A screenshot of a computer screen

Description automatically generated with medium confidence

Entities: User, Video, Sponsor, Comment, Channel, Video\_statistics, and subscription.

User is a superclass which has two subclasses- creators and consumers. The subtype discriminator is USER\_TYPE and I assumed overlapping relationship, i.e., users can be creators, consumers, or both. We assume total completeness because there can be no other types except being a creator, consumer, or both.

Video is a superclass which has two subclasses- informational and entertainment. The subtype discriminator is VIDEO\_TYPE and I assumed disjoint relationship, i.e., videos can either be informative or entertaining. We assume total completeness because there can be no other types.

Videos can have zero or many sponsors and each sponsor can give money to one or many videos. Therefore, it is a many-to-many relationship and thus we need a bridge. Video\_sponsor\_bridge table serves this purpose.

Sponsors are separate entity, not part of the users (neither consumer nor creator).

Channel can have zero or many videos, but each video belongs to one and only channel. Similarly, a video can have zero to many comments, but a comment belongs to one and only video. Similar relationship exists between channel and subscription, consumer and subscription, user and video, user and comment. One and only one relationship exists between video and video\_statistics.

Weak relationships exist between- 1. Consumer and subscription, 2. Subscription and channel, 3. Comment and video, 4. User and video, 5. Channel and video, 6. User and comment.