Junfu Chen
4684872

1.6
1) Should pay for a security facility. Since “Scrooge does not plan to share his list with anyone”, he has to ensure the security of the database. Thus, he should pay for a security facility.

2) Should NOT pay for concurrency control. Since “he plans to run it as a stand-alone application on his PC alone” and “Scrooge does not plan to share his list with anyone”, Scrooge is only trying to query the database for information as he needs. Namely, the situation where multiple users access data from the database concurrently won't happen. So he should not pay for concurrency control.

3) Should pay for crash recovery. Even though “he wants to buy one with the fewest possible features”, fault-tolerance must be considered as no one would accept inaccuracy or loss of data in the database. In addition, he is running the database as a stand-alone application on his own PC, which is not stable and is very likely to crash. If that is the case, inaccuracy or loss will be introduced to the data. And this is definitely not what he wants.

4) Should NOT pay for a view mechanism. A view is conceptually a relation defined by the user, and records can be computed using the definition for the view. A view is useful in that it reduces the work of the user, as the user can retrieve specific records by simply asking for a view. Also, it provides other functions which ease the job of the user. However, considering that “he wants to buy one with the fewest possible features”, view mechanism is not necessary. Scrooge may have to do more work to play with the database, but this is the best choice when the budget is limited.

5) Should pay for a query language. A query language is the fundamental part of managing a database. Without a query language, there is no way to create, manipulate, and query a database. That is, we cannot do anything to the database. Obviously, there's no reason to buy a database without a query language.

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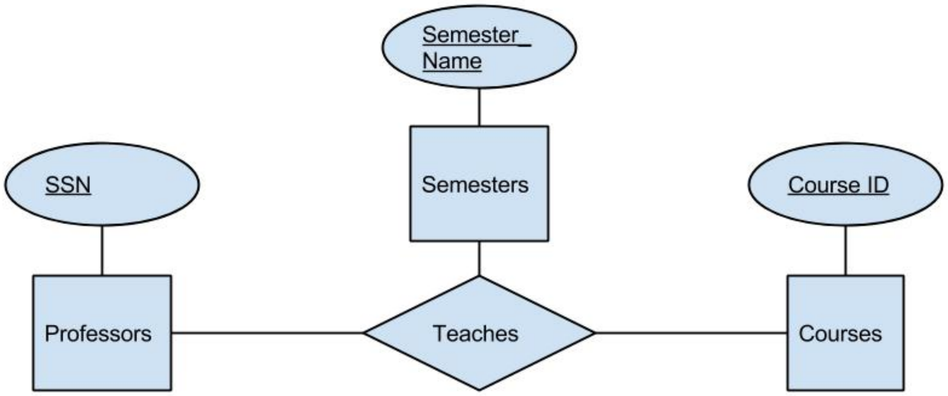

