

# Database Design






spreadsheets




AutoSave

OFF





Book1

Q Search Sheet



HomeInsertDrawPage LayoutFormulasDataReviewView





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Sheet1+

Ready



100%



Untitled spreadsheet - Google

← → ↻ <https://docs.google.com/spreadsheets> 🔍 ☆ ⋮

Untitled spreadsheet

File Edit View Insert Format Data Tools Add-ons Help

Comments

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Arial

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More

fx

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Sheet1



SQL



INTEGER

REAL

NUMERIC

TEXT

BLOB



INTEGER

    smallint

    integer

    bigint

REAL

NUMERIC

TEXT

BLOB



INTEGER

REAL

    real

    double precision

NUMERIC

TEXT

BLOB



INTEGER

REAL

NUMERIC

- boolean

- date

- datetime

- numeric(scale,precision)

- time

- timestamp

TEXT

BLOB



INTEGER

REAL

NUMERIC

TEXT

    char(n)

    varchar(n)

    text

BLOB



INTEGER

REAL

NUMERIC

TEXT

**BLOB**



CREATE

READ

UPDATE

DELETE



CREATE  
SELECT  
UPDATE, INSERT  
DELETE, DROP  
...



sqlite3



WHERE

JOIN

GROUP BY

HAVING

...



PRIMARY KEY

FOREIGN KEY

UNIQUE

INDEX



AUTOINCREMENT

NOT NULL



AVG

COUNT

MAX

MIN

SUM

...



race conditions



BEGIN TRANSACTION

COMMIT

ROLLBACK



# SQL injection attacks



scalability



# Database Design