

Exploring Databases

Grade 4 ICT

Learning Objective: I can define the data type to be used in a field



Read below article from your book

Data types

Computers need to know what type of data you want them to store. For example, will the field need to store a number? Will it need to store letters?

The table describes some common data types you find in a database.

Data type	Description	Examples
Text	This will store letters (a-z, A-Z), symbols (for example, !,./") and numbers that you will not do calculations with (for example, a telephone number).	• Hello • this is all text!! • This is also text 123 • 0028374637282
Number	This will only store numbers.	• 123 • 5 • 2.6 • 59865212356
Date	This will store dates, that is, day, month, year (you can change the order you want it displayed in).	• 1/2/1990 • 12/12/1953
Boolean	This will only store Yes or No.	• Yes • No
Currency	This will store numbers with a currency symbol, for example, £, \$.	• £2.00 • \$3999.99

Key word

Order: the arrangement of items, for example alphabetical order.

Did you know?

Boolean got its name from a mathematician named George Boole.

It means one, or the other, that is, TRUE or FALSE, yes or no.

A person's first name uses letters. The only data type that allows letters is Text. The data type for the field 'First Name' is Text.

A person's age uses numbers. You might want to do calculations with the number, for example, add ten to it. The data type for the field 'Age' is 'Number'.

A question with only two possible answers can be stored as a Boolean, for example: Do you have a television? Yes or No.

Activity

identify the data types for each field below for the sample 'Superheroes' database

Superhero Name	First name	Second name	Gender	Fly?	Invisibility?	Mask?
Cloudlily	Cindy	Cross	Female	☒	☒	☐
Fennick	Krit	Yuvaves	Male	☒	☐	☐
Moledigger	Kevin	Cave	Male	☐	☒	☒
Pollenander	Pru	Fena	Female	☐	☒	☒
Rainymph	Zhang	Chen	Female	☒	☒	☐
Skyman	Kim	Yau	Male	☒	☐	☒
Swiftswan	Kali	Okeke	Female	☐	☒	☐
Treewisp	Tracey	Scott	Female	☒	☒	☒
*				☐	☐	☐

Mask?	Date Of Birt	Suit colour	Special Ability	Country	Height(cm)
☐	05/05/1995	White		Russia	166
☐	25/12/1989	Other	Produce fire	Thailand	184
☒	05/03/1983	Other	Disappear into the ground	Australia	182
☒	06/12/1988	Yellow		Peru	162
☐	15/11/1980	Blue	Manipulate water	China	167
☒	01/01/1991	Blue	Control birds	Iceland	178
☐	09/09/1990	White	Hold breath underwater	Madagascar	164
☒	18/10/1995	Green	Control weather	Canada	164
☐					0

1) this will store letters, symbols and numbers that you will not do calculations with (ex. Telephone number)

A. number

C. currency

B. text

D. date

2) this will only store number

A. number

C. currency

B. boolean

D. date

3) this will store dates, that is, day, month, year (you can change the order you what it displayed in

A. number

C. currency

B. boolean

D. date

4) this will only store YES or NO

A. number

C. currency

B. boolean

D. date

5) this will store numbers with a currency symbol. For example \$, €,£,¥

A. number

C. currency

B. boolean

D. date

6) the arrangement of items. For example, alphabetical order

A. filter

C. number system

B. order

D. query

Match the following

1. Text

2. Number

3. Date

4. Boolean

5. Currency

6. Order

- this will only store YES or NO
- this will store letters, symbols and numbers that you will not do calculations with (ex. Telephone number)
- the arrangement of items. For example, alphabetical order
- this will only store number
- this will store numbers with a currency symbol. For example \$, €,£,¥
- this will store dates, that is, day, month, year (you can change the order you what it displayed in