

## DATABASE COURSEWORK.

### IDENTIFY

My Uncle Samuel is the salesman of a newsagent shop called **Samuel and son's co. limited**. He is busy and disorganized because he is always away on trips and is never around to take inventory of his stock. So I decided to create a database for him to help him make his business more efficient. This database will consist of lists of food-items, drinks, sweeties and confectionaries that he owns. I will add the names of the components into a table. This table will show that all the information required in the database has been entered. I spoke to him about this and he has given me this criteria:

- The database must allow him to see the details of customers quickly and easily.
- He must be able to see who owes him money.
- He wants to be able to check out customers in a location and be able to specify their location.
- He wants to be able to enter a price and see all the items and commodities above or below that price.
- He wants to be able to print a commodities price list.
- He wants the database to be password-protected, so as to stop a competitor from stealing the database.
- Finally, He says that because he is not so good with computers, I should make the database very easy to use.

The softwares that will be used for these purposes are Microsoft word and Microsoft Access. Microsoft Word will be used to type the work and the solution while most importantly Access will be used to create the database for my Uncle. And alternative solution to this would be to use the traditional 'manual system', which is to use a filing cabinet or a card file system, which in that case would have to be handled daily by a lot of people to reduce stress on the on the owner.

I am going to use the Computer and its systems because it is faster, easier to use and more accurate. Besides by using the storage system of the computer, that is, floppy, hard and

removable disks and tapes, storage is safer, files are not easily lost or damaged and it is more difficult for a person to search for a file in a large drawer or filing cabinet than it is to search through a computer database. This reduces fatigue for the owner.

## ANALYSE

I will analyse how an ordinary food-item and confectionaries stock inventory database will work, then I will try to show how I computerized the database system.

The data that I will collect and then input to use in the computer database will be:

- (1) Customer Name.
- (2) Customer Address.
- (3) Customer Town.
- (4) Customer postcode.
- (5) Telephone no.
- (6) Item price.
- (7) Purchase date.
- (8) Amount paid/to pay.
- (9) Item name/type.

All this information would have been gotten from paper, which would contain all the field names so that where the data is to be entered and analysed it would not take a long time to find an item and its details, and to change its price or apply a discount would not be a big hassle.

However if a food item stock inventory were to be designed on a computer it would be a lot easier to access and control.

This is what I plan to do; I will manipulate the data by designing and making the database in the Microsoft Access programme. It will consist of entry fields, data capture forms, tables, macros and queries.

In order to avoid losing my work, I will backup them every few minutes. They will be stored in floppy disks and hard

disks. I will backup to access and make a copy of my work a template. I might also back it by saving it in a removable disk using USB cause this will be safer than a floppy and it is portable. It is also harder to destroy.

In this database, the data that I will input and process will be real not fictitious but it can be changed or updated along the way, although the Data Protection Act (DPA) will not affect it. It is very vital to the database and the user that I input password protect into the database for security purposes and to prevent unauthorized entry or use of the database. This is to stop competitors from stealing the database and details of his customers.

The hardware that I will use for creating this database includes a monitor, keyboard, mouse, CPU (central processing unit.), printer, scanner, digital camera and the Internet. The softwares that I will use are Microsoft access, word, Internet explorer etc.

The main software that I will use is Microsoft access. This is because although excel can be used as a database, it has severe limitations due to the fact that it does not contain all the necessary applications needed to create the database while access makes your work easier and faster. In Access, you can do complex searches (called Queries); produce quality reports and convenient data entry forms. You can also improve your database by making it 'relational'. Excel is more suited to performing calculations or data modelling functions.

A relational database application such as Access is better than a flat file database program, such as Excel and information workshop because it can mean spending less time on data entry and fewer errors.

The file format that I am going to produce will be in MDB (Microsoft Database) format. It compresses all your tables, forms, queries and reports into a single file.

My output will be shown on the screen and will also be printed to enable the user see information on the database.

## DESIGN.

I want to design a database for food-item stock inventory and customer details (between me and my uncle.)

**Welcome to Samuel and son's  
Co. Limited,  
The best newsagent shop in  
London.**

**CLICK HERE TO ENTER**

## RECORDS.

When was item bought?

Where was item bought?

Who bought item?

What time was it bought?