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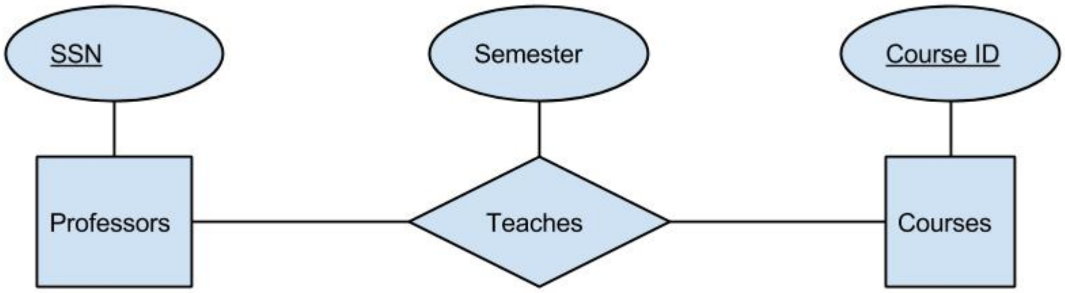
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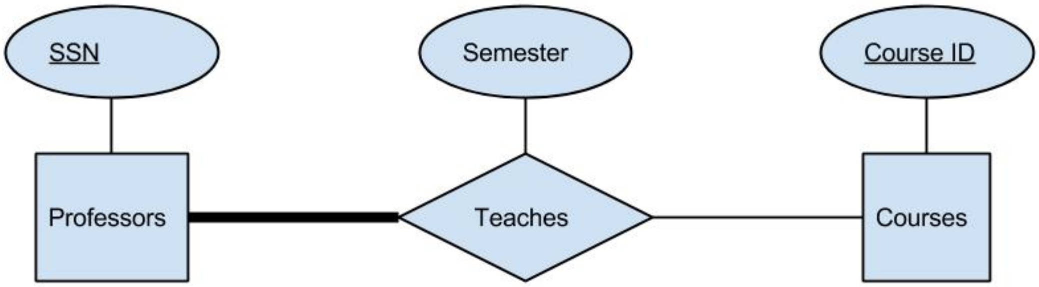
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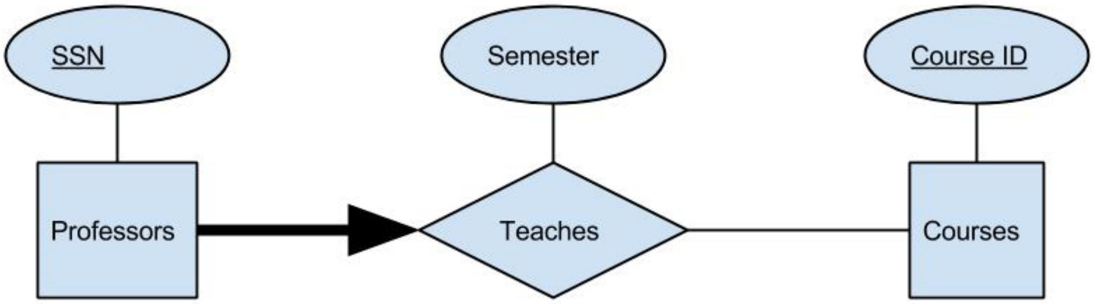
