

Criterion A: Planning

Defining the problem

Client Mrs.XX is an office manager at a local business. Her job is to handle the different accounts of the business such as the finances, the bank statements, the debtors, the creditors and the transactions with the vendors of the business along with the different bills for the business. Additionally, her job is to follow up with customers to remind them to pay their due bills. All of these tasks prove to be difficult when they need to be completed by multiple different means. This problem could have been solved using technology. Hence, I had a discussion with my Computer Science teacher about a possible solution she approved.

During the initial meeting, I also noticed that the corresponding dates with the tasks of her job are very inconsistent. Mrs.XX is also always complaining that modern accounting software is very complicated to use and a little expensive. Currently she uses Microsoft Excel which is not very efficient so the solution I proposed was for an alternative. The program would be simple to use and also allow any upcoming deadlines such as electricity bill payments to be entered into a calendar. When I spoke to Mrs.XX about the idea she said it would be really helpful. I further discussed it with her to figure out which exact features she would like (**See Appendix A for full interview**).

Word Count: 222

Rationale For Proposed Solution

I plan to create a program using Java as my programming language and MySQL database to store the user's data and the information which has been entered by Mrs. XX.

I chose Java as the programming language because:

- I am currently learning Java in school so it will be easy for me to implement it.
- It is object oriented which will allow me to create methods instead of having to type the code multiple times.
- There are many libraries which I can import instead of recreating the code.
- It is free.
- There are many resources online to help me.
- It is supported by IntelliJ which is the IDE which I will be using to create the product.

MySQL will be used to store the user's data because it is free and it is supported by the Integrated Development Environment (IDE) which I wish to use. I chose MySQL as the database to be used because:

- It is free.
- It is user friendly.
- Libraries for MySQL exist in IntelliJ.
- I can search in MySQL for any specific record.
- It will prevent data from being lost when the program is terminated.

Word Count: 189

Total Word Count: 411

Success Criteria

1. The program will present the user with a login and registration page.
2. The program will give error messages when there are data entry errors.
3. The program will allow the user to reset their password after security checks if they forget their password.
4. The program will check the strength of the entered password when registering and resetting the password.
5. The program will allow users to view and edit their profile information including a profile picture.
6. The program will allow the user to input and remove events from a calendar.
7. The program will allow the user to input and remove financial data specific to the different financial tables which will then display the input data in the appropriate financial tables.
8. The program will calculate the totals based on the inputs for the different aspects of each financial table.
9. The program will allow the user to save/print the financial tables and calendar.
10. The administrator will be able to manage the employees which are registered in the program.