

Specification

Background to user

For my A2 project I will be designing new system for Major R Thomson RE who is responsible for recruiting potential officers in the Royal Engineers. He is based at the royal engineers museum on Brompton barracks. Major Thomson is also in a lot of contact with head quarters up in Wiltshire, where they look at potential candidates who want to join the army, the candidates personnel information is then passed on to major R Thomson if they are interested in joining the royal engineers.

The museum is open to the public and shows the history of the Royal Engineers. His main role within the organisation is to oversee its policy and direction.

There are four members of staff including Major R Thomson who work at the recruitment office; each member of staff has a different level of ICT knowledge, ranging from very competent to learning how to use the database system.

Description of the problem

The database is not designed for that particular organisation. Users often find them selves repeating tasks because the existing system is not allowing them to do the tasks all at once. E.g. When the user wants to send information to candidates it has to been done individually there is no way of selecting more than one candidate, which can be along process especially if there are a lot of candidates that are been sent the same letter. My user would like to be able to select more than one candidate and process the letters a lot faster.

The existing system is not user friendly, and tasks take longer then they should do, I aim to tackle this problem, and make the users lives a lot easier, by allowing them to complete tasks easier and faster.

Analysis of the existing

The Existing system is run in Microsoft Access. The database holds personnel information on interested candidates who are interested in joining the Royal Engineers as an Officer E.g. name, address, gender etc. With such tasks been performed like: The generation of letters to candidates, the input of data on candidates.

The existing system hardware is standalone PC that is connected to two laser jet printers. The existing software used is Microsoft access in windows. The hardware is used every day and the software is used all day.

The existing system is not sufficient enough many improvements need to be made to make the system user friendly.

User requirements

- To create a database that can hold information on candidates that want to join the army as an officer.
- To have tasks done in half the time as what they are done in now.
- All information on the candidates is kept secure and confidential.

- Make the system user friendly to all existing users.
- Instead of having information sent via post send it to Microsoft outlook.
- Link Microsoft Access to Microsoft outlook.

Proposed solutions

I aim to make the new system more user friendly to the user and to make there job easier; I propose to do this by doing the following things:

- Linking a table to data that has been selected, so that every time a letter is sent, the time and date is recorded, instead of it been imputed into a table manually.
- Protecting data by:
 1. Using passwords to allow access to the data.
 2. Validation.
- Meeting their user requirements.

There are many advantages and disadvantages of using the following systems:

Manual solutions

<u>Advantages</u>	<u>Disadvantages</u>
Work can be kept in a filed system.	Work can be lost or damaged.
Easy to use.	Work isn't processed as easily as if it was done using a computer.
No training needed.	
Cheap to have and run.	

Database solution

<u>Advantages</u>	<u>Disadvantages</u>
Back ups can be made so that if data is lost or damaged, there is a hard copy available.	Can be hard to use if users ICT knowledge is not of a high level.
Work is kept securely.	

Spreadsheet solutions

<u>Advantages</u>	<u>Disadvantages</u>
Back ups can be made so that if data is lost or damaged, there is a hard copy available.	
Can calculate data for you.	
If changes are made then it automatically updates its self E.g. Graphs, totals etc	

Word processing solutions

<u>Advantages</u>	<u>Disadvantages</u>
More presentable than hand written work.	
You can save the document.	

Above are four tables each one states some of the advantages and disadvantages of using different types of systems, as you can see that the manual system is not as sufficient as computer applications.
Justified software

Justified Software:

For my project I will be using Microsoft accesses and linking it up to Microsoft out look.

Justified hardware:

I have chosen to use the hardware, because it is

Input, processing and output requirements.**Input:**

- The input of data from headquarters.
- Mouse
- Keyboard
- User input

Processing:

- The operation of data.
- Displaying the data on a computer.

Output:

- Printing of letters or documents.
- Sending of documents to users.

Objective of the overall proposed system

To achieve my users requirements. Setting the new system so it is user friendly to the user no matter what there level of ICT they are, this will allow them to get the most out of the database and get jobs done quicker.

Performance indicator

The system that I am going to design will be sufficient to the users. It will cut out any problems that the system had before and tasks will be done in half the time. This will be done by using queries, linking tables, and using macros to achieve my users requirements.

Users ICT skills and knowledge

At the recruitment organisation, all users have varied ICT levels and knowledge. This may have an effect on the design of the new system. Some of the problems that may be faced when designing the new system:

- The design of the system may not meet its full potential because of user or users lack of ICT knowledge.

Ways of solving the problem:

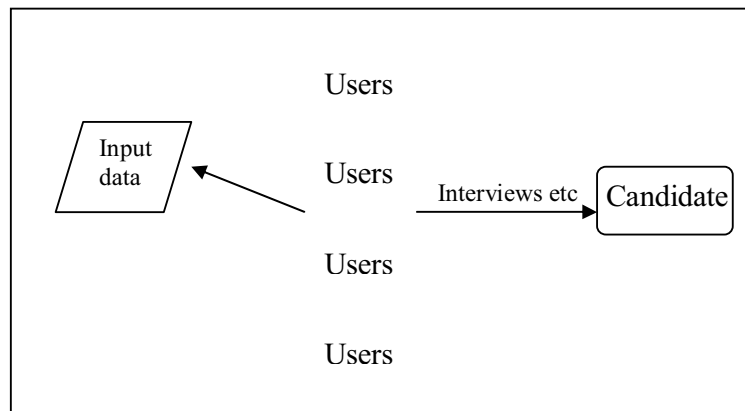
- Organisation may have to pay out for training so that the user can be trained to use the new system.
- Make sure that the user guide allows users with little ICT knowledge to use the database.
- When designing the system if the user comes across a problem and doesn't know what to do they can have a step-by-step guide on what to do. This will be done by, having a call up box, which then can click on, and read the information provided.

Test strategy

My test strategy is to test all data inputs to ensure that they do work how I want them to, so that I meet the users requirements.

Test plan

Test no	Test Data	Purpose	Expected results	Comment/verified
1	Enter in the correct password.	To test password to see if it accepts the correct passwords.	Recruitment.	
2	Candidates full name			
3	Numerical data	To prevent text been entered	Numerical data	
4				
5				
6				
7				
8				
9				

Data flow diagrams**Internal:****Internal and external:**