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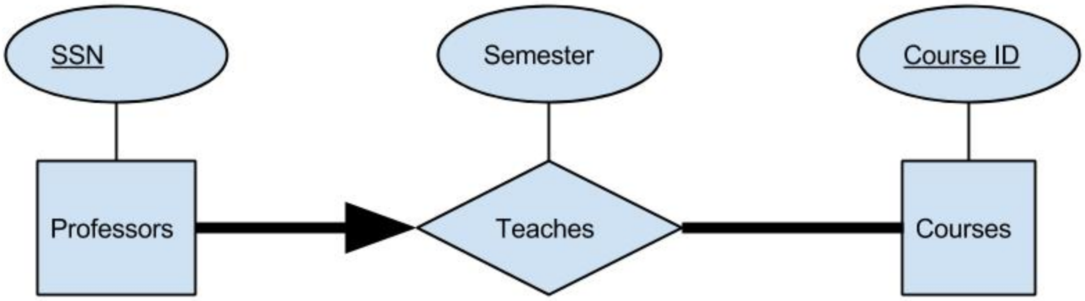
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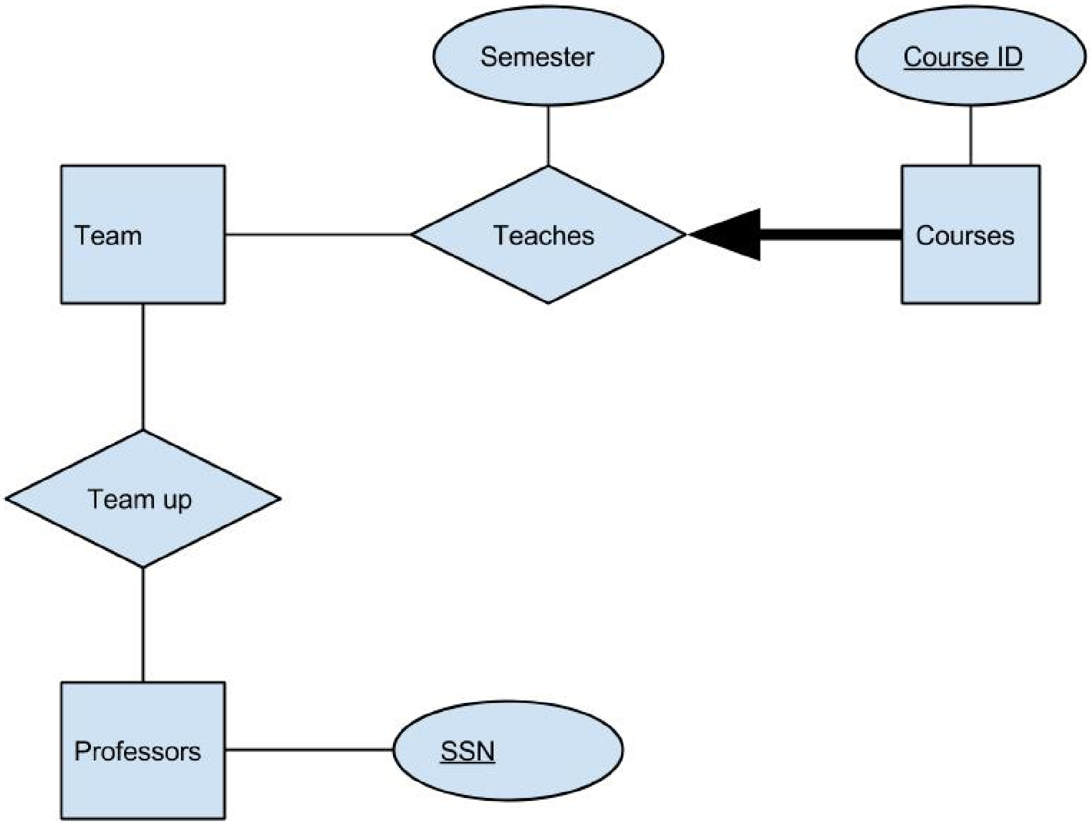
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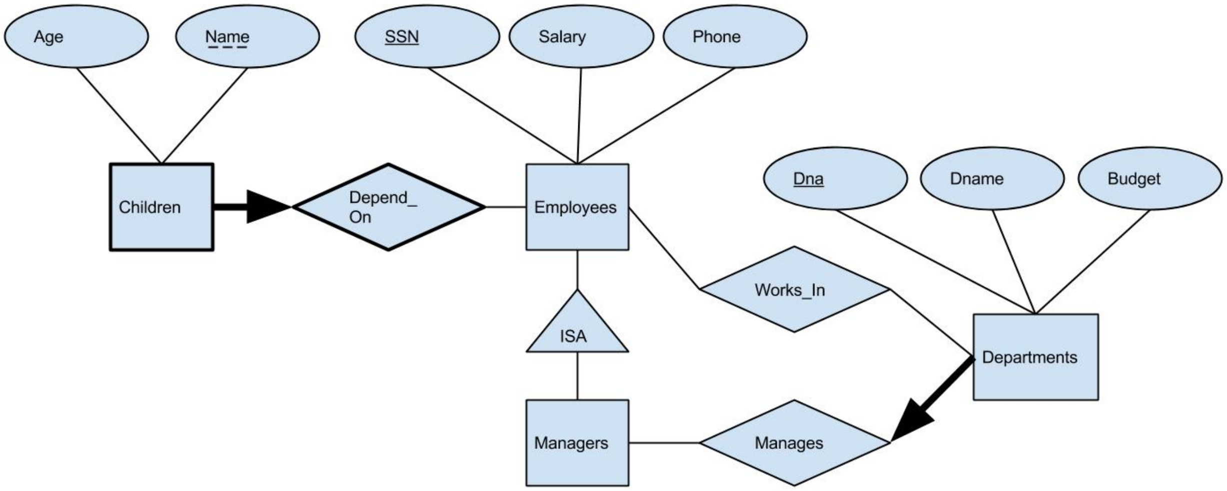
