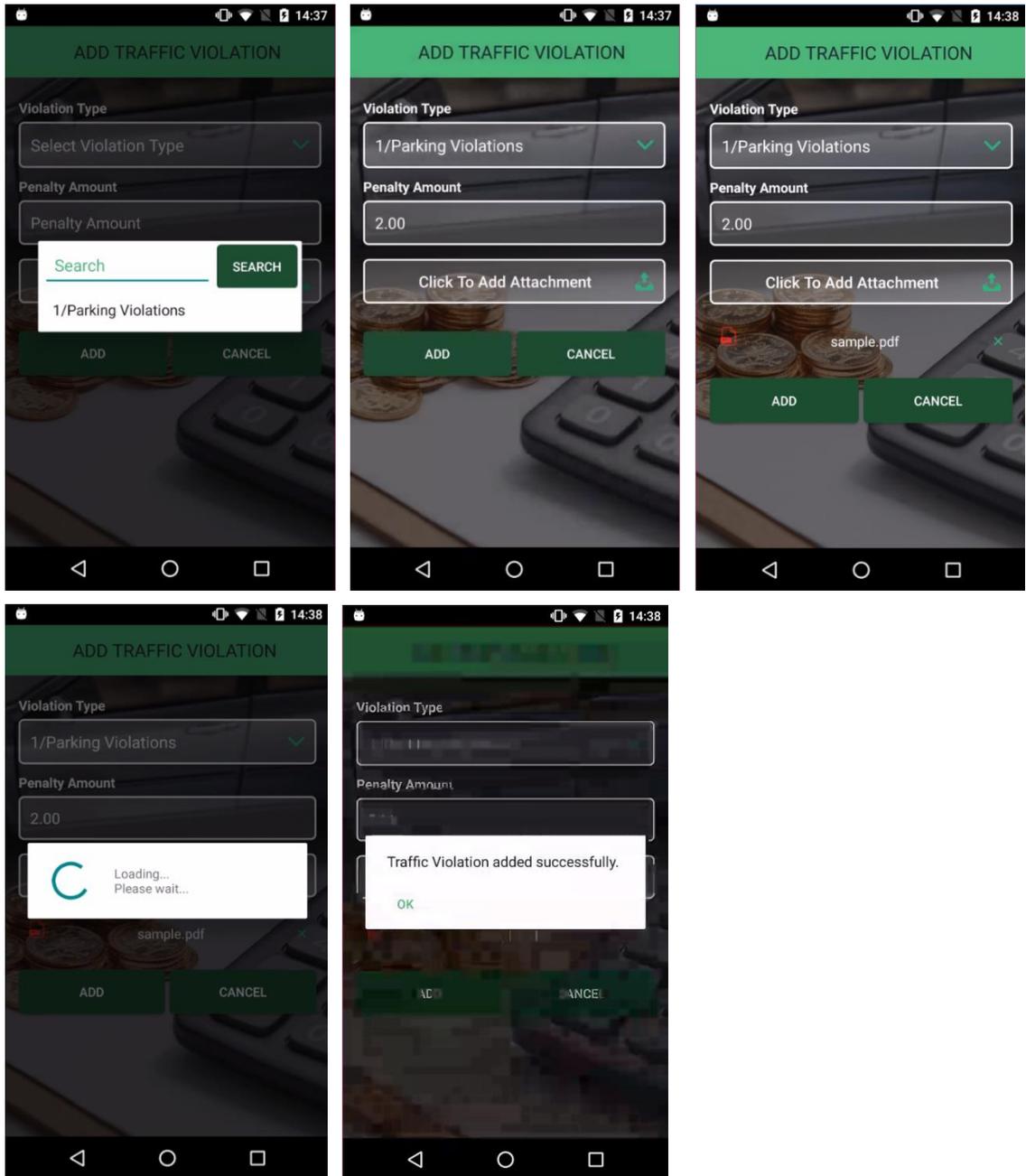


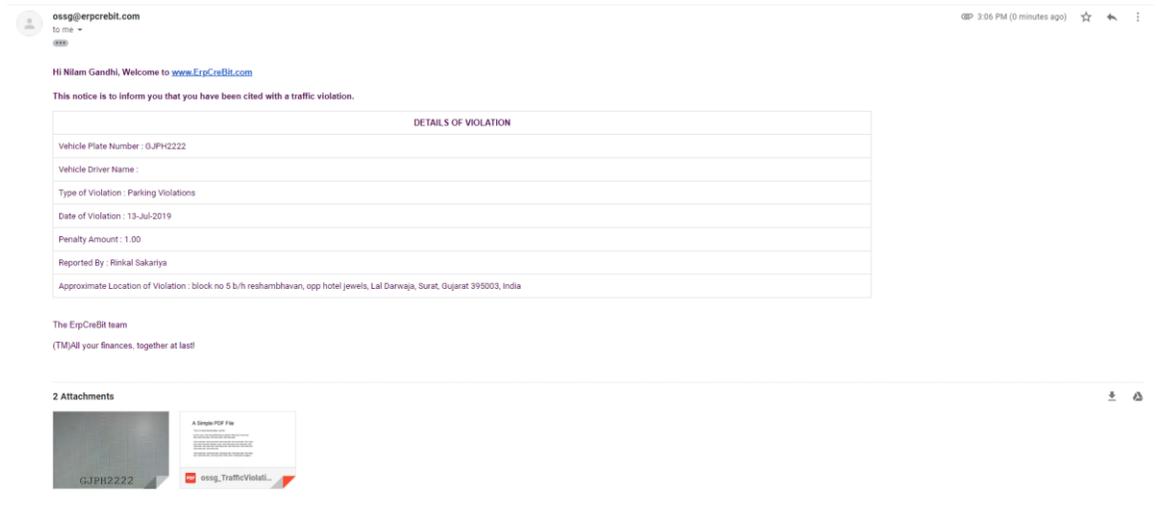




# FACEBIOMETRICS



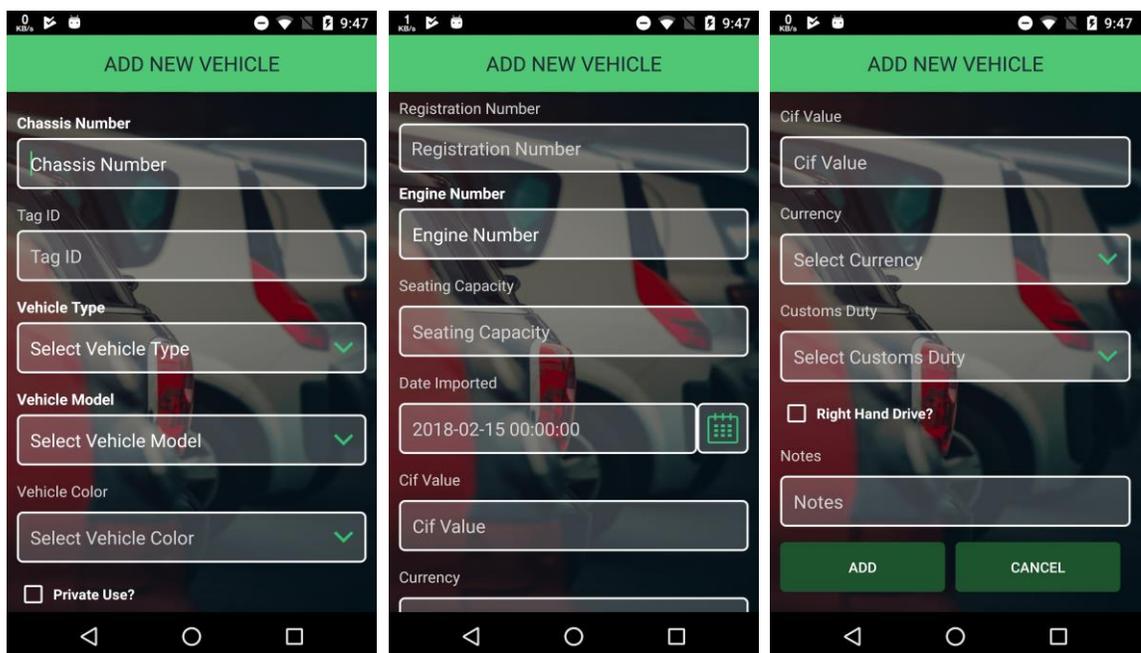




## b) Add New Vehicle

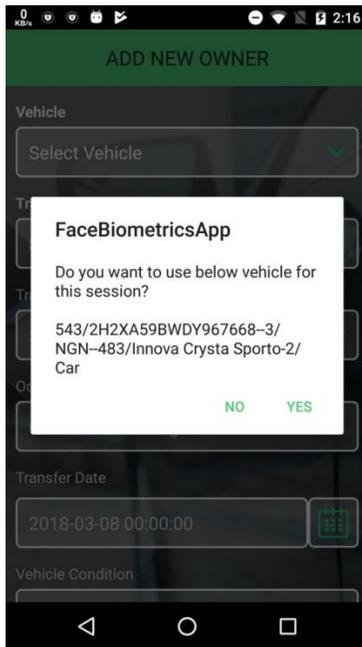
This menu is used to add new vehicle. Here need to provide full details of vehicle like chassis number, TagID, vehicle type, vehicle colour, vehicle model, is it private or not, registration number, engine number, seating capacity, date of imported , Cif value, currency, customs duty, right hand driver or not and notes.

**Note:** In this below form, bold labelled input- box or dropdown means its value require.





After Adding new vehicle when user go to any subsequent menu it will ask to user that "Do you want to use below vehicle for this session?" like in screenshot, if user click on "Yes" button then it will set that newly vehicle details for that menu.



### c) Add New Owner

In this menu you can set owner of vehicle. This menu also used to change owner ship of particular vehicle. Here need to select vehicle, transfer from (old owner of this vehicle), and transfer to (new owner of this vehicle), add odometer reading, transfer date, select vehicle condition and select bill details. If vehicle is new then select same user in both “transfer to” and “transfer from”.



