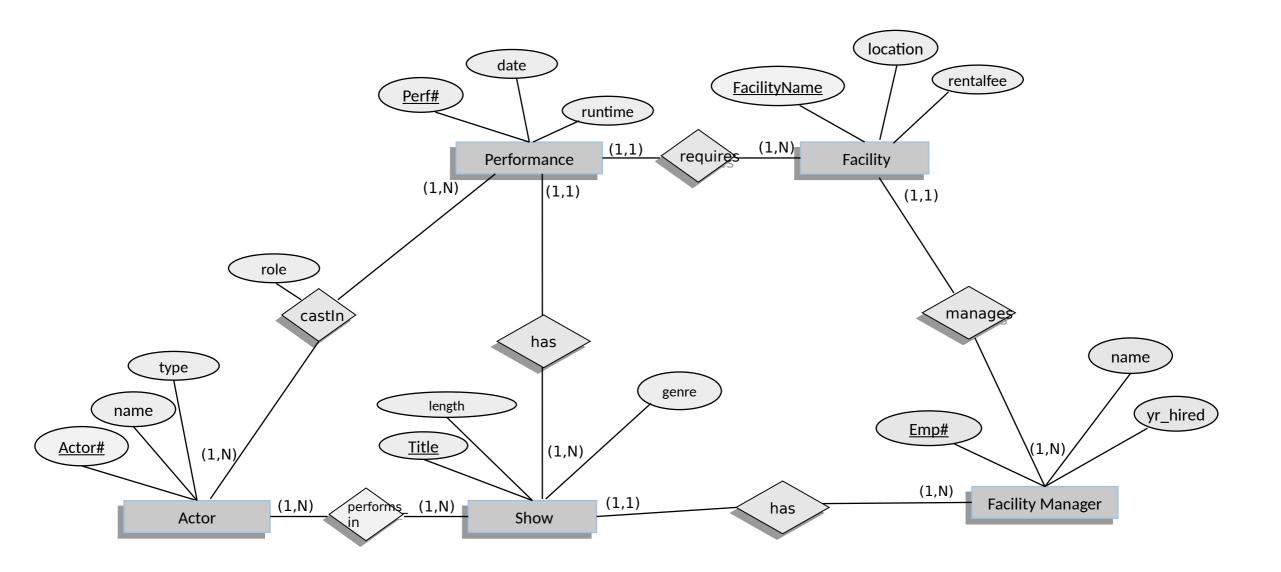
## CIS 8040

Quiz 2



Each entity becomes a separate relation.

Performance: (Perf#, date, runtime)

Facility: (<u>FacilityName</u>, location, rentalfee)

Actor: (Actor#, name, type)

Show: (<u>Title</u>, length, genre)

Facility Manager: (Emp#, name, name, yr\_hired)

Each entity becomes a separate relation.

1:N relationships become foreign keys.

Performance: (Perf#, date, runtime, facilityName, title)

Facility: (FacilityName, location, rentalfee, emp#)

Actor: (Actor#, name, type)

Show: (<u>Title</u>, length, genre, emp#)

Facility Manager: (Emp#, name, name, yr\_hired)

M:N relationships become separate relations.

Performance: (Perf#, date, runtime, facilityname, title)

Facility: (FacilityName, location, rentalfee, emp#)