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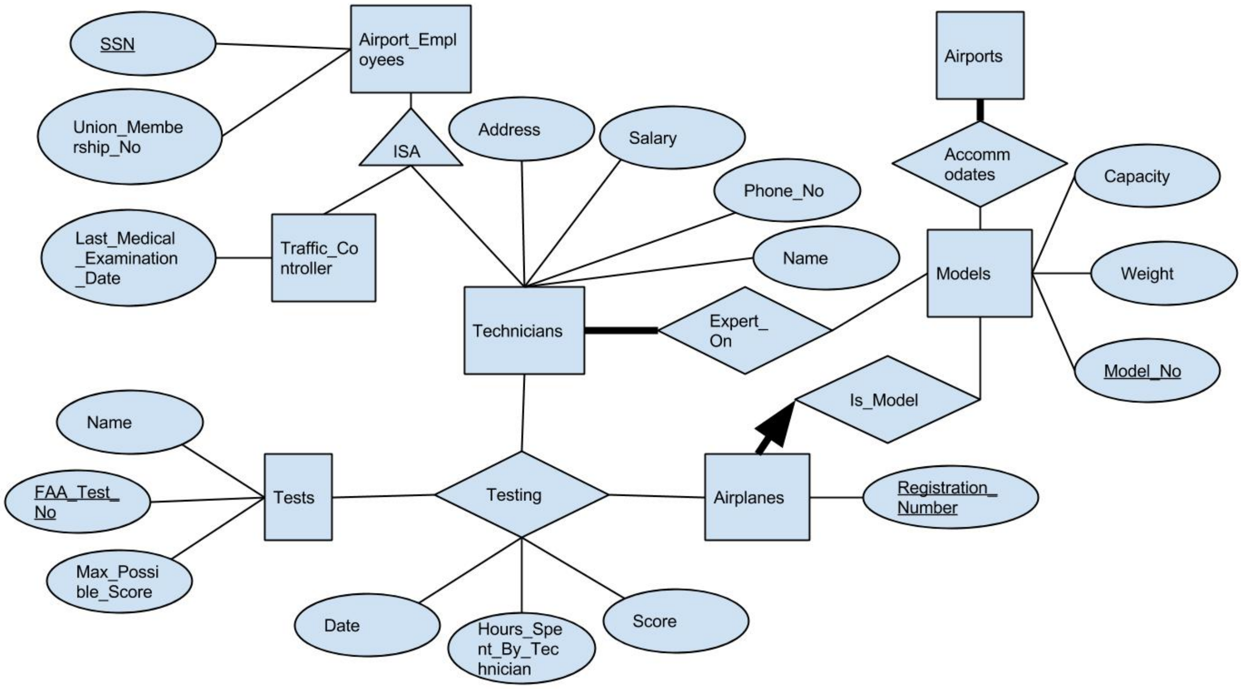
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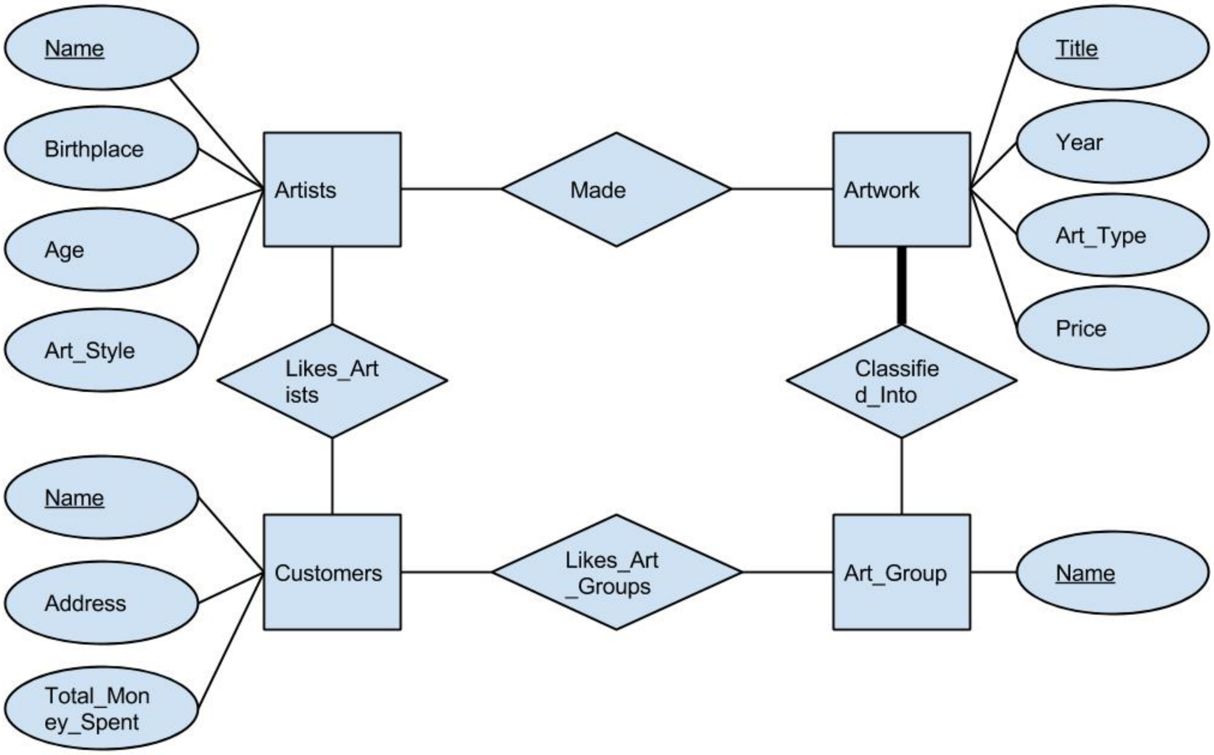
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