## CS585 - HW1 - Solution + Rubrics

**Overall Rubrics Summary** 

Total points: 6 (No bonus)

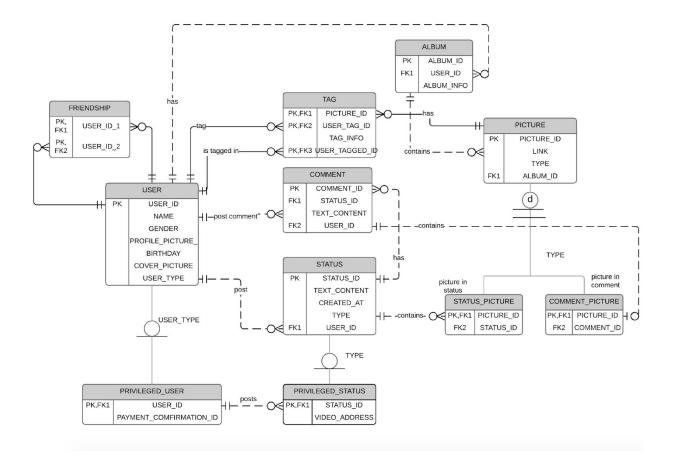
3 points for the ER Diagram

3 points for the report.

-1 for not using a tool to draw the ER diagram

File format - Should be a single PDF file as given in description -2 if found in any other format. File name - Should be provided as given in description. No point deduction this time. We will start taking off points for not following the submission requirements.

## Solution



## **Rubrics for ER Diagram**

Your ER diagram should represent the following things. -1 for each that is missed.

- ER Diagram should have representation of Strong and Weak relationships. A Strong relationship should be indicated by adding the referencing foreign key to the primary key of the entity. They should be distinguished by dashed and solid lines.

- M:N relationships should be created with a bridge entity. For instance, you need to represent a bridge entity to represent User-User friendship.
- Specialization is necessary to represent Privileged users / privileged status. Using a boolean attribute to represent a privileged user / status will not represent why there are privileged users and what is their role. Compare with the diagram given in solution with your solution.
- ER diagram should use meaningful notations that are standard and discussed in class. Any weird notation will be penalized.

ER Diagram must-have entity-sets **Album**, **Tag**, **Picture**, **Comment**, **Status**, **User**, **Friendship**. There are specific specializations like **Privileged Status**, **Privileged User**, **Status\_Picture**, **Comment\_Picture**. Names or number of these can vary, but there should be at least one entity modelling each problem stated in the homework. **-1 for each missing**.

Note: Any ER Diagram that has weird notation and no clarity of what it is, then **5 points will be deducted** from the total.

## **Rubrics for Report**

Report should justify the decision why it was taken rather than state what is given in the diagram. Assumptions must make sense and be aligned with the requirements given in the homework description. -1 for Every assumption that doesn't make sense or is contradicting with the ER Diagram

Report should discuss the tradeoff or design decisions that were taken rather than refer to the homework description. -3 if it just refers to statements in homework description.

Note: This is an exercise to help you think in terms of design decisions that you take when designing large scale databases. It is important to question your decisions, write substantiating statements and discuss the trade-offs in your design.