

IT4300 Introduction to Databases

Bob Diagrams

The format of a Bob diagram is as follows:

database
table
***field,type,size,->foreignKey,comments**
field,type,size,->foreignKey,comments
...

table
***field,type,size,->foreignKey,comments**
field,type,size,->foreignKey,comments
...

Here is what the terms are:

| term | meaning |
|----------|---|
| database | Database the the main database name. There should only be one database. |
| table | Table is the table name. There can be several tables in a database |
| field | Field is the element name. There can be several fields in a table. If there is an asterisk before the field name, then the field is a primary key. |
| type | This is the type if the data. Some data types are: C-Fixed length character Use this type instead of variable length characters for primary keys. V-Variable length character. Use this type is save disk space. N-Number D-Date B-Binary blob |

| term | meaning |
|------------|--|
| size | This is the size of the field. C-The length of the character field. (name,c,30) V-The maximum length of the character field. (name,v,30) N-The length of the number. Then a comma and the length of the number after the decimal (dollar,n,12,2) D-Has no length (startDate,D) B- Has no length (image,B) |
| foreignKey | This is the link to another table in the database. This is optional. (person,v,30, |
| comments | This is for optional comments. This is optional. (name,v,30,both the first and last name) |

Here is a sample bob diagram:

| accountsReceivable |
|---|
| customers *cid,c,5, customers account number first,v,30 last,v,30 |
| transactions *cid,c,5,->customers.cid,customer account number *date,d,transaction date amount,n,12,2,transaction amount |