

## Kap 10.3 Dokumenten Management

*Volltext Suche mit relationalen Datenbanksystemen?*

Textdokument = (Wort1 Wort2 ..... Wortk)

**DB-Schema**

```
create table Dokumente
  ( Did      integer,
    Position integer,
    Word     string )
key is ( Did, Position)
```

## Anfragen

**Anfrage 1:** *Finde alle Dokumente, die das Wort  
Datenbank enthalten*

```
select unique Did from Dokumente
  where Word = "Datenbank"
```

**Anfrage 2:** *Wie sieht das Dokument Nr 17 aus?*

```
select Word from Dokumente
  where Did = 17
  order by Position
```

**Anfrage 3: Finde alle Dokumente und umgebende Textstellen, wo das Wort *Datenbank* vorkommt**

```
select D2.Position, D1.Word, D2.Word, D3.Word
from   Dokumente D1,
        Dokumente D2,
        Dokumente D3
where D2.Word      = "Datenbank"
and   D2.Did       = D1.Did
and   D2.Did       = D3.Did
and   D1.Position + 1 = D2.Position
and   D2.Position + 1 = D3.Position
```

### **Schema Transformation**

```
create table Dokumente2
( Did      integer,
  Position integer,
  Word#    integer )
key is ( Did, Position)

create table Wortliste
( Word      string,
  Word#    integer )
key is ( Word)

create view Dokumente as
select Did, Position, Word
from   Dokumente2 D, Wortliste W
where  D.Word# = W.Word#
```