



Title:
NFC Unlock Computer

Additional point:
Drawer unlocker

Material:

Arduino Leonardo(Amazon, I already have one)
Adafruit's NFC Shield(Amazon, I already have one)
NFC Tag (included with shield)

Scenario

Most computer tables have a drawer. I will try to combine Arduino with traditional computer table. Normally people's basic behaviors to interact with computer table are sit down, turn on the desktop, type the password and sometimes user need open drawer to grab something. How could I make a computer which gives user a better experience? I will separate my concept into two parts NFC Unlock Computer and drawer unlocker.

Idea:

I read an article about Adafruit's NFC Shield, the principle of NFC shield is the NFC reader can detect the special number of each NFC tag. According to how NFC shield work, I tried to use Arduino Leonardo board to make a simple NFC reader. I will ask Arduino remember the number of my NFC tag, once the NFC reader detects that number, Arduino will write simulate the keyboard to type the password to unlock the computer.

Additional point (Drawer unlocker)

If I have enough time, I will connect a servo motor. Once Arduino detects NFC card approaching, the servo motor will turn 180 degrees to unlock the drawer.