

Criterion A: Planning

Defining the problem

At the end of March, we were told about the internal assessment on CS. While thinking about what I should make I remembered that at the beginning of each semester computer lab's timetable is changing, due to the changes in school timetable. This sometimes is a reason for the clash between two classes, as they both have a lesson in same computer lab. Computer lab is used by several teachers of ICT, Technology, Computer Science and sometimes other subject teachers that want to give a lesson in the lab, as it has an access to a huge amount of computers that can be used by students to perform different tasks given by teacher.

I began to think, how this issue can be fixed. Thus I came to a conclusion to make a java-based interactive Time-table program that will help head of ICT lab to solve this problem;

I asked my computer Science teacher about my idea and she approved it; to know how my program should look like I decided to take an interview with XX head of computer lab.

After the interview I realized that the timetable form exist only in Excel form. Also XX told me that he want to be able to print out all the changes he may have done by hand, so he would be able to distribute the "new" time-table to the teachers, thus avoiding the clashes. Because it would be better to create special interactive software for ICT Lab, that will let the head of the lab able to sort out the problems without any sweat.

Thus, my project client and supervisor became ICT Lab head Mr XX.

Rationale for the proposed product

My decision was to make a program as it's much more dedicated for a chosen task, and Java is the best tool to solve this problem.

The java program will have an easy access to a certain amount of tasks such as: create, edit, delete, print, search options that will let my client to be able to look for the information the timetable has, if it's wrong to fix it, or if there is something missing to fill it.

I decided to use Java, because:

- I have studied java in school.
- It is portable on any platform.
- Java has runtime check to encourage error-free programming.
- It's easy to create interactive interface with colored buttons, fields and menus.

Criteria for Success

This program will be able to create a flexible Time-table and will have a possibility to be easily modified when needed by the end-user.

- with program client will be able to register teachers and lessons. Also, will be possible to edit/delete them.
- Program will be able to display timetable as an interactive table, where each teacher will have his own colour.
- It will be easy to edit the information just by clicking on the interface button.
- The program will have a search option with some sub-options: by day, by period, by class and by teacher.
- If somebody will try to occupy, already occupied period, an error message will be displayed, preventing the period being overwritten and will notify that the particular period is already occupied.
- It will be possible to print different types of information from the time-table, by which I mean: time-table, period occupied by a certain teacher, a chosen's teacher time-table (will display only the periods occupied by this teacher)
- The program will be easily back-upped.

Words: 416