What type of item was bought?

**CUSTOMER NAME: text**

**CUSTOMER ADDRESS: text**

**CUSTOMER TOWN: text**

**CUSTOMER POSTCODE: text**

**TELEPHONE NO: number**

**ITEM NAME: text**

**ITEM TYPE: text**

**ITEM PRICE: currency**

**PURCHASE DATE: date**

**EXPIRY DATE: date**

**AMOUNT PAID/TO PAY: currency**

**Name:**

**Address:**

**Telephone no:**

**Item bought/to buy:**

**Amount paid:**

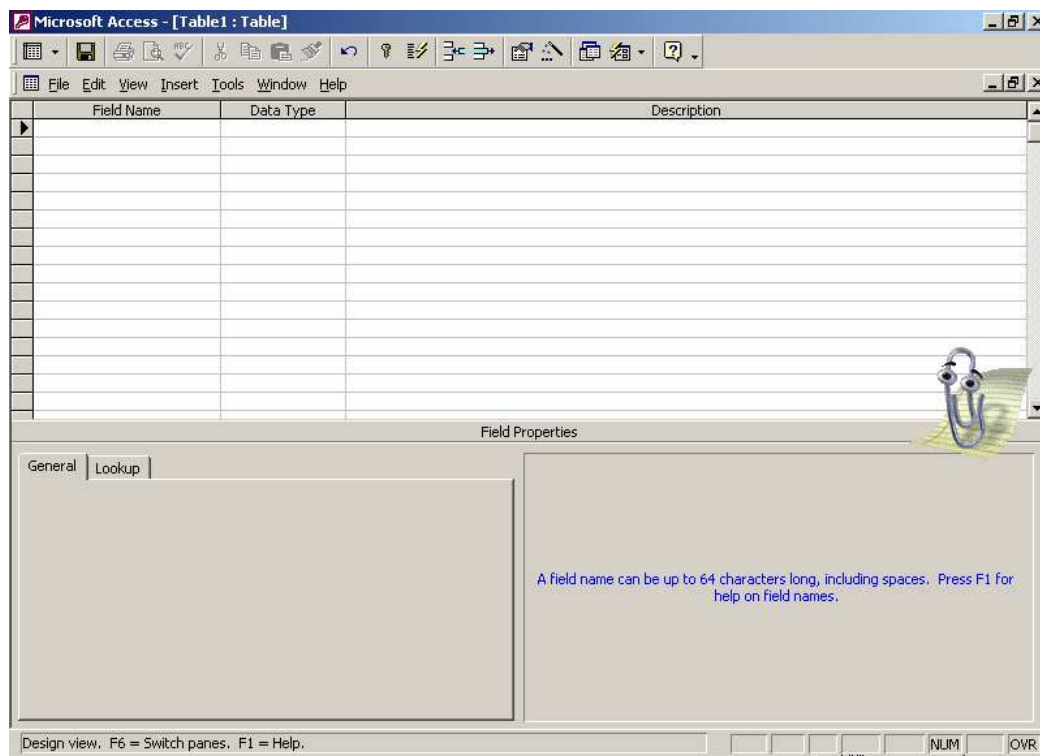
## IMPLEMENT.

I will now try to create this database, and I shall explain the steps I used to create it along the way. I started off by first deciding to create a database for my Uncle because of his unorganised business. I designed this because he will need it to attend to lots of customers in the future and it will make his business a lot more efficient and effective.

