

Project Phase 2 and Assumptions  
Nicholas Kory  
ID 862-18-9331  
nkory003@ucr.edu  
Bryan Parada  
bpara001@ucr.edu  
ID 861-02-7456  
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CS 166 Database Management Systems  
Instructor: P. Bakalov  
Section 22  
TA: Qizhong Mao

In completing this homework we consulted...

- Gehrke, Johannes, and Raghu Ramakrishnan. *Database management systems third edition*. McGraw-Hill, 2003.
- Bakalov Petko's CS 166 Database Management Systems Video Lectures and Lecture Slides. University of California – Riverside.
- Qizhong Mao's CS 166 Database Management Systems Video Lab, Lab Assignments & Solutions, and Lab Notes. University of California – Riverside.

All of the code is original.

See next page for Project Phase 2 Documentation.

## Project Phase 2 Documentation

### 2.4 Cinema

- *A cinema has one or more theaters: see tables cinema\_has\_city and cinematheater\_has\_cinema*
  - This cannot be enforced.

### 2.5 Cinema Theater

- *A theater must exist in exactly one cinema: see table cinematheater\_has\_cinema*
  - Non-nullable foreign key cinemaid REFERENCES cinema\_has\_city.

### 2.7 Show

- *One and only one movie can be played in a show: see table show\_played\_movie*
  - Non-nullable foreign key movieid REFERENCES movie.
- *A show must have at least one seat: see table showseating\_has\_show*
  - This cannot be enforced.

### 2.8 Booking

- *A booking can be made by one and only one user: see table booking\_has\_show\_by\_user*
  - Non-nullable foreign key email REFERENCES useraccount.
- *A booking must have at least one seat booked for a show: see table booking\_has\_show\_by\_user*
  - This cannot be enforced.
- *Some booking may not have a payment: see table booking\_payment*
  - Nullable foreign key bookingid REFERENCES booking\_has\_show\_by\_user.

### 2.10 Payment

- *A payment must belong to exactly one booking: see table payment\_has\_booking*
  - Non-nullable foreign key bookingid REFERENCES booking\_has\_show\_by\_user.