



HOCHSCHULE RUHR WEST
UNIVERSITY OF APPLIED SCIENCES

Work sheet 6: What is a database?

Dear children,

The following worksheet will guide you through the basic elements of a database. You do not need the AppInventor for this yet. That will follow in the next worksheet.

What you will learn in this work sheet:

- What is a database?
- What is the difference between a local and an online database?
- How can "firewalls" help with data security?

Have fun!

Used OER-materials:

[1] Memucho: "Datenbank", <https://memucho.de/Datenbank/53>, abgerufen am 17.6.2021

Used links and sources:

[2] Youtube: "Was sind Datenbanken", <https://www.youtube.com/watch?v=O2AIbuNOTDo>, abgerufen am 17.6.2021

[3] Flaticon: "Table", https://www.flaticon.com/free-icon/table_787194, abgerufen am 17.6.2021

[4] Flaticon: "Database", https://www.flaticon.com/free-icon/database_51319, abgerufen am 17.6.2021

[5] Flaticon: "Keys",

https://www.flaticon.com/free-icon/key_807292?term=key&page=1&position=4&page=1&position=4&related_id=807292&origin=search, abgerufen am 17.6.2021



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What is a database?

A database, also called a database system (DBS), is a system for electronic data management [1].

What does a database consist of?

A database

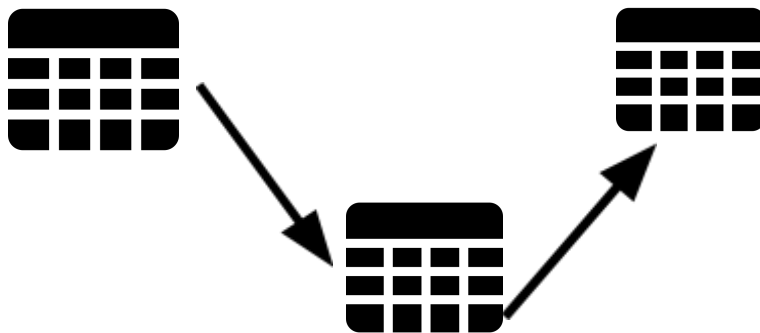


consists of multiple tables.



How is the data saved?

Data is stored as key-value pairs in a table. With a certain key, a certain value can be accessed. Tables can also be linked to each other.



What is the difference between a local and an online database?

A local database can only be accessed by one user, whereas an "online database" can be accessed by several users from different locations via the network.

What are firewalls in online databases for?

The database firewall makes it possible to regulate / restrict access to the database and only allow authorised persons to access the database.

Why is this important?

Data can be sensitive personal information (e.g. credit card number, address, telephone number, etc.) and should not fall into the hands of unauthorised third parties.



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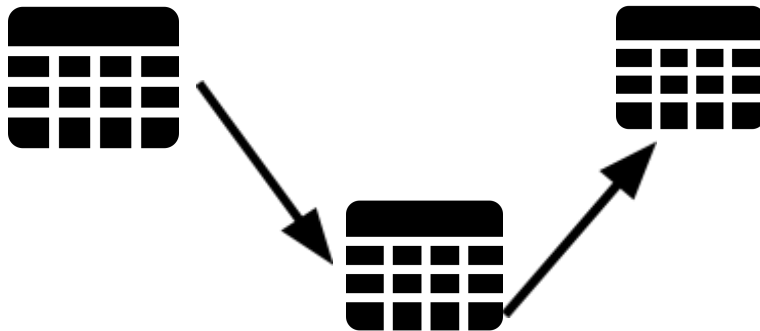
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