Criteria A: Planning

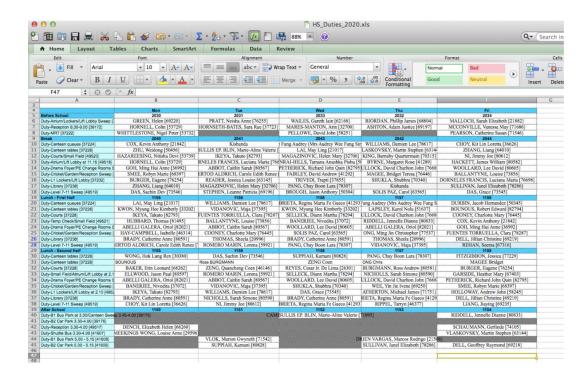
Scenario

I will be creating a product for Ms Nathalie Buckland-Brough who is the deputy principal of my school. Upon consultation, I found that her problem was with assigning teacher duties. My school has a set number of duties every semester that must be carried out by teachers in the high school. Duties are spread out over the week and in different times. However there are certain conditions that determine which teacher should carry out which duty and how many duties a certain teacher can have per week. This is done every 2 semesters

My client's current method of managing this is through the use of a spreadsheet. She has a spreadsheet with a list of duties and a list of teachers which she uses to assign the duties too. She also has a list of subject area leaders and admins along with subject area meeting days that allow her to allocate the duties. However, She has to manually look at each teacher and find which one is the best to fit the specific requirements. Some teachers have more than one subject and so more than one meeting day. She does this over the weekends which she feels is a waste of her time There are also many requirements that she must follow when she is assigning teacher duties over the course of the week. After the spreadsheet is done, she compiles the spreadsheet and then sends it to the IT department which posts it onto the system where she can later manage it.

Word Count: 253

Below is a screenshot of the current system that Ms Buckland Brough Utilises



To see initial consultation See Appendix A1

Proposed Solution

After initial consultation, My proposed solution to this would be to provide a system that can take in CSV/excel files of the number of duties that need to be filled, what day they must be done and be able to allocate the duties accordingly. After it has performed all of this, It will return a CSV file containing duties along with the allocated teacher. The CSV file will then be sent to the Schools' IT department who will then put it in their system so that my client can handle the duties later (in case of exceptions)

In addition, My school is split into different sections with high school, middle school and elementary school. The duties are split between all these schools but change each semester. My client requires the duties to be changeable I.e (Remove, change, add). The teachers in our school also change so my system should be able to add more teachers and remove more teachers.

This new system will be better for my client as the system will automatically be able to allocate teachers to each of the required duties needed to be completed by the high school. This will save my client time and be more efficient allowing her to focus on other tasks that she must do.

The new system will be programmed in Eclipse's inbuilt function that lets me upload all my code to github from which my teacher can give me feedback and provide directions along with a GUI builder.

Word count: 253

Success Criteria

- 1. The client must be able to give a spreadsheet/csv files with duties
- 2. The client must be able to give another spreadsheet/csv files with teachers
- 3. The client must be able to give another spreadsheet/csv files with a list of Admins and Subject area Leaders
- 4. The system should be able to produce a csv files with a list of duties
- 5. The system should be able to accurately allocate each teacher to each duty
- 6. The system should not assign duties to teachers who are have a subject area meeting during that time
- 7. The system should not assign more than one duty to teachers who are also admins
- 8. The system should not assign more than one duty to teachers who are also head of departments
- 9. The system should not assign more than 4 duties to any teacher
- 10. The system should not assign duties to teachers who work more than 21 hours
- 11. The system should not assign duties to teachers who have 4 or 5 lessons on the day
- 12. The system should be able to prevent the entering of invalid data

- 13. The system should be able to tell the client a mistake and occurred and where it has occurred (If it occurred in the csv file)
- 14. The client should be able to easily tell the program where to store the CSV file on their computer (file path). This would require a GUI.