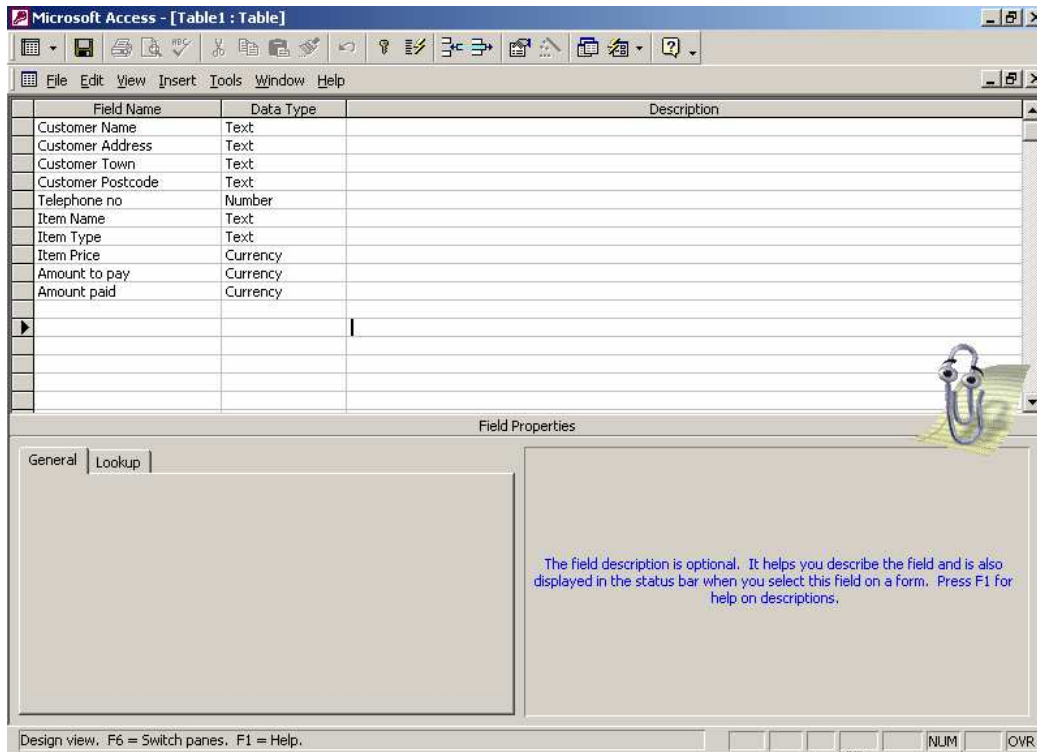
This database will consist of some of the food-items and confectionaries that he owns. I will add the names of them into a table.

To make my database, I will use the Microsoft Access 2000 programme. I will be using screen dumps by pressing Alt + print screen to explain the process of creating my database.

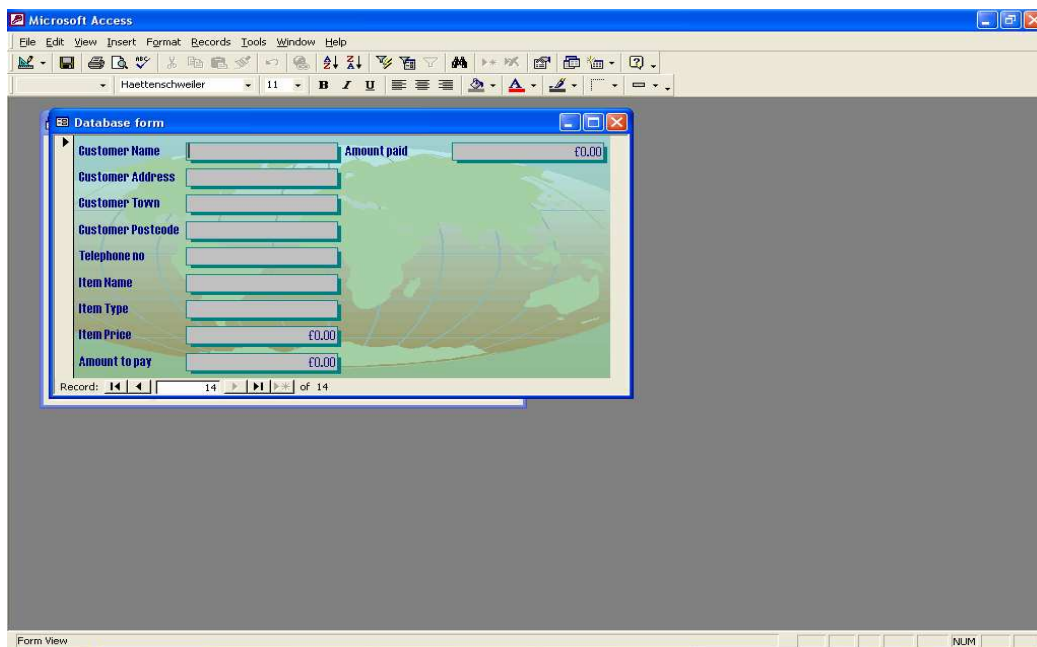
First of all, I open Microsoft Access and input all my information into a table.



