SQL Note

2/20/17

* Structured query language
  + (originally: structured English query language)
* Create table
  + CREATE TABLE Dog(
  + OwnerID VARCHAR(20) – length of value
  + Name VARCHAR(50) NOT NULL, - length 50, cannot be null or will reject entry
  + Age INT DEFAULT 0 NOT NULL
  + )
* Default
  + Set a default value for the attribute
  + Used inside of CREATE TABLE
  + Attribute TYPE DEFAULT
* Not Null
  + Means attribute cannot be null
* Nulls
  + Unknown value
  + Value not applicable
  + When there is no value for an attribute a DBMS allows you to have
* Constraints
  + Several different types
  + Maybe expressed after the type or at end of table
  + May be named or un
  + Use constraint keywords for constraints
* Primary Key
  + Declares the primary key
  + PRIMARY KEY (Att1, Att2,…)
  + Constraint name PRIMARY KEY (Att1, Att2,…)
  + Constraint DogPK PRIMARY KEY (OwnerID, Name)
* Foreign Key
  + Identifies when primary key from another table when it is present in your table
  + FOREIGN KEY (att1,att2,…) REFERENCES tableName
  + FOREIGN KEY (att1,att2,…) REFERENCES tableName (att1,att2,…)
* On update/on delete
  + Action available
    - NO ACTION
    - SET NULL
    - SET DEFAULT
    - CASCASDE
* Unique
  + Requires that certain columns have
  + Primary Key implies Unique and Not Null
  + UNIQUE(name) means that every
* Check
  + Can bound the range of something
  + Uses expressions
  + CHECK(expression)
  + CHECK(age>= 0 AND age < 40)
* Alter
  + ALTER TABLE table\_name ADD constraint\_declaration
  + ALTER TABLE table\_name DROP column\_name
  + ALTER TABLE table\_name
* Deleting a Table
  + DROP TABLE table\_name1, table\_name2,…
  + DROP TABLE IF EXISTS table\_name1,…
* Restrict
  + Don’t allow change
    - Deny changes
* Cascade
  + When changes are made, perform change in related rows
* Nullify
  + Replace value with null