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COS 301 : User Manual
for the SmartCard Application

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1 System Overview

The SmartCard system is a mobile-based application that is used to transfer business data from one device to another using either NFC or QR-Code scanner. The application should be free to download from either a mobile phone application store or similar services.

2 System Configuration

The SmartCard system operates on mobile devices with Android operating system. It is compatible with Android 4.1 (jelly bean) API 16 and higher versions. The application requires connection to Internet in order to save data to database. A virtual business card will be generated for the user using the information the user signed up with and will then be transmitted with a single tap using the NFC too available on their smart device. Alternatively the smart device's camera will be used to scan the QR code on another device. After installation on the device, SmartCard can be used immediately without any further configuration.

3 Installation

The most recent apk has been made available on our GIT repository link: <https://github.com/XoloKDandashe/Alpha-Tech/tree/master/Smart%20Business%20Card%20APK> for installation on a device.

Download the apk from the website and install on your device. For specific instruction on how to install application on specific device refer to device's manual.

Alternatively the application should be available for download and install on google play store.

4 Using The System

4.1 Getting started

Upon opening the system, the following screen will appear:



Figure 1: Log in page

- How to login:
 - Log in by using the email and password that were used when registering.
- How to Sign up manually:
 1. Upon opening the application, select **Register now** (Figure 1).
 2. Input your details on the provided form below.

Figure 2: Register form

3. Select **CREATE ACCOUNT**.
- How to Sign up via importing business card:
 1. Upon opening the application, select **Import Business Card**.
 2. Select **CAPTURE CARD** to take a picture of the business card.
 3. After capturing, select **SCAN CARD** to enable the system to scan image and fill in the fields for you.
 4. If any fields were filled with incorrect information, you can rectify the mistakes by editing the fields manually.
 5. If any fields were not filled automatically, you can fill them in manually.
 6. Enter and confirm password then click **CREATE ACCOUNT**.

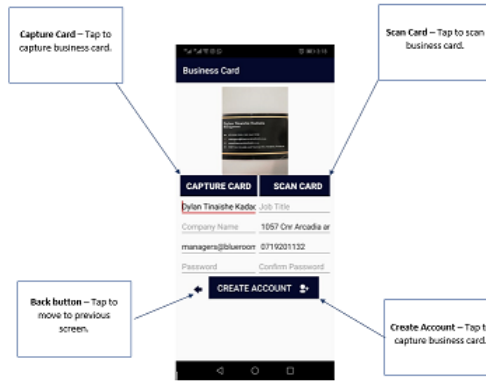


Figure 3: Import Card form

- Main menu:

After Registration or logging in, the following page will appear:

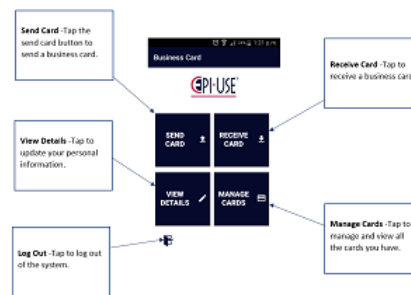


Figure 4: Main menu

4.2 Sending business card

- When the **SEND CARD** button is clicked, the following page appears:

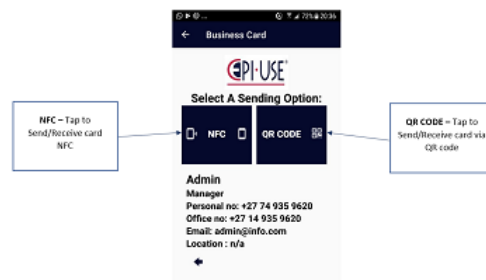


Figure 5: Swap business Card Menu

- Sending through NFC:
 1. Select **NFC**
 2. Simultaneously tap the screen and touch the phone with another device.
- Sending through QR code:

1. Select **QR CODE**.
2. Select **GENERATE CODE**.
3. Allow another device to scan the code that was generated using their camera.

4.3 Receiving business card

- Receiving through NFC
 1. from a similar page to figure 5, select **NFC**
 2. Simultaneously tap the screen and touch the phone with another device.
- Receiving through scanning QR Code
 1. from a similar page to figure 5, select **QR CODE**.
 2. Select **SCAN CODE**.
 3. Scan the QR Code on another device to capture the data.

4.4 Manage Cards



Figure 6: Manage cards

- When **MANAGE CARDS** option is clicked, the above view appears.



Figure 7: View business card information

- When a card is clicked, the above view appears.
- When the dustbin icon is clicked, the user is asked to confirm if they want to delete that specific business card.
- Tap **NAVIGATE ME** to navigate to the persons company location.
- Tap the **Calendar icon** to create an appointment.

4.4.1 Create Appointment

1. After the **calendar icon** is clicked in fig. 7, the following page appears:
2. Enter the title, date, time and notes for the appointment.
3. Tap on **SAVE APPOINTMENT** to create the appointment.

4.4.2 Navigate Me

1. After clicking **NAVIGATE ME** in fig. 7, the following page appears:
2. The companies location will appear on the screen.

5 Deployment diagram

- The following components on the diagram are components that are already implemented:

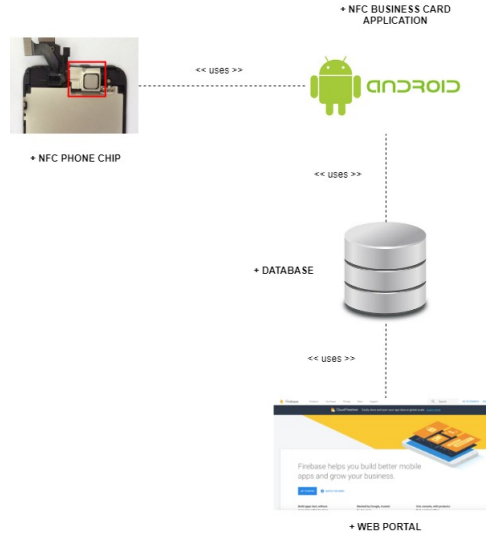


Figure 8: Deployment Diagram

6 Troubleshooting

In case of failure to send or receive you will receive a pop up notification to let you know that the operation has failed and you will either have to try again or cancel the operation.