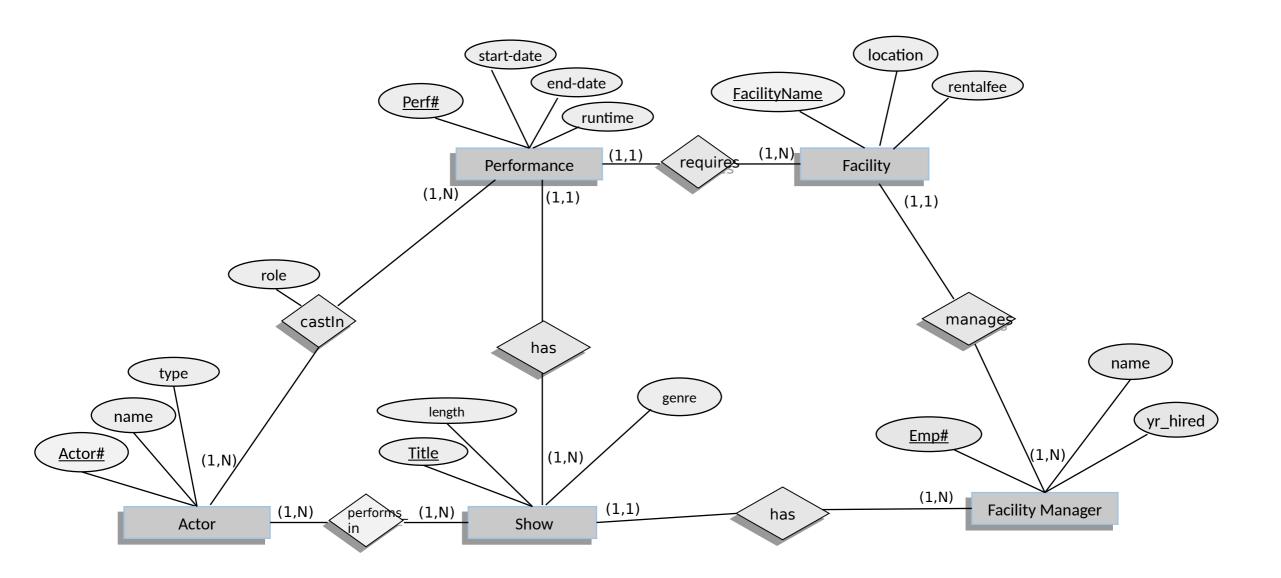
Actor: (Actor#, name, type)

Show: (<u>Title</u>, length, genre, emp#)

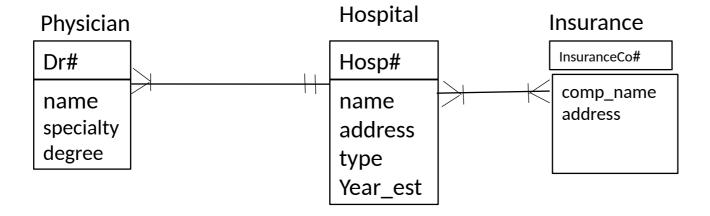
Facility Manager: (Emp#, name, yr\_hired)

Performs\_In: (Actor#, Perf#)

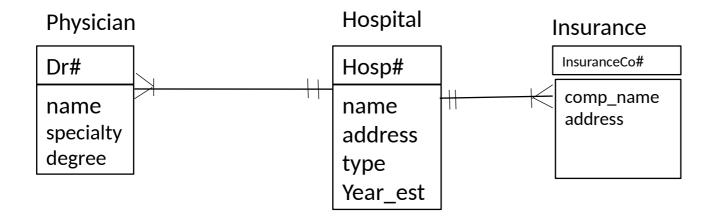
CastIn: (Actor#, Title, role)



## Crow's Feet Notation



## Crow's Feet Notation



Physician: (<u>Dr#,</u> name, speciality, degree, <u>hosp#)</u> Hospital: (<u>Hosp#,</u> name, address, type, year\_est)

Insurance: (InsuranceCo#, comp\_name, address)

Insurance-Hospital: (InsuranceCo#, Hosp#)

Consider the following relation.

Cruise: (Cruise#, name, type, port\_of\_departure)

Write an SQL query to retrieve the names of the cruises that leave from New York City.

```
Select name
From cruise
Where port_of_departure = 'New York City'
;
```

```
(5 Points) What is the best interpretation of the following query? Select description
From item
Where color <> 'purple'
;
(3 Points) State one reason why this query might be useful.
```

List the descriptions of the items that are not purple. Reason (real-world): Want to know how the products (items) are selling that are not purple in color, perhaps to see if you want to retain them on your shelves. Consider the following relations.

```
PoliceOfficer: (<u>PO#</u>, name, rank, date_joined, email, date_retired, address, building#)
Police Building: (<u>Building#</u>, address, capacity)
Write an SQL query to answer the following.
```

In what years did police officers retire for those officers who joined after 1 January, 2007? [You can assume any format for the date.]

```
Select distinct date_retired
From PoliceOfficer
Where data_joined > '1 Jan 2007'
;
```