This is the design view of the database creation table.



The first form I could create was a blank input form; The Input form is a really nice way of presenting all of the information of the customers. I made this input form of the customers look more attractive by placing the world background into the form.



Microsoft Access - [Table1 : Table]

File Edit View Insert Format Records Tools Window Help

Customer Name	Customer Address	Customer Tow	Customer Post	Telephone no	Item Name	Item Type	Item Purchase Price	Amount
John Smith	12 Forest Road, Dalston Kingsland	Hackney	E8 3DA	07945858486	Rubicon's	Drink		£0.50
Amy cinders	5 Mayfield Close, Dalston Kingsland	Hackney	E8 7XA	07956212245	Aero	Confectionaries		£0.75
Vanessa Isaac	22 Baker street, North woolwich	Woolwich	E10 7KN	07954178954	Walkers	Crisps		£0.90
Amy Cinders	5 Mayfield Close, Dalston Kingsland	Hackney	E8 7XA	02045478845	Five alive	Drink		£0.99
Amy Cinders	5 Mayfield Close, Dalston Kingsland	Hackney	E8 7XA	07982686596	Snickers	Confectionaries		£1.50
Ricky Martin	102 Nightingale Road, Brooke House	Clapton	E5 8NB	07952156488	Magnum	Sweeties		£1.50
Philip Papae	17 Parkerson close, Abbeywood	Greenwich	E13 7HT	02054878787	Andrex	Sanitaries		£1.55
Angelina Jones	13 Homerton Hospital, Lower Clapton	Clapton	E5 7WB	07894545211	Coca-cola	Drink		£3.00
Kaycian Francis	14 Pembury Road, Northfold	Clapton	E5 8TY	07954854652	Doritos	Crisps		£3.00
Ahmed Zakri	4 Roundtree Close, West Hampsteac	Woolwich	E10 9KN	07951201545	Jawbreakers	Sweeties		£3.00
Antonio puzo	10 Navarion Mansions, Brixton park.	Brixton	E12 9NG	02058487855	Shortbread	Confectionaries		£5.50
Natasha Siberski	12 Johnson Road, Abbeywood	Greenwich	E13 6GN	07951542575	Kingsmill	Pastries		£4.79
John Smith	12 Forest Road, Dalston Kingsland	Hackney	E8 3DA	02058854588	Bailey's	Drink		£12.00
*								£0.00

Record: 1 of 13

Datasheet View

After I had inputted all of my customer's information into the created table, I placed the print screen of the page then I used the information to enter data into the form.

