



NE Colloquium Scanner v1.0

User Guide

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LEGAL

NE COLLOQUIUM SCANNER - A program to collect and report student attendance
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Notice for Use:

The provided Windows executable file (.exe) should run on Windows XP or Windows 7 without problems. Note that for the program to run correctly, the appropriate *Images* folder must exist in the same directory as the .exe file and explicitly contain the files *icon.ico* and *Main_Frame.jpg*, capitalized and spelled exactly as such. Without these files, the program will still run but will provide an error.

Purpose

Taking attendance in NE Colloquiums can be a burdensome and inaccurate task using attendance sheets. Alternative methods such as a card reader (as shown in Figure 1) could increase the accuracy of attendance measurements while saving time for those involved in the record-keeping process.



Figure 1: Standard USB Card Reader

In an ideal situation, card readers would be available at each exit location in the colloquium location. For example, in WTHR 200, a total of four (4) card reader stations would be ideal. This setup would allow for students to scan their cards upon entry, exit, or both – indicating their physical attendance. As each student would only have to swipe their card and no others, the problem of students “signing in” their friends would be alleviated. In addition, the combination of *before*, *after* or *both* scanning schemes would affect the amount of time the students remain in the classroom, as a student who leaves early would not be counted absent if scans both before and after the class session were required.

The Faculty or Staff member in charge of attendance would need to have the included software, the Equipment listed in the next section, and a File containing student ID numbers to utilize this system. Due to the sensitivity of Student ID Data, it is suggested that **ONLY an authorized University Faculty or Staff member** be permitted full access to this attendance method.

Equipment

The equipment necessary to properly run the software is minimal in nature and depends upon the mode of usage.

For taking attendance values at Colloquium:

- One computer, equipped with either:
 - Microsoft Windows XP, Windows 7, or
 - Any Unix system with Python 2.x (2.7.3 preferred) and the appropriate version of wx.Python installed.
- One Standard USB Card Reader per computer, hooked into a USB slot with appropriate drivers installed.
- A copy of the software on either CD, USB, or other physical memory. For recording student attendance values, local storage on the computer or on a USB drive is needed.

For running reports after Colloquiums:

- One computer, equipped with either:
 - Microsoft Windows XP, Windows 7, or
 - Any Unix system with Python 2.x (2.7.3 preferred) and the appropriate version of wx.Python installed.
- A copy of the software on either CD, USB, or other physical memory. For saving student attendance reports, local storage on the computer or on a USB drive is needed.
- A Text file (*.txt) containing Student Name and ID pairs in Comma Separated Value (CSV) form:

<Student Name 1> , <Student ID 1>
<Student Name 2> , <Student ID 2>

Example:

Austin Grelle, 0012345678
Another Student, 0022345756

- **No Card Reader Required**

When Installing a Standard USB Card Reader for the first time:

For Microsoft Windows, let the computer find the software itself online. When installed correctly, most readers will show up in the Device Manager as shown in Figure 2, and the appropriate device driver will read similar to that shown in Figure 3.

