

Lab 5-1 Making NFC Tags

💡 In this lab we are going to make our own NFC Tags for personal use (yes, you get to keep them!) The primary focus will be on how to write to the NFC Tags, and then how to read the NFC information off them.

We will be using Gen4 NTAG 215 NFC Tags.

Step 1: Write to an NFC Tag


There are many different ways one can write to an NFC tag. You can use any iPhone above an iPhone 7 (iOS 13+), a supported Android phone (there are too many to list), or a Flipper Zero.


- **iPhone:**
There are several apps on the App Store for reading and writing NFC tools, but the best one will probably be [NFC Tools](#).
- **Android:**
Look up instructions specific to your Android device. There are a number of free apps that can write NFC tags on Google Play. Just like iOS, the best one will still probably be [NFC Tools](#).
- **Flipper Zero:**
Follow the instructions provided from the official documentation of the Flipper Zero linked [here](#).

Using one of the devices above, poke around with your NFC tag and test out writing different content to it. Are you able to get different types of media/content to load on your phone by scanning the NFC tag?

Deliverable 1: Submit a screenshot(s) of some custom content that you used to write to your NFC tag, like the one below.

< Write Add a record OK

 Contact

Enter your contact 

Contact name :

Company :

Address :

Phone :

Mail :

Website :

Step 2: Reading NFC

Depending on the device/OS you may be able to manipulate the phone into opening certain programs and apps.



This deliverable is open ended, take some time and have fun with it.

Deliverable 2: Submit a screenshot(s) or screen recording demonstrating a creative way you were able to have the NFC tag interact with your device.

Step 3: Dangers of NFC

- After playing with NFC tags, put yourself in the perspective of a malicious actor. Do some brief research on NFC and RFID and think about the ways someone could use NFC/RFID maliciously.
- *Hint!* This research will be useful for the discussion post!

Deliverable 3: Write one paragraph outlining a few security measures that you would recommend a parent/grandparent take to protect themselves from NFC/RFID related attacks.