System Overview

***Note**: This is background information for the entire platform, not just the database.*

THS wants to develop and adopt a new social media platform exclusively for university students, referred to as **KTH Social**. This platform is aimed at making it easier for university students to connect with each other, schedule events and share posts. Let's take a look at the main use cases for this platform:

Posts: The platform allows users to share their thoughts and ideas through text, image or video posts. These posts may be sorted based on place or tags. Furthermore, in order to promote high quality content, users can like other posts.

Event management: The platform lets users create events with a place and a date. Other users can sign up to attend these events.

Connecting with others: The platform lets users connect with each other through friendships. This lets users keep track of their friends' posts and the events they are arranging or attending.

Subscription: Through monthly subscriptions users are able to gain access to premium features such as longer texts etc.

Database Data Requirements

***Important**: The relations/tables you create do not have to follow the structure used in the following list.*

1. Required Information about **image posts**:
    - Post ID
    - User ID
    - Title
    - Date
    - Place[1]
    - Tags
    - Image URL
    - Filter[2]
2. Required Information about **text posts**:
    - Post ID
    - User ID
    - Title
    - Date
    - Place
    - Tags
    - Text Content
3. Required information about **video posts**:
    - Post ID
    - User ID
    - Title
    - Date
    - Place
    - Tags
    - Video URL

[1] Address of a place related to the post.
[2] A filter is what you may find in Snapchat or Tiktok, for example, vintage, black and white, cute dog face, etc. This should be implemented as a string.

- Codec[3]

4. Required information about **likes**:
    - Post ID
    - User ID
    - Timestamp[4]
5. Required information about **users**:
    - User ID
    - Full Name
    - Friends (by their User IDs)
6. Required information about **events**:
    - Event ID
    - User ID
    - Title
    - Place
    - Start date
    - End date
    - Duration
7. Required information about **attendees**:
    - Event ID
    - User ID
8. Required information about **subscription**:
    - Subscription ID
    - Date of Payment
    - User ID
    - Payment Method
    - Expiry date

[3] File format for the video
[4] The date a post was liked

Important notes:

- A Post ID, User ID, Event ID or SubscriptionID may only refer to one single post, user, event or subscription respectively.
- Friends is a symmetric relationship, meaning that if A is friends with B, then B must also be friends with A.
- The User ID in Event refers to the user who arranges the event.
- Out of the listed attributes, only the following can have null data instances in the database:

  - Tag
  - Filter
  - Place of Post
  - Title of Post

Detailed Requirements

Note: These requirements might need new attributes or even new tables besides the ones already created based on the Data Requirements. A good indicator that the database has been designed correctly is that these requirements can be checked fairly easily using queries without subqueries.

A. These are the available tags: {Crypto, Studying, Question, Social}
B. A post may have multiple tags.
C. A user can only have one subscription at a time.
D. A subscription is paid monthly and is valid for 30 days after the transaction is made.
E. A subscription can be paid either using Klarna, Swish, Card or Bitcoin.
F. A filter is represented by a string.
G. A place is represented by a string.
H. The person who arranges an event may also attend that event.