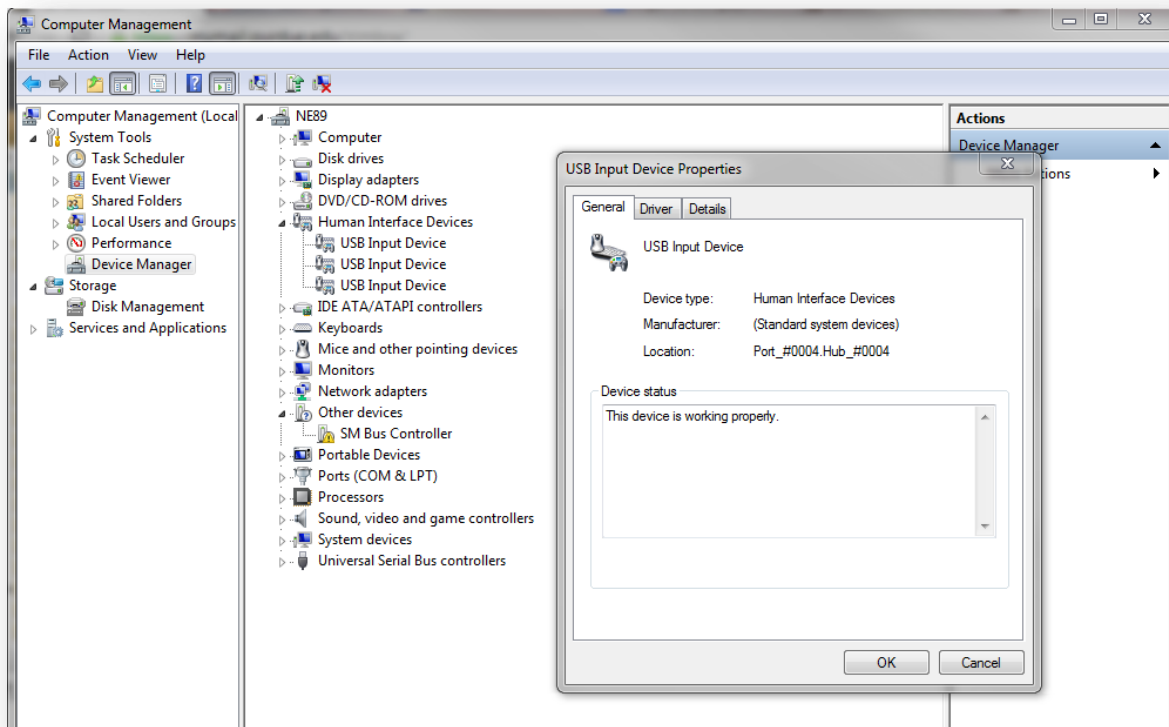


Figure 2: Standard USB Card Reader in the Device Manger shows up as a 'USB Input Device'

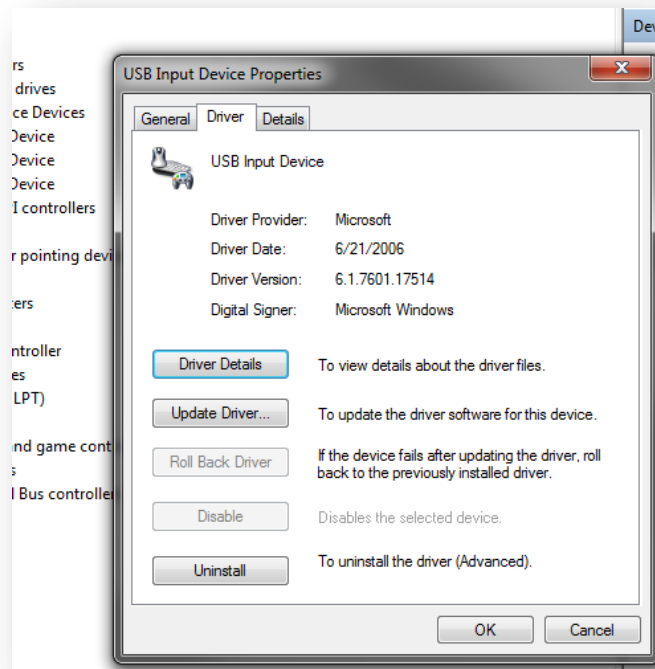


Figure 3: Drive Details for a Standard USB Card Reader

Basic Directions

Follow these instructions to operate the *NE Colloquium Scanner* software.

To Open the Software:

Find the file “Colloquium_Scanner.exe” and run it by either Double-Clicking on it or selecting it and pressing Enter.

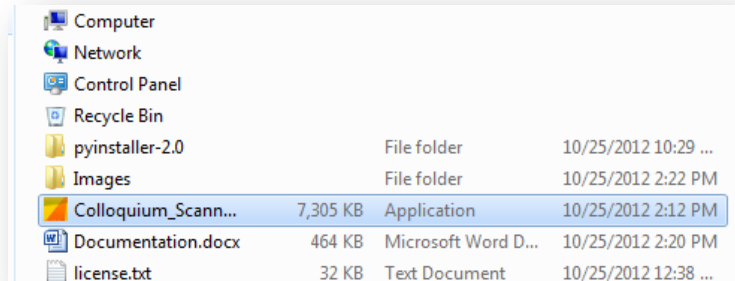


Figure 4: The Colloquium Scanner icon as shown in a Windows folder.

To Set the ‘Station’ Value:

Find the menu bar at the top of the program and select the “File” menu. From the drop-down submenu, select “Identify Station.”

The default station value is ‘A’, but can be changed to anything. It is suggested that each station be given a unique name so that you can know where the file it produces came from. For example, if there are four stations, they could be name ‘A’, ‘B’, ‘C’, ‘D’.

