Databases– Part 1

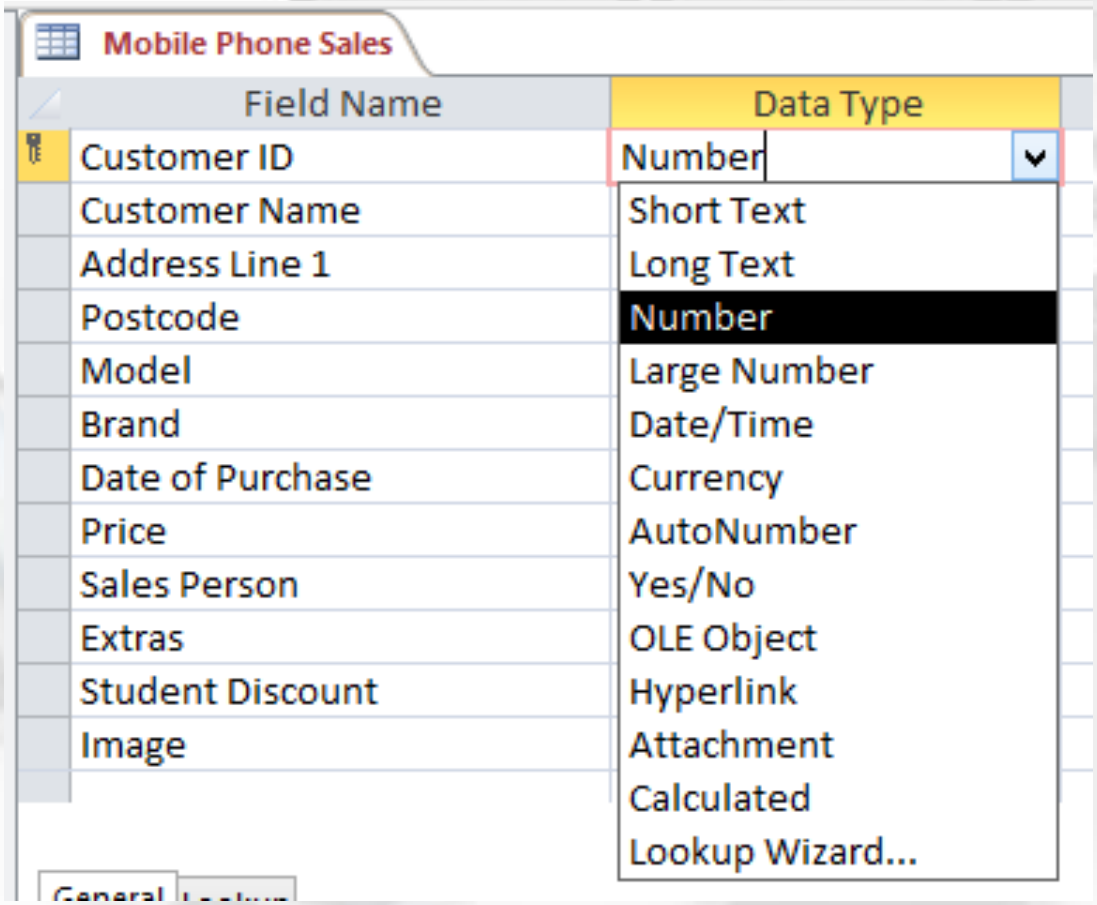
Lesson 1 & 2

Starter 1 – What is a Database?

A database is information organized in such a way that a computer program can quickly select pieces of data.

1. What will a **doctors surgery, a school and The Police** use a database for?
2. What **type of information** will be stored?
3. How would having a database benefit the school and doctors surgery?

Starter 2 – What are Data Types?



Text
Currency
Date/Time
Boolean
OLE Object
Number (Integer)

Lesson Overview

Objectives
To understand what a database is and how they are used.
Understand the different types of data types used in Databases.

