

Working with NULLS

MAD 202



Forbidding Nulls

- A column's nullability determines whether it can contain nulls or in other words – whether it requires values or not
- Remember, a null:
 - Is not a value, but a marker that means no value has been entered
 - Represents a missing, unknown or inapplicable value
 - Is not the same as zero (0), a blank or an empty string
 - The keyword NULL represents a null
 - Belongs to no data type and be inserted into any column that allows null



Defining NULLs

- You define a null-ability constraint by using the keywords NOT NULL in the CREATE TABLE column definition
- Avoid allowing nulls because they complicate queries, insertions and updates
- Forbidding NULLS helps maintain data integrity – ensures data is entered
- If you don't specify a NOT NULL, the column accepts NULLs by default



NOT NULL

```
CREATE TABLE authors
(
  au_id CHAR(3)          NOT NULL,
  au_fname VARCHAR(15)   NOT NULL,
  au_lname VARCHAR(15)   NOT NULL,
  phone VARCHAR(12),
  address VARCHAR(20),
  city VARCHAR(15),
  state CHAR(2),
  zip CHAR(5)
);
```



NULL and NOT NULL

```
CREATE TABLE titles
(
    title_id CHAR(3)    NOT NULL,
    title_name VARCHAR(40)    NOT NULL,
    type VARCHAR(10)    NULL,
    pub_id CHAR(3)      NOT NULL,
    pages INTEGER       NULL,
    price DECIMAL(5,2)  NULL,
    sales INTEGER       NULL,
    pubdate DATE        NULL,
    contract SMALLINT   NOT NULL
);
```