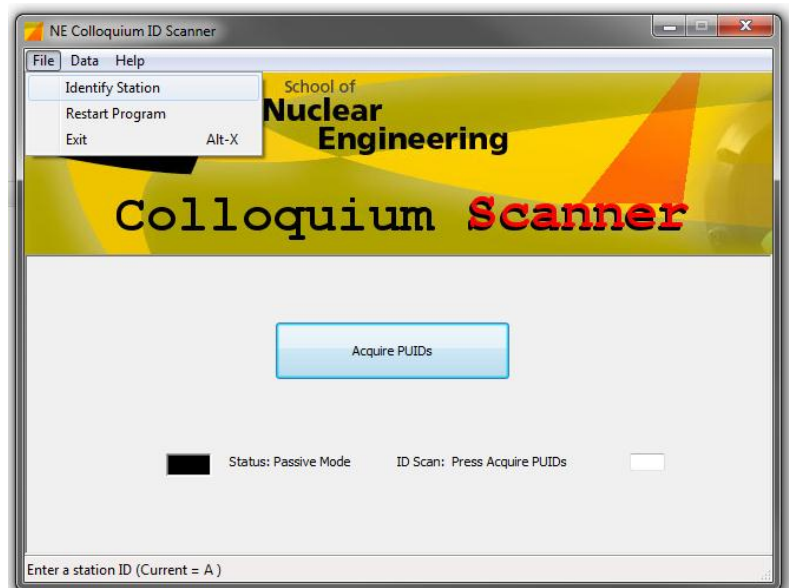


Figure 5: A view of the program with the File menu open

To Reset the Program

In the event that you would like to reset the program, go to “File” and then “Restart Program.” Clicking this option will reset the station ID to ‘A’, set the Total Colloquiums value to zero (0), clear the Student ID file, and clear the Student Attendance file list.

Gathering PUIDs for Attendance

To gather PUIDs, ensure that the Standard USB Card reader is plugged into an available USB port and that it is ready to gather data. When ready, click the large ‘Acquire PUIDs’ button. At this point the indicator will turn from Black to Green, the *Status* field will read ‘ACTIVE’, and the *ID Scan:* field will read ‘READY’.

If there is a Card Read Error in the process of scanning cards, the indicator light will switch to *RED*, the *Status:* field will remain as 'ACTIVE', and the *ID Scan:* field will say 'RETRY SCAN.' In this circumstance, just swipe the card again until the indicator light returns to *GREEN*.

When finished taking attendance, click the large button now labeled 'Stop Acquisition.' At this point, the program will output a file in the same directory as *Colloquium Scanner* with a title in the following format:

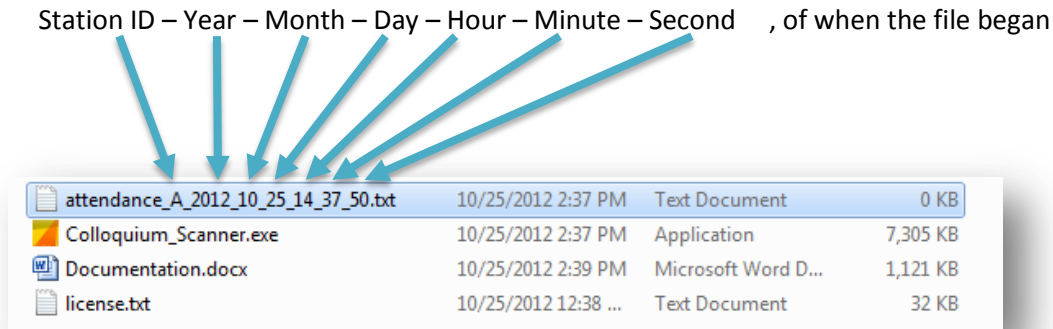


Figure 6: An example file name

Inside the text file will be a list of Student ID numbers in the order they were scanned in. Each Student ID value will take up one line in the text document. No student names are paired yet with the Student ID values, so this data **is not especially sensitive** yet.

Based upon the way the program reads attendance values for each file, there are allowed to be duplicates in each file (example: a student can swipe their card 5 times in one attendance session but the program will only register it as *one* entry).

Generating Reports

When the Faculty or Staff member who runs the Colloquium Attendance is ready to poll the files created, a Data Reporting feature has been added into the program. These features can be found under the *Data* menu option on the main program menu bar.

This step is potentially important that only **an authorized Faculty or Staff member** be allowed to perform these actions, as they may have access to Student Name and Student ID combinations.