Microsoft Access

File Edit View Insert Format Records Tools Window Help

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db1 : Da

Open

Objects

Tables

Queries

Forms

Reports

Pages

Macros

Modules

Groups

Favorites

Database form

Customer Name: John Smith

Amount paid: £0.50

Customer Address: 12 Forest Road, Dalston Kingsland

Customer Town: Hackney

Customer Postcode: E8 3DA

Telephone no: 07945858486

Item Name: Rubicon's

Item Type: Drink

Item Price: £0.50

Amount to pay: £0.50

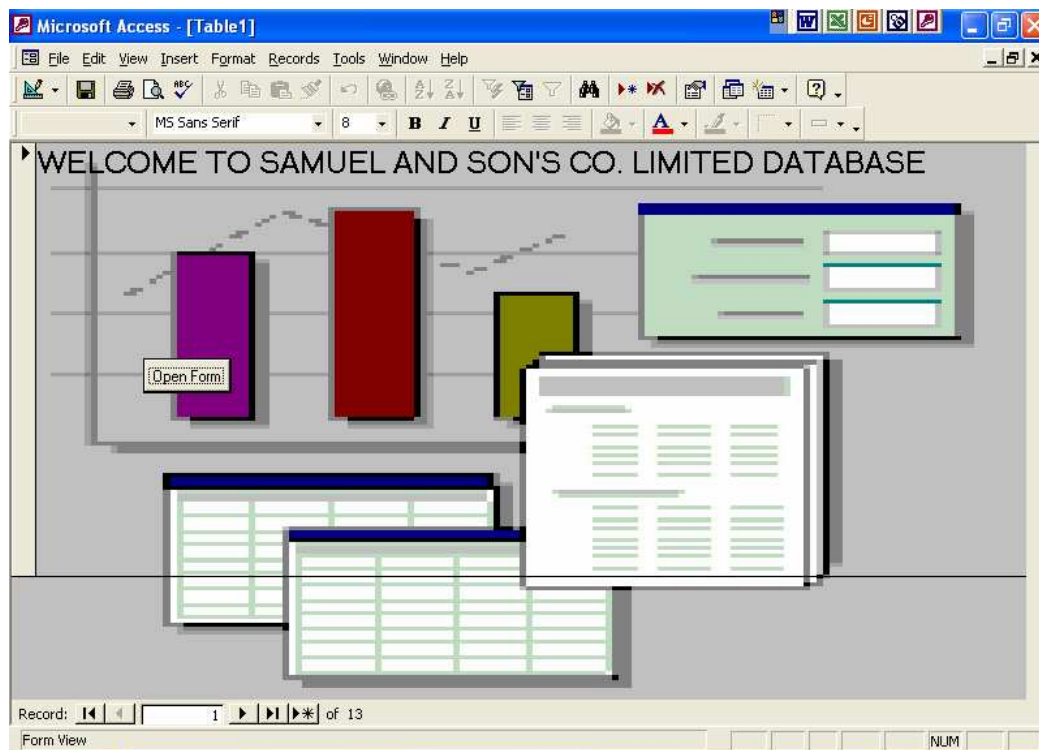
Record: 1 of 13

Form View

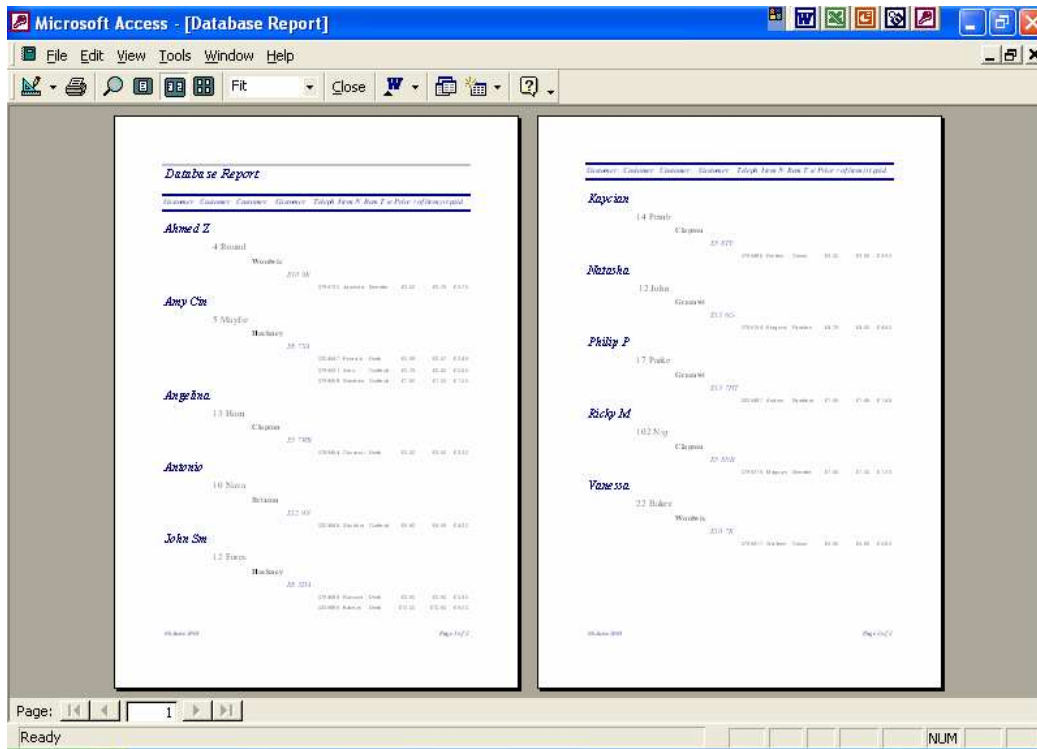


After putting the customer's details into the form, I added a macro at the bottom of the page of the type form to take you back to the previous page.

