Laboratory Exercies 4 – Introduction to SQL – DML statements

The image below shows part of the ER diagram of a database for a video streaming service:

For each user, the database stores information about the username, email address, first name, last name, phone number, registration date, monthly subscription, and user type. Some users are premium users, for whom information is additionally stored about the date they became premium users and the discount percentage they receive.

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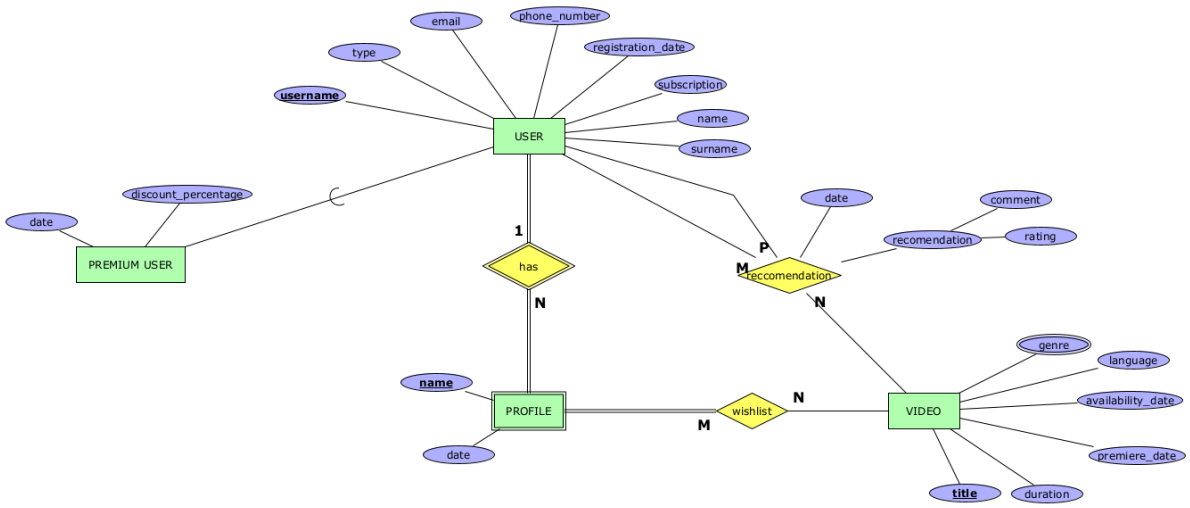
For each user, information is stored about the profiles they have (one profile refers to one user). Information about the name and creation date is kept for each profile. Within their profiles, users can add videos to a wish list.

The videos on the streaming service are defined by: title, language, duration, premiere date, availability date in the system, and the genres to which they belong (e.g. comedy, action, mystery, drama, ...). Users can recommend videos to other users, and it is known which user recommended which video to which user, the date of the recommendation, as well as information about the recommendation itself consisting of a comment and rating.



The relational database is defined by the following relations:

User(username, name, surname, type, subsription , registration_date, phone_number, email)

Premium_korisnik(username*, date, discount_percentage)

Profile(username*, name, date)

Video(title, langugage, duration, premiere_date, availability_date)

Video_genre(title*, genre)

Wishlist(title*, username*, name*)

Recommendation(username_from*, username_to*, title*, date, comment, rating)

Write DML for the following questions:

1) **Return the first and last name of all the premium users who recommended a video longer than 2 hours and for which they left a rating greater than or equal to 4, sorted by registration date in ascending order (duration is stored in minutes)**
2) **Return the username and number of videos that were recommended to the user who gave the most recommendations.**
3) **For each profile, return the profile name and the average rating of the videos in the wishlist associated with that profile. (The average rating of each video is calculated from all the ratings for that video).**
4) **Return the genres along with the number of recommendations with a comment containing the word "interesting", sorted by the number of recommendations in descending order.**
5) **Return the titles, duration, and number of recommendations, for videos that are in the wishlist of at least two different profiles.**
6) **Return the names of all users who have made recommendations for videos that none of their profiles have in their wishlist.**