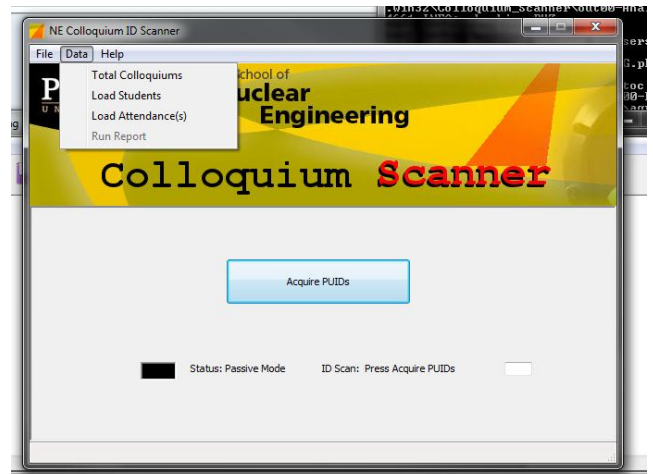


Figure 7: The data menu selected

The first option in the menu is *Total Colloquiums*. This option allows you to specify how many total colloquiums there were. The initial value is zero (0), in which case the program will then find the student with the highest attendance and assume that is the total amount of colloquiums. **It may be important to specify the total amount of colloquiums** in the event that a student scans their ID at two different stations in a single colloquium, for example, both

Station A and Station B. This would result in a scenario which the highest attendance amount is GREATER than the possible attendance amount, representing a record-keeping problem.

The next step would be to select the *Load Students* option. This option will bring up an Open File Dialog which requests only Text Files (*.txt) as input. The appropriate text file to select will be one which follows Comma Separated Values (CSV) scheme as demonstrated below:

```
<Student Name 1> , <Student ID 1>
<Student Name 2> , <Student ID 2>
```

Example:

```
Austin Grelle, 0012345678
Another Student, 0022345756
```

In this case, the Student's Name is shown first, followed by a comma, and then the Student ID number is listed **without the hyphen**. After listing the Student ID number, the next student should be placed on the next line. Spaces are disregarded and the only important part of the line **is the comma**.

Once the Student IDs have been loaded, the next step would be to load the attendance files by selecting *Load Attendance(s)*. This open will also open up an Open File Dialog, except this time you have the option to select more than one file. Using this, select **all** of the colloquium attendance files that you want to include in the total. **Make sure to select all files in one File Dialog Window, i.e.: Do not close the window without making sure you have selected all the attendance files.** This means that it will be necessary to place all of your attendance files in the same folder.

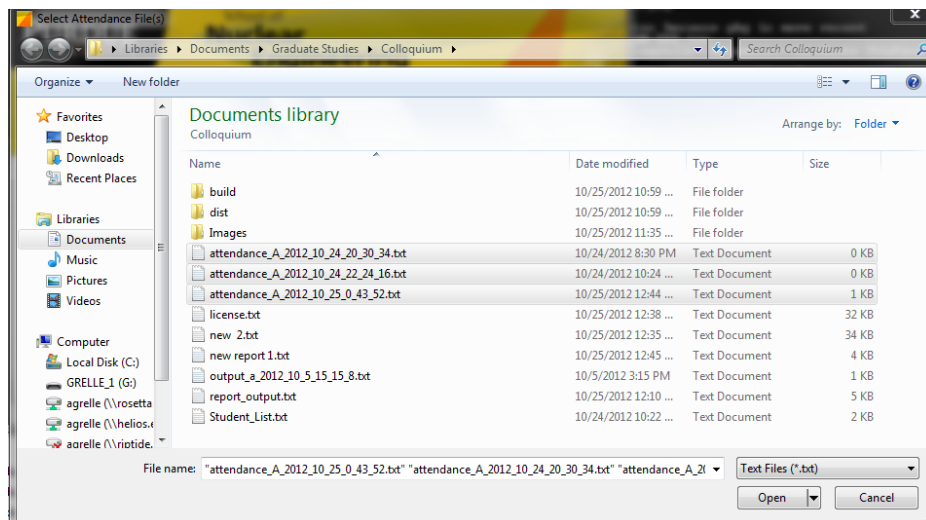


Figure 8: Selecting multiple attendance files (ideally all of them).

Once both the Student IDs and Attendance Files have been loaded, the *Run Report* option will be “un-greyed out” in the *Data* menu. When this happens, you can select *Run Report* to view all of the students who attended Colloquium and the amount of times for each of them. In this report view, students with the correct amount of attendances are shown in White. Students missing only one attendance are shown in Yellow. Students missing more than one attendance are shown in Red. Finally, students with greater than the maximum amount of colloquiums are shown in Green and represent a record-keeping problem.

If the resulting report needs to be saved, click the button titled “Save as .txt. File” to open a Save File Dialog window. In this window, select where you would like to save the file and give the file a name. This file will print out not only the Student’s names and Attendance values, but also the file name used to access the Student IDs, and each attendance file selected. This will allow you to determine if the appropriate files were used to create the report.

	Student Name	Attendance
1	Austin Grelle	2
2	Phil Forberg	0

Save as .txt File

White = No Concern
 Yellow = Missed 1 Colloquium
 Green = Record-keeping Problem
 Red = Missed >1 Colloquiums

Figure 9: Run Report view with two students

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