I could now be able to make the rest of the database. This is the front page of my database, which I am creating. It consists of a picture that I saved from the Internet and opened as the background wallpaper. I added a title to the front cover, and then I needed to make a report and query.



I used "WELCOME TO SAMUEL AND SON'S CO. LIMITED" as the entry to the front page of the database that I have created; I then added a button on it with the name 'Open form' which will enable me to access my forms just by clicking on it. Then by using the information inputted on my table to create a report, by clicking on it and choosing the necessary fields to create a brief and easy to understand summary of the information inputted into my table. This is seen below.



It will be seen that from here all information needed about customers that is including location of customers, amount paid, item bought e.t.c can be found out by just looking at the report of the customers. I will name my report “Database Report”.

Also, in order to sort out the customers to find out their location, put their names in ascending order or find out your best customers, a query has to be created to do this. In order to do this, I will go to design wizard to make my query. I will choose the name of my table as the source of the query fields, and then I will name it “Database Query”.

The screenshot shows the Microsoft Access interface with a 'Database Query : Select Query' window open. The window displays a table with the following data:

Customer Name	Customer Address	Customer Tow	Customer Post	Telephone no	Item Nam
John Smith	12 Forest Road, Dalston Kingsland	Hackney	E8 3DA	07945858486	Rubicon's
Amy cinders	5 Mayfield Close, Dalston Kingsland	Hackney	E8 7XA	07955212245	Aero
Vanessa Isaac	22 Baker street, North woolwich	Woolwich	E10 7KN	07954178954	Walkers
Amy Cinders	5 Mayfield Close, Dalston Kingsland	Hackney	E8 7XA	02045478845	Five alive
Amy Cinders	5 Mayfield Close, Dalston Kingsland	Hackney	E8 7XA	07982686596	Snickers
Ricky Martin	102 Nightingale Road, Brooke House	Clapton	E5 8NB	07952156488	Magnum
Philip Papae	17 Parkerson close, Abbeywood	Greenwich	E13 7HT	02054878787	Andrex
Angelina Jones	13 Homerton Hospital, Lower Clapton	Clapton	E5 7WB	07894545211	Coca-cola
Kaycian Francis	14 Pembury Road, Northfold	Clapton	E5 8TY	07954854652	Doritos
Ahmed Zakri	4 Roundtree Close, West Hampsteac	Woolwich	E10 9KN	07951201545	Jawbreakers
Antonio puzo	10 Navarion Mansions, Brixton park.	Brixton	E12 9NG	02058487855	Shortbread
Manuela Oliveira	42 Johnson Road, Abbeywood	Greenwich	E13 3DN	07954542777	McDonald's

The record counter at the bottom of the query window shows 'Record: 1 of 13'. The status bar at the bottom of the Access window indicates 'Datasheet View' and 'NUM'.

It will be seen that from here the entire questions to be asked from the records can be answered easily. Now I will now create password protect to protect the database from unauthorised entry and set the password reminder to be easy to remember. It should be noted that I couldn't create this criteria for security due to the fact that the Administrator did not allow for this.

## EVALUATION.

In this evaluation, the good parts and bad parts of this project will be stated. This database was created in Microsoft Access 2000. It was seen that I needed to create a suitable database for my uncle to make his business more efficient.

There were many stages in doing this, firstly I needed to enter the information into a table, and then present my data into a form, which can be easily edited. Once the forms were made, I began to create the report and query. These were really for presentation. I then put all these pages together and placed a front page with the title of the database in front so when the database is opened, the front page pops up.

It was seen that my pages looked pretty boring without any pictures or background. This upset my uncle so I decided to create a suitable background by using saved pictures, adding colour to the text boxes and outlines to where they are needed on the pages.

It can be noted that the design for the database was slightly different to the implementation. It will be seen that the front-page design is different from the created one and also the created form is different from the designed one. This is because my uncle decided to introduce more fields into the form and add background to both the form and front-page. It should be noted that all changes were made on user's requirements.

By adding scrolls and background pictures, a vast improvement has been made to the whole project. Although it is seen that in this project is that when presetting the database the information in form of a table should never be seen. However in database that piece of information is if the viewer accesses the query option.

It should also be noted that password set was "ifeoma" and can only be access when file is opened exclusively.