

ICT - Year 9.2 Mon 04-01-2021

Databases

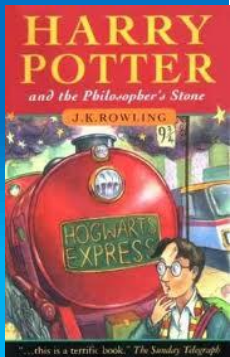
What is a Database?

What is and isn't a database file?

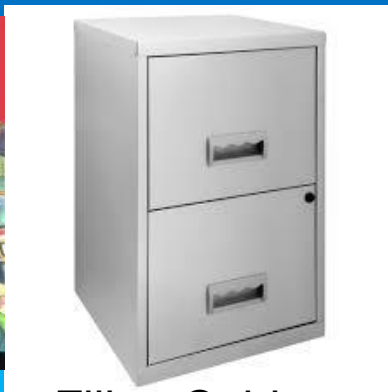


Database

Not a Database



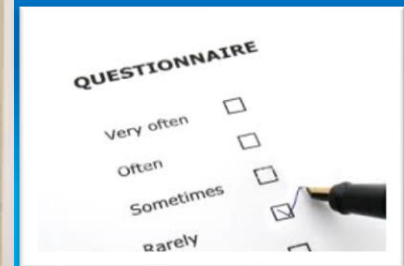
Book



Filing Cabinet



Catalogues



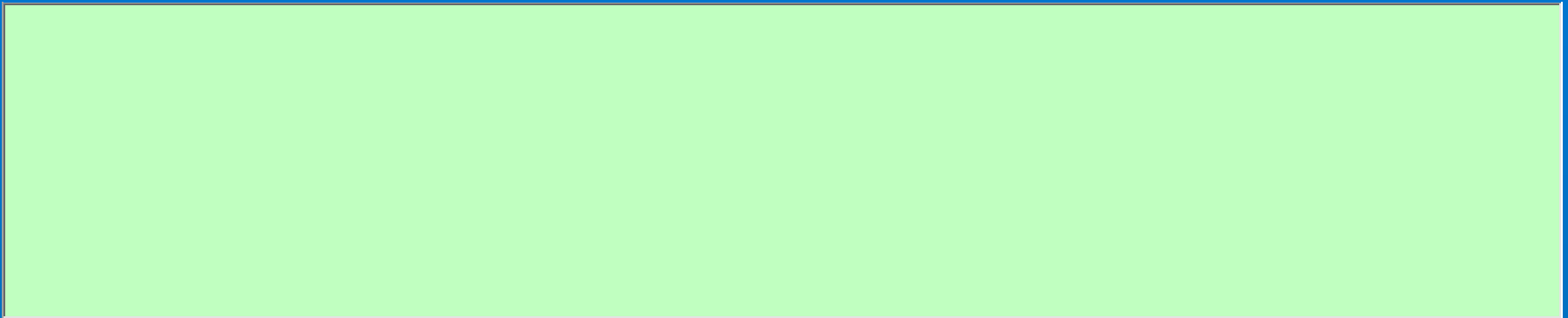
Questionnaire

Finished? Can you think of any more Database examples of your own?

What does a database file do?

