Barker Corp Essay Description Of Problem

GCSE Estate Agent Coursekwork

The aim for this coursework is to design a new system for an estate agent called Barker Corp Estate agents. The database will be designed to hold information about the properties such as number of bedrooms, garden size, price etc. Currently the company is using a filing cabinet to keep the current data, this takes up a lot of space and it is hard for the workers to access or amend the information.

I will need to design a solution for this problem, my system has to be fast and easy to use, the information should be clear and easy to change. I will need to find out how the workers are currently using their system and I will need to see if the new one will be easier and faster

My company currently files all the information about the houses that are for sale or rent. They are all organised by the area that they are in. If any customer inquires about buying a house but doesn't specify the are but sets other criteria then all the files have to be studied to find a house meeting the criteria set. If information about the area is given then it is a bit easier because only houses in that area have to be searched. Searching for the right houses can take hours because a lot of files have to be searched. House prices are constantly changing and it isn't possible for the company to manually change the prices for each house. When inquires for a house which has to be between a certain price range is made, many houses cannot be made available because the current price hasn't been updated and the latest price may be out of range. The company is losing a lot of business because it takes a long time to find the right properties for the buyers, the company also needs to employ many extra staff because excessive manual work is required.

Specification

What must the new system be able to do?

The data will need to be stored in an organised way - using tables to present the data in a clear way i.e. a database could do this.

The system would need to be user friendly - simple instructions could be provided so that everyone could use it easily and effectively.

The data should be put under suitable field names such as: -

ID number- this gives each customer an ID, which when searching for a certain customer, the owner can just search for his ID number and the customer's details will appear on the screen.

Street name- The name of the street, this is usually text

House/Flat number- The number of the property, this is numerical

Postcode - The postcode is a mixture of numbers and text, but they are set out in a particular order, so that will have to be taken account of.

Town/City- The area where the house is, this is set out in text.

Contact name - The name of the person who needs to be contacted regarding the property, this is usually the owner. This will be in text.

Telephone Number- The telephone number of the owner, this is numerical but is in a particular order.

Type of property - This will be a drop down menu and show whether the property is a semi-detached house, detached house, flat etc.

Number of bedrooms - The number of bedrooms the house contains. This is numerical. Must have a range to help avoid data entry errors.

Size of master bedroom (square m)- The size of the main bedroom, the size of other bedrooms isn't considered important. The answer should be numerical.

Size of living room (square m)- The size of the main room, this should be numerical.

Size of garden (square m)- The size of the garden (if any), this is numerical.

Type of sale- A drop down menu asking whether the property is for rent, lease or freehold sale. The owner could also be considering all options so this section doesn't always have to be filled.

Rent per week - The asking rent per week, this doesn't have to be filled if the property is for sale. This is numerical.

Price- The price of the house, this also doesn't need to be completed if the house is only for rent. This has to be numerical.

Conditions/Additional information - If there are any conditions or restrictions regarding the property then they can be put here. For example if the house is on lease then a brief outline of the conditions should be put here. The information here can be a mix of text and numbers.

Resources

Software

Application

Word processor - This is used for typing text, which can be edited rearranged and also printed. The word processor can check any spelling or grammar mistakes, it also contains facilities such as a dictionary and thesaurus. This type of software is mainly used for letter writing and essays.

Spreadsheet - This consists of rows and columns of cells which can be used to contain text, numbers and most importantly formulae. These formula can be used to calculate figures, look up information from other cells and to carry out validation checks just to name a few. The rows are given numbers and columns

are given letter which together give the position of the cell. In the formulas instead of inserting direct numbers, cell references are given so that if the number changes all those that are affected automatically change, this minimises any mistakes and makes it much easier for the user. The information in a spreadsheet can also be able to show a graph or a chart, which will show the progress of a company or any other data.

Desktop Publishing - This is the use of a computer and specialised software to combine text and graphics to create a document that can be printed on either a laser printer or a typesetting machine. Desktop publishing is a multiple-step process involving various types of software and equipment. The original text and illustrations are generally produced with software such as word processors and drawing and painting programs and with photograph-scanning equipment and digitisers. The finished product is then transferred to a page-makeup program, which is the software most people think of as the actual desktop-publishing software. This type of program enables the user to lay out text and graphics on the screen and see what the results will be; for refining parts of the document, these programs often include word-processing and graphics features in addition to layout capabilities. I will not use this application because I will not be using graphics like pictures etc.

Graphics - This package can be used to design illustrations, drawings and logos , and it is also used to modify pictures, photographs or animations. In this package there is a wide range of colours, shapes and lines. This type of package is used to create cartoon animations, produce computer games, design logos and creates pictures. The drawing can be printed out or a collection of these can make a movie.

Database - This is a collection of data organised for storage in a computer memory and designed for easy access by authorised users. The data may be in the form of text, numbers, or encoded graphics. Originally devoted largely to the sciences, these automated databases now embrace a comprehensive array of subject fields. The cost of these searches, whether covered by the library or the patron, is often offset by the great efficiency of the searches, especially in contrast to earlier methods of manual searching through multiple printed sources. This work also represents a partnership of the for-profit private sector with the public library community. In effect, it is another form of library networking.
Relational Databases in computer science are types of databases or database management systems that store information in tables—rows and columns of data—and conducts searches by using data in specified columns of one table to find additional data in another table. In a relational database, the rows of a table represent records (collections of information about separate items) and the columns represent fields (particular attributes of a record). In conducting searches, a relational database matches information from a field in one table with information in a corresponding field of another table to produce a third table that combines requested data from both tables.

In my research I discovered that using a database was the ideal application for my system because it enables me to store data easily, to create forms and records, its more efficient, cost effective, saves space and is time effective. It also has the ability to keep my system well organised in tables and under suitable field names, queries can be run to search for data that satisfies certain criteria that are set by the user. Other applications are not suitable for my system because they are not suitable to sort out data and run queries like the database does. Although some spreadsheets and word processors have the ability to sort out data in alphabetical order, ascending or descending order with bullet points and with numbers these are not sufficient for my system. I need to run queries and have validation checks, which mean that only a database can be used.

Package

A software package is needed where all the data can be inserted. A very popular and user friendly package is Microsoft Access. It will enable me to search and amend my database. It is available at school and I have it at home and I know how to use it. There are many other packages available but this is the best and most widely used. To type out my instructions to give to the users I will use Microsoft Word which is also easy to use and is available everywhere.

Hardware

The computer I will need for use with the system will need to be of reasonable speed, with adequate memory and hard disk. It will also be ideal if the firm owned a printer so progress can be put on paper. This hardware should be reliable and have minimal chance of technical problems.