**Film Production Management System**

Scenario Description:

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)

Budgeting (Strong Entity)

Attributes:

* Producer
  + p\_id (Primary Key): single valued
  + p\_name: simple
  + p\_dob: simple
  + p\_age: derieved
  + p\_phno: multivalued
  + p\_email: mulltivalued
* Director
  + d\_id (Primary Key): single valued
  + d\_name: simple
  + d\_age: simple
  + d\_phno: multivalued
  + d\_email: multivalued
* Marketing
  + m\_id (Primary Key): single valued
  + m\_name: simple
  + 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: simple
* Audition
  + a\_id (Primary Key): single valued
  + a\_venue: simple
  + a\_date: composite (day, month, year)
* Creative Team
  + Creative Team roles:
    - Set makers
      * sm\_id(Primary Key): single valued
      * speciality: multivalued
    - Make-up artists & fashion designers
      * ma\_id(Primary Key): single valued
      * m\_speciality: multivalued
      * fd\_id(Primary Key): single valued
      * f\_speciality: multivalued
    - Editors
      * ed\_id(Primary Key): single valued
      * ed\_speciality: multivalued
* Film
  + f\_name (Primary Key): single valued
  + f\_release\_date: composite (day, month, year)
  + f\_length: simple
* Finance Team
  + t\_id (Primary Key): single valued
  + t\_phno: multivalued
  + assigned\_budget: simple
* Budgeting

No explicit attributes, connected to Finance Team

Relationship:

1. Producer **Hires** Director
2. Director **Directs** Film
3. Producer **Hires** Marketing team
4. Film **Is Produced By** Producer
5. Film **Works On** Creative Team
6. Cast **Acts For** Film
7. Cast **Auditions For** Audition
8. Marketing **Markets** Film
9. Finance Team **Is Responsible For** Budgeting

Cardinalities:

Many Directors are hired by One Producer  
(Cardinality: M:1)

Many Films are directed by One Director  
(Cardinality: M:1)

One Marketing team is hired by One Producer  
(Cardinality: 1:1)

Many Films are produced by One Producer  
(Cardinality: M:1)

Many Films work with Many Creative Teams  
(Cardinality: M)

Many Cast members act for Many Films  
(Cardinality: M)

Many Cast members audition for One Audition  
(Cardinality: M:1)

Many Films are marketed by One Marketing team  
(Cardinality: M:1)

One Budgeting process is managed by One Finance Team  
(Cardinality: 1:1)

ER Diagram: