

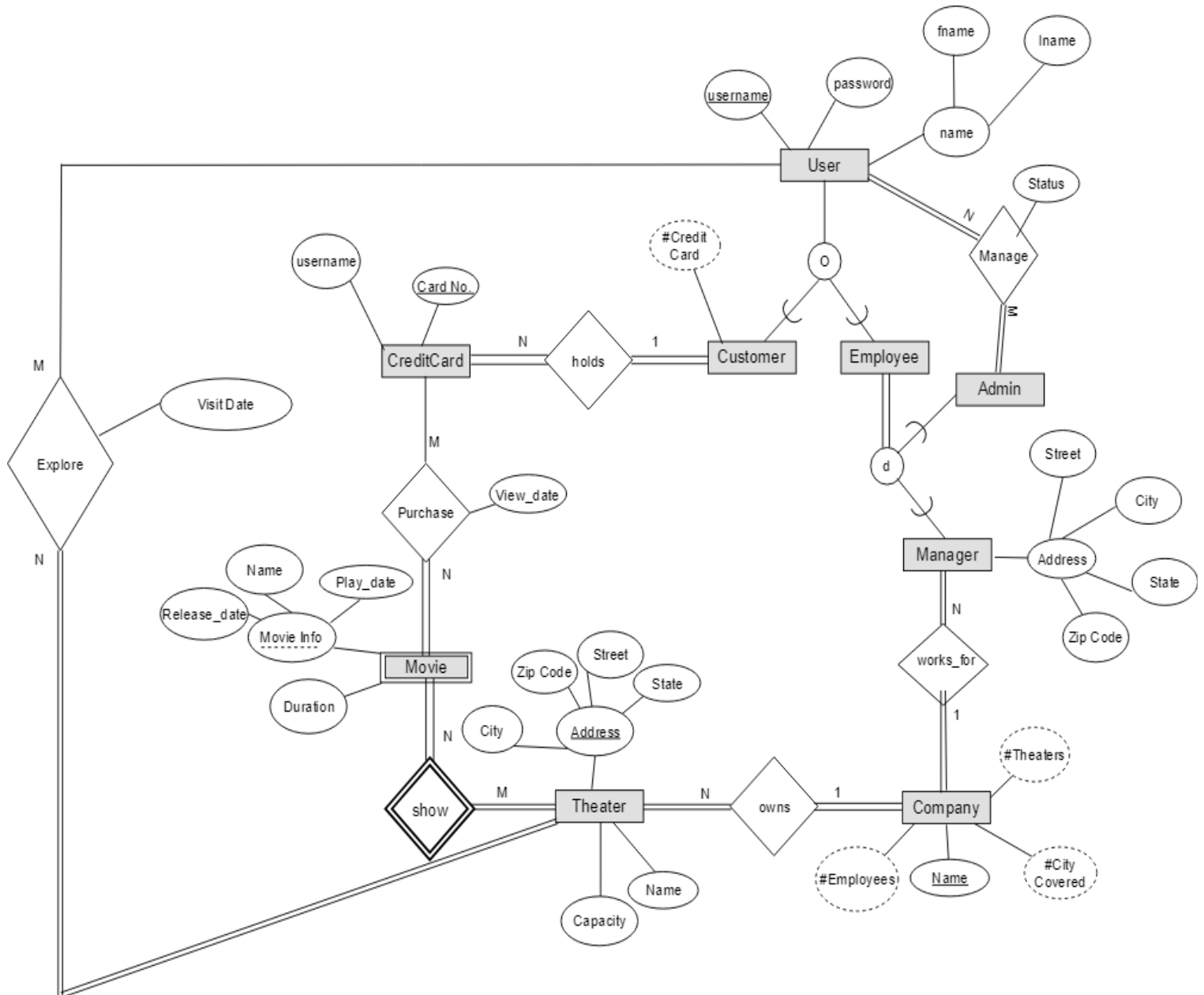


TEAM 32

Phase [1]

Kai Li (kli399)
Zhekun Qi (zqi39)
Yiqiong Xiao (yxiao351)
Lifeng Tang (ltang62)
Xiang Zhong (xzhong66)

Enhanced Entity Relationship (EER) Diagram



Information Flow Diagram (IFD)



Logical Constraints:

1. A movie's play date must be later than its release date.
2. The maximum number of cards that customers can have is 5.
3. Customers can at most watch 3 movies per day.
4. View date must be later than movies' release date.

Assumption:

1. People who can schedule movies are the same as those who can manage a theater.
Since updating and deleting a movie is naturally part of managing a theater.
2. No two or more theaters can have the exact same address, since that would be conflicting when a customer looks for his/her intended theater's location.
3. A certain theater can't be owned by multiple different companies.
4. A theater must be able to show at least one movie in order to exist.
5. Every user should have his/her distinct username so the system doesn't conflict two or more users with the same username but different personal information.
6. A theater must be a dependent of a company because theaters are created by companies.
7. Movie is the weak entity that is identified by the movie's info and the specific theater with which the movie is related.
8. Movie play date is null when it's not scheduled by manager.
9. Companies can't have the same name; if that's true, then the administrators would get confused when creating companies.
10. Users should be able to explore as many theaters as they want for making decisions.