Sample RFID Attendance System Instructions

Setup: [Required]

- 1. Connect an HDMI display cable to the Raspberry Pi
- 2. Connect a USB keyboard and mouse to the Raspberry Pi
- 3. Plug the power adapter (micro USB) into the Raspberry Pi.
- 4. Plug in the other end of the Raspberry Pi power adapter to a (wall outlet)
- 5. Wait for the LCD screen to display "Hello, please scan"

If any of the wires become disconnected from the Pi or bread board refer to the diagram in the engineers notebook.

Usage: [Required]

1. With the Raspberry Pi powered on, use the keyboard, mouse, and display to click on the web browser icon (Chromium)



- 2. The Attendance System dashboard will be displayed
- 3. Click the Users button
 - a. You will see the users registered to the system
- 4. In the top right corner of the screen click the "View Attendance" link
 - a. The attendance page shows you each attendee and when their tokens were scanned
- 5. Scan the blue token labeled "Judge" on the RFID scanner. It looks like this:



- a. The LCD screen will display the message "Hello: Judge"
- 6. Refresh the screen by clicking on the refresh icon in the top left part of the browser



- 7. Notice, an additional scan is recorded for the "Judge" token
- 8. Repeat steps 4 through 7 for any other tokens note how the attendance count increases

Refer to the following page for instructions to shut down the RFID Attendance System

Shutdown: [Required]

- 1. Click on the Raspberry icon in the top left corner of the display
- 2. Click the Shutdown option at the bottom of the menu displayed
- 3. This brings up a shutdown options menu, click Shutdown
- 4. Wait for the display to go blank
- 5. Unplug the power adapter from the wall outlet
- 6. Unplug the power adapter from the Raspberry Pi
- 7. Disconnect the monitor, keyboard, and mouse from the Raspberry Pi
- 8. Place any tokens back in the box with the Raspberry Pi
- 9. The Raspberry Pi can now be displayed

Files created or modified for this project (copied to USB key): [Optional]

- /pi-rfid [directory]
 - o read.py
 - attendancesystem [database]
- /attendancesystem [directory]
 - o save_user.py
 - check_attendance.py
- /var/www/html/attendance [directory]
 - o common.php

Sample Notes: This is an example set of operating instructions for a project found on PiMyLifeUp.com. (<u>https://pimylifeup.com/raspberry-pi-rfid-attendance-system/</u>). Some of the material does not match up with the stock instructions for this system and are modifications to the design presented. If you were to build this project, these operating instructions will not work without either modifying the project or modifying the instructions. You should always test your instructions from beginning to end to make sure you haven't left out a step.

The setup, usage, and shutdown sections are required so that the judge can setup the environment without assistance. The files section is optional and is to inform the judge which files the youth is responsible for and make up a majority of the project. These files should be found on the USB drive as well.

Pictures are not required in the instructions and are only shown as one way to help make the instructions clearer. The pictures were created using PowerPoint and then pasted into the instructions as images.