#### d) Add New Driver

This menu is used to set driver for particular vehicle. Here need to select vehicle, driver (user driving license) and need to provide start date and end date.



## e) Vehicle Attachment

In this menu you can upload attachment for particular vehicle.

The screenshot shows a mobile application interface for adding a new attachment. At the top is a green header with the text "ADD NEW ATTACHMENT". Below this, there are several input fields: a dropdown menu for "Vehicle" with the placeholder "Select Vehicle", a button for "File Name" with the text "Click To Upload File" and a green upload icon, a text input field for "Notes" with the placeholder "Notes", and another dropdown menu for "Attachment Type" with the placeholder "Select AttachmentType". At the bottom of the form are two green buttons: "ADD" and "CANCEL". The background of the form is a blurred image of a car's interior.

## f) Add Plate Number

This menu is used to add new number plate, so here you need to provide number and related information.

The screenshot shows a mobile application interface for adding a new plate number. At the top is a green header with the text "ADD NEW PLATE NUMBER". Below this, there are several input fields: a text input field for "Plate Number Full" with the placeholder "Plate Number Full", a dropdown menu for "Issued By" with the placeholder "Select Issued By", a text input field for "Fancy Number" with the placeholder "Fancy Number", a text input field for "Plate Number Prefix" with the placeholder "Plate Number Prefix", a text input field for "Plate Number" with the placeholder "Plate Number", and a text input field for "Plate Number Suffix" with the placeholder "Plate Number Suffix". The background of the form is a blurred image of a car's interior.



## g) Assign Plate Number

In this menu you can set number plate to particular vehicle, so provide details in form and submit.

The screenshot shows a mobile application interface for assigning a plate number. The form is titled "ASSIGN PLATE NUMBER" and contains the following fields:

- Vehicle Plate Number:** A dropdown menu with the text "Select Vehicle Plate Number" and a green checkmark icon.
- Vehicle:** A dropdown menu with the text "Select Vehicle" and a green checkmark icon.
- Date Assigned:** A date picker field showing "2018-02-15 00:00:00" with a calendar icon.
- Date Revoked:** A date picker field showing "2018-02-15 00:00:00" with a calendar icon.
- Bill Details:** A dropdown menu with the text "Select Bill Details" and a green checkmark icon.

At the bottom of the form, there is a label "Vehicle Plate Number Appn". The Android navigation bar is visible at the very bottom.