Outcomes		Time
Task 1	Create table for Mobile Phone Database	
Task 2	Import the Mobile Phone Sales CSV File	
Task 3	Update Records and edit records	

Task 1 – Create Table

Microsoft Access:

1. Open Access and Save a New Database File – Call the File – **Sales Database**

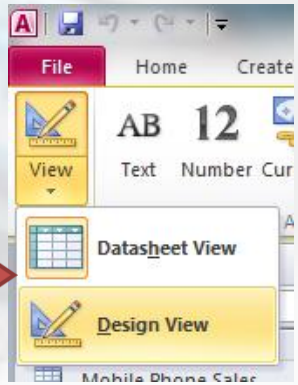
2. Create a New table called **"Mobile Phone Sales"**

3. **Include the Fields and Data Types Shown on the Right**

Mobile Phone Sales

Field Name	Data Type
Customer ID	Number
Customer Name	Short Text
Address Line 1	Short Text
Postcode	Short Text
Model	Short Text
Brand	Short Text
Date of Purchase	Date/Time
Price	Currency
Sales Person	Short Text
Extras	Short Text
Student Discount	Yes/No
Image	OLE Object

You need to be in Design View



Refer to the Video Tutorial

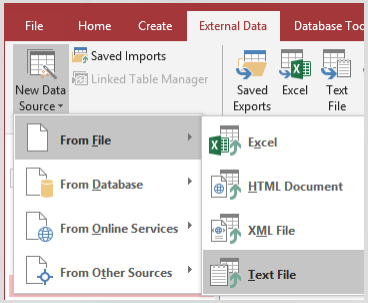
Task 2 – Import CSV

Microsoft Access:

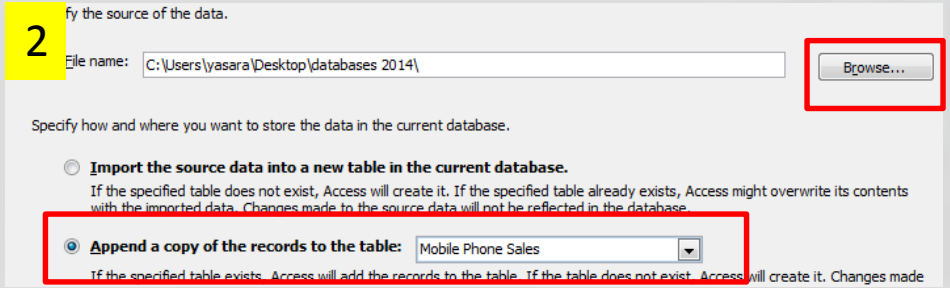
A comma-separated values (CSV) file stores tabular data (numbers and text) in plain-text form. The manager at the mobile shop has transferred all the sales data into a CSV File. Your Task is to attach the CSV file to your newly created database.

1. **Click on External Data >> Text File**
2. **Browse** for the CSV File and then click the option **>> Append a copy of the records to the table.**

1



2



3. **The click Next and Finish to complete the Import.**

Refer to the Video Tutorial

Task 3 – Update Records

Microsoft Access:

The following customer sales records need to be updated. You can use the Primary Key to search for the records.

Customer ID: 1 >>> (New Address: 220 Hazel Grove, H43 U79)
Customer ID: 12 >>> (New Address: 93 Peace Street, P43 RT9)
Customer ID: 19 >>> (New Address: 12 Jersey Terrace, J54 H75)
Customer ID: 24 >>> (New Address: 59 Baker Street, B34 8HG)

Add the New Sales Records: (No Student Discount Has Been Applied)
Extras: Find this information from the previous records.

ID	Customer Name	Address Line 1	Postcode	Model	Brand	Date of Purchase	Price	Sales Person
41	Adnan Januzaj	56 Bridge Street	BE4 B64	I phone 5	Apple	13/04/2014	£350.00	Rebbecca Reece
42	Alexis Sanchez	09 Cresset Road	C32 G87	I phone 5	Apple	13/04/2014	£350.00	Khuram Majid
43	Karim Benzema	11 Albert Road	A52 P69	s5	Samsung	14/04/2014	£320.00	Hatem Hassine
44	Paul Pogba	38 Baker Street	B34 7HG	I phone 5	Apple	16/04/2014	£350.00	Hatem Hassine
45	William Carvalho	13 Kings Road	K43 K59	s5	Samsung	16/04/2014	£320.00	Rebecca Reece

Plenary – Refer to the Lesson Objectives

Objectives

To understand the structure of a database (Tables and CSV Files).

Understand the different types of data types used in Databases

Plenary Task (Q&A)

Peer Assess each others work and suggest possible improvements.
Discuss the levels pupils have achieved for this task.