

CSCI 585 - Assignment 1 Rubrics

ER Diagram

Total Marks: **5 marks**

Distribution of marks is shown in the table below:

Submission Requirements	Marks Allotted
ER Diagram (.jpg/ .png)	4 marks
README.txt	1 mark

FILE FORMAT AND NAMING CONVENTIONS

1. ER Diagram should be either **.png or .jpg**.
2. Name of the description file should be ***“README.txt”***.

****Please Note** - Since this is the first assignment, marks won't be deducted on the basis of naming conventions. But from next time, please follow the **EXACT** submission guidelines. We will start taking off points for not following the submission requirements.

Rubrics - ER Diagram

Following are the considerations we made during grading your assignments:

1. Fully depicted **entities, attributes and relationships** mentioned in problem description.
Some of the required entities are mentioned below.
 - a. That will be worth 3 points.
 - b. If any one is wrong, -1 would be deducted.
 - c. If a student got all of the following wrong, we deduct 3 points.
2. **PK and FK** should be marked (-0.5 if missing)
3. **All the entities** presented in the solution must be there. (-1 if missing)
4. **Strong and Weak Relationships** must be mentioned.
 - a. A Strong relationship should be indicated by adding the referencing foreign key to the primary key of the entity.
 - b. They should be distinguished by **dashed and solid lines**. (-1 mark if there is no

differentiation)

5. Standard and meaningful notations should be there in the ER as discussed in class.

****Please Note** -Any weird notation will be penalized accordingly.

Rubrics - README.txt

Following are the considerations we made while grading the description file: 1. All assumptions should make sense. If they are not well explained and **don't make sense** 0.5 will be deducted.

2. **Incomplete explanation** of the design would cost you 0.5 marks.

3. Report should discuss the **tradeoff or design decisions** that were taken which differed from the ones mentioned in the homework description.

****Please 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.

Required Entities (Need not match exactly but valid assumptions must be explained!)

Before we present the sample solution, here is the tabular representation of expected entities and relationships. This may vary according to the valid assumptions you made for your own design. Overall these cover the entire homework description.

Entities	Attributes	Description
User	ID, Name, Email, Age, Address	A user is identified with a unique id, name, email, age, address, etc. And it can be creator or/and consumer.
Channel	Name, owner, subscription count, created details	A channel is created by only one video creator, but a video creator can have multiple channels

Video	URL, Title, Thumbnails, Category, Duration, Description, Upload id, Upload date, Update time, Channel ID	A video is in one channel and created by one and only one creator.
Subscription	User id, Channel id, type	Subscription can either be paid or free, and is identified via a subscription type
Information video	keyword	Informational videos are identified based on keywords
Entertainment video	Tag	Entertainment videos are identified based on tags
Statistic	Like/dislike, View count, Number of shares, Number of comments	Each video has statistics to gauge popularity
Comment	Video id, User id, Comment text, Likes, Sentiment, Details of comment	Each video can have 'N' number of comments in the comments section where users post their thoughts.
Sponsor	Sponsor id, Name, Phone, Address,	YouTubers can use a third-party sponsor for their videos
Sponsor Detail	Sponsor id, Video id, Sponsor amount	Sponsor detail contains the amount, sponsor and video information.

At the bare minimum, following relationships should be present

1. MANY Channel can be subscribed by MANY Users.
2. One User can create MANY Videos.
3. ONE User can create many Channels, but ONE channel can only be created by ONE User.
4. ONE User can have MANY Comments.
5. MANY Users can have MANY Sponsors.
6. ONE Video has ONE Statistic.
7. ONE Video has MANY Comments.
8. ONE Sponsor can have MANY Sponsor Details.
9. ONE Video has ONE or ZERO (MANY or ZERO is also OK) Sponsor Details.

Sample Solution