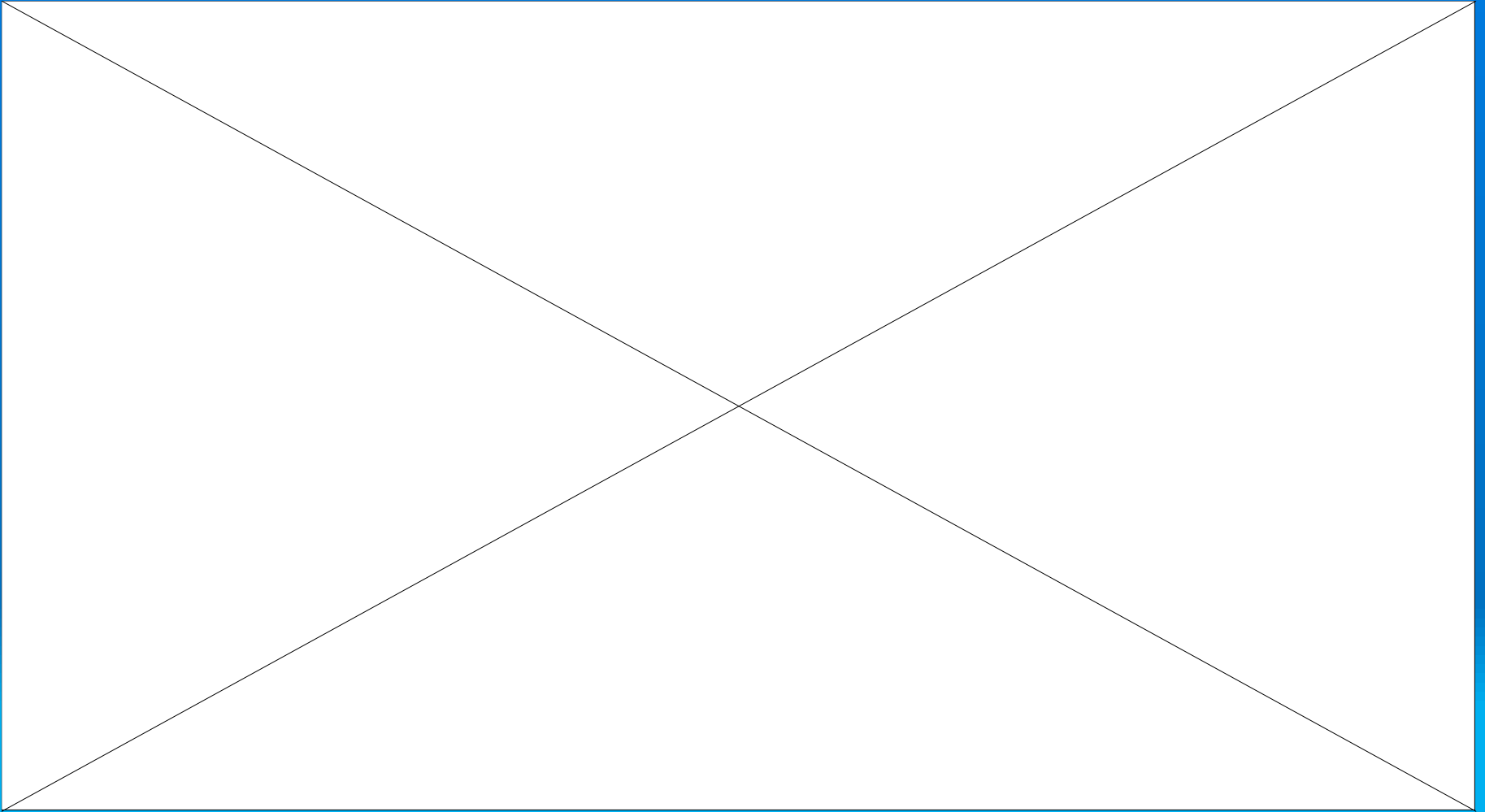


- Define a database on your whiteboards.
Finished? Can you name 3 advantages of a database?
- Let's come up with a class definition...



- **Database:**
An organised / structured set of data.

What is a Database?



Learning Objective

Success Criteria

- To understand the purpose of a database file.
- To understand the key words: database, file, record and field.

Level 4 - To be able to define the keywords: database, file, record and field.

To know what databases are used for.

Level 5 - To be able to explain the differences between a flat file and a relational database.

Challenge Task: Level 6: To find examples of where a flat file database and a relational database would be useful and evaluate their suitability.

Amazon



- Amazon has a database of all its customers.
- What information do they hold about their customers? Please complete in the box below.

What information do you think is the most important for Amazon to know?

Amazon



Name

Billing Address

Card Details

Phone Number

E-mail address

Delivery Address

Previous Orders

- These are called FIELDS in a database.
- They are one piece of information about the customer

Amazon



- All the information (fields) that is about ONE CUSTOMER is called a RECORD.

Name	Delivery Address	Billing Address	Phone Number	Email Address	Card Details	Previous Orders
Martin Freeman	1 Carr Lane	10 High St	0121 555 8888	m.freeman@gmail.com	VISA	Samsung Telly

- Just like a school has a RECORD about you (all the information about you)
- Just like the police have a record of all criminals (with their personal info with crimes committed too)

Records and Fields

- This is a **record**...

Name	Delivery Address	Billing Address	Phone Number	Email Address	Card Details	Previous Orders
Martin Freeman	1 Carr Lane	10 High St	0121 555 8888	m.freeman@gmail.com	VISA	Samsung Telly

- It is made up of **fields**...

Activity 3: Create a database with information that a school will hold about you.

Surname	First Names					Class

Activity 4: Database

- Create a document in either:
 - PowerPoint
- This document is a revision tool for you for your assessment at the end.
- You need to include:
 - What is a database?
 - What is a field and a record?
 - What is the difference between a flat file and a relational database?
 - What are the advantages of a relational database?

Review



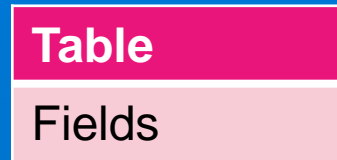
- What kind of fields would the school hold on you?
- What kind of fields would the police hold on criminals?
- What kind of fields would a database of games have?
- Define a record

Difference between Flat File and Relational

- There are 2 types of Databases:

- Flat File Database

- One big table



- Relational Database

- Many tables linked together



Plenary

- **Have you achieve the learning objectives ?**
- **How have you done so?**
- **Explain how you have achieved it?**

Learning Journals

- Fill in your learning journals detailing what you've done so far.

HW

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