Database for Nicole Martin

Criterion A– Planning

Defining the problem

The **client,** Mme Nicole Martin, runs a small French language school in Melbourne, Australia. Her customers are school students seeking help with their studies, business people with contacts in France and travellers wishing to learn basic French. She has established a library of French DVDs to lend to her students to support their studies.

Currently she allocates a unique number to each DVD and, when a student borrows a DVD, she records this number, the date, DVD title and borrower's name in a book.

The current manual system has become **inadequate** as her collection has expanded and more students are borrowing DVDs. She wastes valuable time reading through every page in the register to identify unreturned items. To contact borrowers she then needs to locate their phone numbers stored in a separate filing cabinet. She has no list of DVDs and can't easily locate an item on a topic of study.

Nicole has consulted Computer Science student Angus McBean and asked him to provide an IT solution. She does not wish to invest a lot of money and, due to her limited computer skills, she would like a user-friendly interface and clear documentation to help her use and maintain the application.

Word Count 201

Rationale for the proposed solution

I decided that a relational database would be the best solution for Nicole. I think MS Access would provide the facilities to create a relational database to store the data. This would mean that issues such as data redundancy and data integrity would be easier to manage than in either a flat-file database or spreadsheet. The data entry forms would be easier to create in Access than in a spreadsheet package.

I had also thought about creating the database online. Despite the advantages of being able to update the database from any location with Internet access, I decided there were too many disadvantages. I would need to create additional code, find a platform that accommodated active scripting, consider the cost of an ISP and address potential security issues arising from using a third party to host my database.

Word Count 138

Stating success criteria

1. A data entry form that allows Nicole to add a new student
2. A data entry form that allows Nicole to search for an existing DVD
3. An easy way to search for students (eg by typing in their names) in order to find DVDs they currently have on loan
4. The ability to print a list of overdue DVDs showing names and phone numbers of the borrower
5. A list of all the DVDs in the collection in order of title with details of the topic
6. An option to enter a topic in order to find a list of suitable DVDs
7. The product must have a user-friendly interface so Nicole can maintain the data and print reports by clicking a button
8. On screen help tips plus an electronic manual providing simple instructions to maintain the database would be an advantage