**Slide Title:** Reading/Writing of Tags

* NFC tags are small passive bits of circuitry embedded into things like tags on merchandise, posters in theaters, or exhibits in a museum.
* Bringing the NFC-enabled device close to the tag induces electrical current in the tag which the NFC-enabled device can then read.
* Data contained on the tag could be a website URL, product details or exhibit explanations.
* Tags can contain up to 32k of data.

**Slide Title:** Pairing Devices

* There are a number of NFC-enabled devices available on the market such as headphones, speakers and similar devices.
* Typically these would be paired with smartphone using Bluetooth, but with NFC, move the smartphone near the device and it will automatically pair it. The Bluetooth connection is automatically initiated.

**Slide Title:** Information Sharing

* Bumping phones to share contacts or music playlists can be done via NFC.
* Both phones must have NFC capabilities, and have the NFC-enabled app running in the foreground for this to work.

**Slide Title:** Transaction Processing

* Use the NFC-enabled smartphone to:
  + Pay for tickets at a theater
  + In place of your Easypass at a toll booth
  + Purchase items at a store (in place of using a credit card)
* Uses information stored in an app like google wallet to provide payment information.

**Slide Title:** Future of NFC

* Replace traditional wallets with contain a bunch of credit cards
* Home automation (simply wave your phone by a sensor to control your home automation system)
* Embed NFC tags in a person’s skin containing complete medical history and with the inclusion of sensors, track insulin levels and other physiological information
* Replace ID badges for work places and/or governmental buildings.
* Already embedded in passports to provide personal information more quickly at ports of entry/exit.

**Slide Title:** Simulation Lab

* Using the Open-NFC simulator and an Android virtual device running in the Android SDK’s emulator, we were able to simulate the reading of various tags fusing an android phone running Icecream Sandwich (version 4.0.3).