

Criterion A: Planning

Introduction

My client, Mr. X is an owner of small pet shop in my town. He sells mostly feed, aquariums and animal toys, rather than real animals which are specially ordered for customer.

Nowadays, every transaction in his shop is done manually. The employee must remember code for every product and write it in the cash register by hand. Also every document that is later requested by accountant is manually written. For example, the daily profit report is calculated on paper or the stock is manually counted.

As the shop is facing more customers than in previous years, the method of serving them has become inefficient. Because of the time it takes to serve one customer, the bigger queue starts to form. Also, because of not keeping the amount of stock, the employee faced a difficulty during ordering the replenishment, because she had to count every sold product, which lowered her productivity at work. Furthermore, the amount of paper that is used for paperwork is an additional waste and cost.

I volunteered to write a GUI based software that will play a role as a Point of Sale, which in theory will snap the products barcode, display it on the screen and move the employee through every process of the transaction. Moreover, It would automatically keep the transactions report and help in writing a daily profit report.

Rationale for solution

In my opinion, the best solution for Mr. X is choosing an Object-Oriented Programming, because of the need of cooperation between graphical user interface and the functionality of the program. Also because of the complexity of the app.

To store the data I will use the PostgreSQL database, which is free, secure and has a user-friendly interface.

Because my client own only one store, I don't see a need of creating online system which would be much more complicated and less secure.

As a medium I have chosen Java, because it is simple, secure, free, platform independent. Also, by using java I could easily transfer the app into the Android phone, if needed in the future.

Success Criteria

- Client can create user accounts
- The program can scan the barcode of the product
- The program can search the database and display the ongoing transactions on history
- The program can print the receipt
- The program can count the daily sum of money and compare it with the expected one.
- The program must have user-friendly interface, which is not complicated
- The program can track the amount of stock
- The program can create documents using templates, such as daily transactions report

Word Count: 424