

## Film Production Management System

### Scenario Description:

A film production house is a dynamic hub where the entire process of making a movie comes together. The producer oversees the hiring of key professionals, such as directors, marketing teams, finance teams, and creative specialists like set designers and make-up artists. Directors manage the auditions and casting, while screenwriters craft the story. The creative team handles the visual elements, and the marketing team ensures the film reaches the right audience. Every department works together, from budgeting and writing to shooting and editing, all to bring a film from concept to screen.

### Entities:

Producer (Strong Entity)

Director (Strong Entity)

Marketing (Strong Entity)

Screenwriters (Strong Entity)

Cast (Strong Entity)

Audition (Strong Entity)

Creative Team (Strong Entity)

Film (Strong Entity)

Finance Team (Strong Entity)

### Attributes:

- Producer
  - p\_id (Primary Key): single valued
  - p\_name: composite
  - p\_dob: simple
  - p\_age: derieved
  - p\_phno: multivalued
  - p\_email: mulltivalued
- Director
  - d\_id (Primary Key): single valued
  - d\_name: composite
  - d\_age: simple
  - d\_phno: multivalued
  - d\_email: multivalued
- Marketing
  - m\_id (Primary Key): single valued

- m\_phno: multivalued
  - m\_budget: simple
  - m\_timeframe: composite (start date, end date)
- Screenwriters
  - sw\_id (Primary Key): single valued
  - sw\_name: simple
  - script\_id: single valued
  - script\_name: simple
- Cast
  - c\_id (Primary Key): single valued
  - c\_name: simple
  - c\_role: multivalued
- Audition
  - a\_id (Primary Key): single valued
  - a\_venue: simple
  - a\_date: simple
  - auditionee: composite.
- Creative Team
  - Creative Team
    - Set makers
      - sm\_id(Primary Key): single valued
      - speciality: multivalued
    - Make-up artists & fashion designers
      - ma\_id(Primary Key): single valued
      - ma\_speciality: multivalued
      - fd\_speciality: multivalued
      - fd\_speciality: multivalued
    - Editors
      - ed\_id(Primary Key): single valued
      - ed\_speciality: multivalued
- Film
  - f\_id (Primary Key): single valued
  - f\_name: simple
  - f\_release\_date: composite (day, month, year)
  - f\_length: simple
  - f\_language: multivalued
- Finance Team
  - t\_id (Primary Key): single valued
  - t\_phno: multivalued
  - assigned\_budget: simple

### Relationship:

1. Producer **Hires** Director
2. Producer **Hires** Marketing team
3. Producer **Hires** Finance team

4. Producer **Hires** Creative team
5. Producer **Hires** Screen Writers
6. Producer **Produces** Film
7. Director **Directs** Film
8. Director **Conducts** Audition
9. Director **Finalizes** Cast
10. Cast **Acts For** Film
11. Marketing **Markets** Film
12. Finance Team **Is Responsible for** Budgeting
13. Screen Writers **Writes for** Film
14. Creative Team **Works on** Film

Cardinalities:

**One** Producer hires **Many** Directors.

**One** Producer hires **One** Marketing Team.

**One** Producer hires **One** Finance Team.

**One** Producer hires **One** Creative Team.

**One** Producer hires **Many** Screenwriters.

**One** Producer Produces **One** Film.

**Many** Directors Directs **One** Film.

**Many** Directors Conducts **Many** Auditions.

**Many** Directors Finalizes **One** Cast.

**One** Cast Acts for **One** Film.

**One** Marketing Markets **One** Film.

**One** Finance Team is responsible for budgeting **One** Film.

**Many** Screenwriters Write for **One** Film.

**Many** Creative Team Works on **One** Film.

ER Diagram: