

Criterion B: Analysis

chosen solution database

Proposed solution:

Carlos and I initially considered the following options:

- Spreadsheets
- Desktop publishing
- Have everything written in a notebook

Requirement specification

IT system requirements

- Hardware Laptop or PC
- Software Windows XP, Vista or seven and Microsoft Access.
- Microsoft Access requirements, 500-megahertz (MHz) processor or higher, 256 megabytes (MB) of RAM or higher, 2 gigabyte (GB) available disk space, 1024 × 768 or higher resolution monitor.

System interaction

- Microsoft Access requirements, 500-megahertz (MHz) processor or higher, 256 megabytes (MB) of RAM or higher, 2 gigabyte (GB) available disk space, 1024 × 768 or higher resolution monitor.

Input/output requirements

Input requirements

- The system will keep track of all the workers, the place they are, the time they arrive to work, the time they departure to home, the tools they take, the amounts of tools, the description of tools (ex. how are they? in good conditions or bad

Output requirements

- The picture of the worker
- The name of the worker who has a certain type of tool
- The hours each worker has worked
- The personal information of each worker
- All the tool they have in stock

Processing

- Type a workers name, to find out his information
- Type a tool name to find how many are left in stock
- Automatically make the discount if they get mark as late
- Typing a tools name to know who has the tools
- The amount of hours worked

Security

- My data base will have user name and a password, so we can be sure that only the one in-charge will be inputting the data.

Specific performance criteria

- Ask for a user name and password
- Keep record of time of arrival, departure, number of hours worked
- Number of tools in stock
- Number of tools left in stock
- Know which worker took which tools
- Search for the people that didn't return the tools
- Search for a tool a see how has that tool
- Automatically do the discount to the workers that arrive late
- Know the amount of hours work per worker
- Type the workers name to find his abilities and other information
- Type the workers name and find what is his position in the firm (ex. if he is in charge of a group of gardeners)

Justification of chosen solution

The proposed solution of data bases solves the problem of "the control of the workers and the tools the workers use" and the problem of keeping track of the numbers of tools to know the number of tools they are left in stock, this gives the exact numbers of tools that are left in the stock in order to my client to know with which tools he can work. It also solves the problem of keeping record of the time of arrival, departure, and extra hours worked. My database will help my client to keep a clean and easy to understand control mode, that will automatically update for example the tool, they will automatically be download from the system when a workers ask for it, leaving only he real number of tools in stock.

A solution I thought of was spreadsheets, but a spreadsheet doesn't solve the entire client problem. It can do some of them, but not all of them for example it can keep record of the time of arrival, departure, and extra hours worked, but it can't keep real track of all the tools. The other solution I thought of was desktop publishing, but this is not a very good idea for keeping records of data. I even thought o writing everything on a notebook, but that is too difficult to keep a good and complete record of all the data. Then I realize that the best solution for my client's problem was to do a database, because you can easily keep record of data and you can do calculated queries, which are going to be helpful in keeping record of the tools and the discounts that are going to be done to the late workers.

The software I will use for this database is Microsoft Access 2007, is a very good software for working in databases, it is also simple to use and I have had some lesson, so I have a pretty good understanding of all the things you can do with access and how you can do them. My client won't have any problem working with this software because he is a person that he is in constant touch of what is new, and I am going to teach him how to use it, so he would find easy to use the program. The hardware of the database is a computer, a keyboard to impute the data and a mouse. My client has a laptop with window 7, so he would not have any problem running Microsoft Access 2007 in his computer.

Word Counts: 429