Foreign Keys

MAD 202

Foreign Key

- A foreign key is a mechanism that associates two tables

- It's a column in a table whose values relate to or references values in some other table

- A foreign key ensures that rows in one table have corresponding rows in another table

- Establishes a direct relationship to a primary key in the referenced table

- Can allow nulls

- Are generally unique in their own table

Foreign Keys

- Define a foreign-key constraint using the keywords FOREIGN KEY or REFERENCES

- The data types **must** have the same data type

A FOREIGN KEY in one table points to a PRIMARY KEY in another table

FOREIGN KEY

```
CREATE TABLE royalties (
    title_id CHAR(3) PRIMARY KEY,
    title_name VARCHAR(4) NOT NULL,
    book_type VARCHAR(10),
    pub_id CHAR(3) NOT NULL,
    pages INTEGER,
    price DECIMAL (5,2),
    sales INTEGER,
    pubdate DATE,
    contract SMALLINT NOT NULL,
    CONSTRAINT royalties_publishers_fk
    FOREIGN KEY (pub_id)
    REFERENCES publishers(pub_id)
);
```

This table's column

Names is made up of two table names and fk for foreign key

table

column