# Contact Swap

**USER REQUIREMENTS SPECIFICATIONS**

**Rev 1.0**

Team SWAP

(team 4)

|  |  |
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# 1.0 Introduction

## 1.1 Purpose

Contact Swap is an android application that makes it quick and easy to exchange your contact information with anyone you meet. Just touch the phone of your nearest friend's phone and you're double plus friends! How about that?

## 1.2 Scope

Using NFC technology, the user will be able to exchange contact information wirelessly with another user's phone by tapping the phones together. User should be able to select what information to share (phone number, name, picture, social media account, etc.). Each person's individual contact information will be exchanged and stored in the other user's contacts app.

## 

## 1.3 Document Overview

The purpose of this document is to serve as a guideline for the development of Contact Swap . It will play a key role in validation of the developed software as well.

## 1.4 Definitions, Acronyms, and Abbreviations

* NFC : Near Field Communication
  + This technology lets smartphones and other enabled devices communicate with other devices that also contain a NFC tag. Therefore by bumping phones with another person you are able to share information via this process which .involves one device acting as a reader, interrogator, or an active device to create a radio frequency current that communicates with another NFC compatible device or a small NFC tag holding the information the reader wants. This creates the ability to establish peer-to-peer communication through the two active devices.
* Android Activity
  + An activity is a single, focused thing that the user can do. Almost all activities interact with the user, so the Activity class takes care of creating a window for you in which you can place your UI with [setContentView(View)](http://developer.android.com/reference/android/app/Activity.html#setContentView(android.view.View)). While activities are often presented to the user as full-screen windows, they can also be used in other ways: as floating windows (via a theme with [windowIsFloating](http://developer.android.com/reference/android/R.attr.html#windowIsFloating) set) or embedded inside of another activity (using [ActivityGroup](http://developer.android.com/reference/android/app/ActivityGroup.html))
* Android
  + Android is a mobile operating system based on Linux created by Google

# 2.0 General Software Requirements

URS2.1: The user should have the choice to use the application without starting it first.

URS2.2: The application should be consistent across all NFC-compatible android phones (android 4.0 and higher).

URS2.3 Application should have a simple user-friendly interface

URS2.4 The user will have access to a tutorial that explains how to use the app

USR2.4.1 The tutorial will show up when the app is first used, and if the contact exchange fails three times in a row.

URS2.5 The application can create and modify contacts.

URS2.5.1 If a duplicate record is added, the option to update or create a new contact will be presented

URS2.6 The user will have the ability to blacklist a contact to prevent any future attempts at initiating a contact swap transaction.

URS2.7 After a contact swap occurs, there will be a prompt asking if the user would like to take a photo for that person's profile picture.

# 3.0 User Privacy Requirements

URS3.1: User will be presented with a screen containing both a confirm and deny button when two devices attempt to share contact information.

URS3.1.1 Both users in the transaction will need to press the confirm button for the information to be transferred.

URS3.1.2 When the user denies a swap request a new activity screen will be shown which will provided an option to block the user.

URS3.2: All contact information is locally stored in the devices Contacts List (It will not be stored in database server, etc.)

URS3.3 Phones with lock screens activated must unlock the device before the confirm button can be pressed

# 4.0 User Settings Requirements

URS4.1: There will be a settings screen that is easy for the user to access.

URS4.2: There should be an option to manually disable the background process from the settings screen (only works when the app is opened)

URS4.3: The user will be able to modify the privacy settings

USR4.3.1 User should be able to decide what contact information he/she wants to share with other users.

USR4.3.1.1 Sharable fields should include Name, Phone number, profile picture, Email address, living address, social media accounts, such as facebook, twitter, and linkedIn.

URS4.4: The user can change the theme of the app

USR4.4.1 The background color, confirm/deny buttons color, the fonts, and the action bar can all be customized

URS4.5: The user will be able view a log of previous information transfers.

# 5.0 Revision History

|  |  |  |
| --- | --- | --- |
| **Date** | **Revision** | **Description** |
| 2014-09-17 | **0.0.1** | **Rough draft** |
| 2014-09-24 | **1.0.0** | **Final Draft** |
| 2014-10-08 | 1.0.1 | **Clarifications** |

# 6.0 Document Approval

This document shall act as a binding contract to complete a product fulfilling the list ofrequirements sealed by the signatures below.

|  |  |  |
| --- | --- | --- |
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| Anthonie Roux |  |  |
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