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Cos301 : 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 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 mainscreen should be visible.



- How to sign up:
 1. Upon opening the application, select emphRegister now.
 2. Input your details on the provided form.

3. Select emphCreate Account.

- How to login:

4.2 Sending business card

- Sending through NFC:
 1. From the main screen select emphSEND CARD
 2. Select emphNFC
 3. Simultaneously tap the screen and touch the phone with another device.
- Sending through QR code:
 1. From the main screen select emphSEND CARD.
 2. Select emphQR CODE.

3. Select emphGENERATE CODE.
4. Allow another device to scan the code that was generated using their camera.

4.3 Recieving business card

- Recieving through NFC
 1. From the main screen select emphSEND CARD
 2. Select emphNFC
 3. Simultaneously tap the screen and touch the phone with another device.
- Recieving through scanning QR Code
 1. From the main screen select emphSEND CARD.
 2. Select emphQR CODE.
 3. Select emphSCAN CODE.
 4. Scan the QR Code on another device to capture the data.

5 Troubleshooting

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