

Criterion A

Identifying the problem

The client Ms.xx is a currently employed CTE teacher at Cleveland High School. In a discussion about our IA projects, my Computer Science teacher mentioned her as an example. Intrigued by the idea, I set up an interview with her. She, like many other teachers at Cleveland have had trouble with the bathroom pass sign in/out system.

The current system, a piece of paper with lines to write name and sign in/out times is passable, but as can be seen in my interview, only works 75% of the time. "Many students don't sign out when leaving but take the pass, and many sign out but don't take the pass." She also talked about the bathroom sheet in relation to the school administration. Because the sheet is just a piece of paper, relaying the information it gives to the principal and vice-principle involves a lot of work, and it's hard to get the right message across, resulting in the admins ``making a mountain out of a molehill" she says.

She has asked me to create a computer program to take the place of the sign in/out paper. Not only would it allow her to relay bathroom pass usage to the admins easier, but it would allow her to sort through the data easier, and see trends within the students. Ms.xx says she want's to be able to query the program for data for specific times, dates and class periods.

Words = 243

Rational

The program will solve Ms.xx's bathroom pass problem, as it will allow her to track when people leave and how often in an easier to read manner. The paper sheet was hard to read and numerous, as once you reached a certain amount of sign in/outs you need a new sheet, but this program will allow her to cut down on the time needed to sort through it all.

I've decided I wanted to create this as a stand alone program because if I used something like a chrome extension for instance, I would not be able to write and save files to my machine where I wanted to. Because it's on a specific machine for use with the purpose of a sign in/out system, I want to create a specific directory, instead of downloading the file. This would allow the system to create folders on it's own, without the need to sort them from the download folder.

I chose python to use, as it is the language I am most familiar with. It is also widely used, so I will have many resources to consult when I am in need. I also know for sure it can fulfill my needs, as I have already seen examples of it being used to create spreadsheets and take in and sort data.

Words = 223

Success Criteria

- To be able to take a student's name, the date, time and save it to a spreadsheet.
- To be able to display how long the hall pass has been out.
- To store all the data in a document and have it readable to the client.
- To be able to keep track of other miscellaneous values such as total time out.
- To be able to alert the user when a student has been out for long periods of time.
- To be able to make a spreadsheet titled with the day it was made unique for the day.