Progress Report 2

i. Chris Bero

ii. The functional project is nearly complete. The system validates user entry via Charger Cards, sends data to a Diavolino through a serial connection, and the Diavolino operates the tactile sensors and servo to unlock the door. There are several housekeeping issues that should be addressed next, such as the method in which everything is adhered to the door, and the mounting system for the computer. The project encountered a HUGE problem about five weeks ago. Every day, while I was away at class or before I woke up in the morning, the system would crash. Specifically, the serial connection would die, and then the system would crash. I estimate nearly 80 hours went into debugging code, switching coding languages four times, and staring blankly at printoffs of the serial communication. Last week I found an obscure resource online that mentioned USB cables causing serial issues. I happened to be using some old generic 9ft USB cable for the project. Immediately after removing the cable, I noticed that the serial connection became more reliable, but the crashing issue wasn't fixed. Over the last weekend I found that the root of my problem was that my roommate was unplugging a single wire on my breadboard every morning before going to visit his girlfriend, so that the device wouldn't lock him out. This in turn crashed the serial connection. Since he never told me, I thought it was a coding error.

iii. The final report and tri-fold have not been completed. I have purchased a project board and will finish the report and project presentation this weekend.