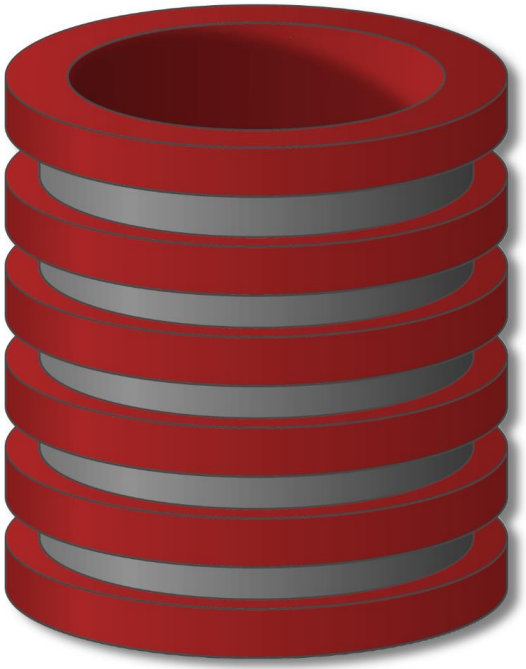
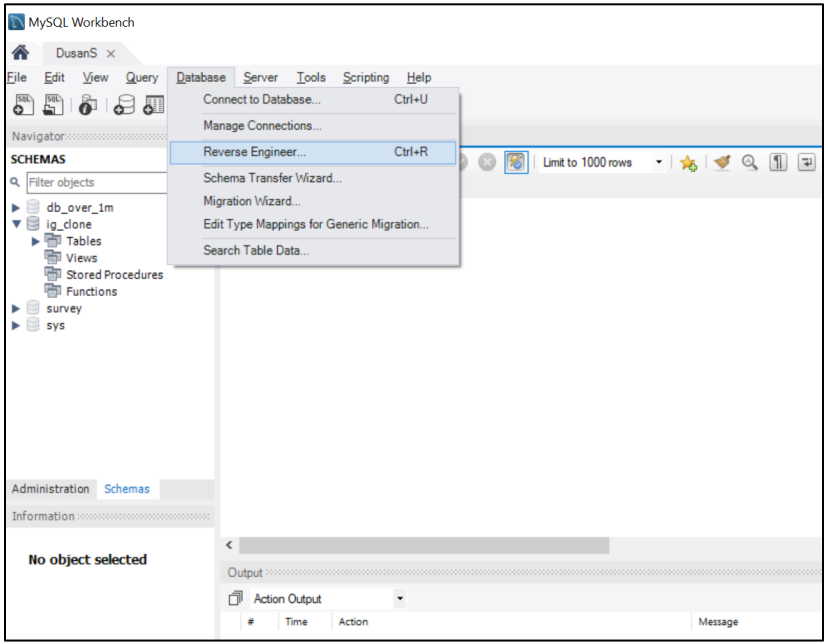
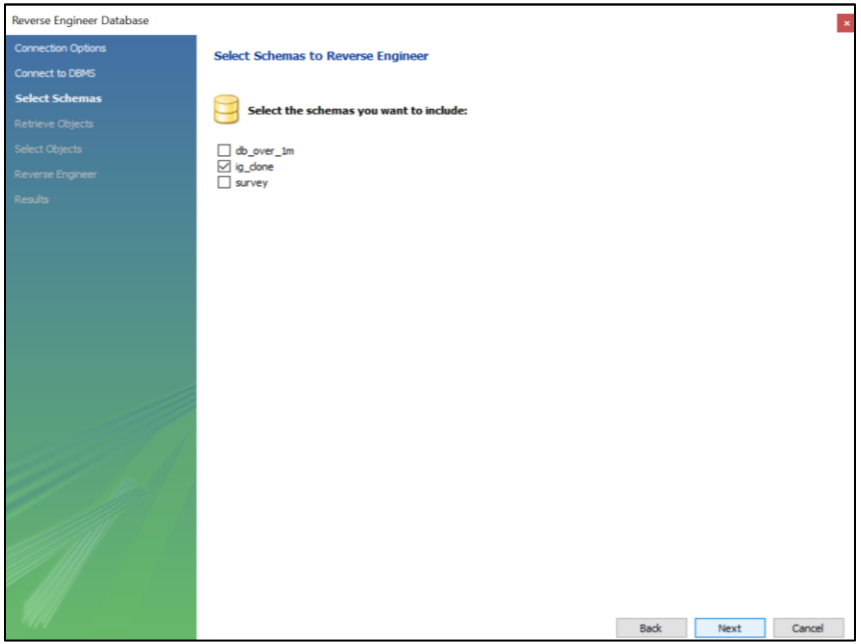


Inverzni Inženjering

Instagram Clone
– Reverse Engineering –

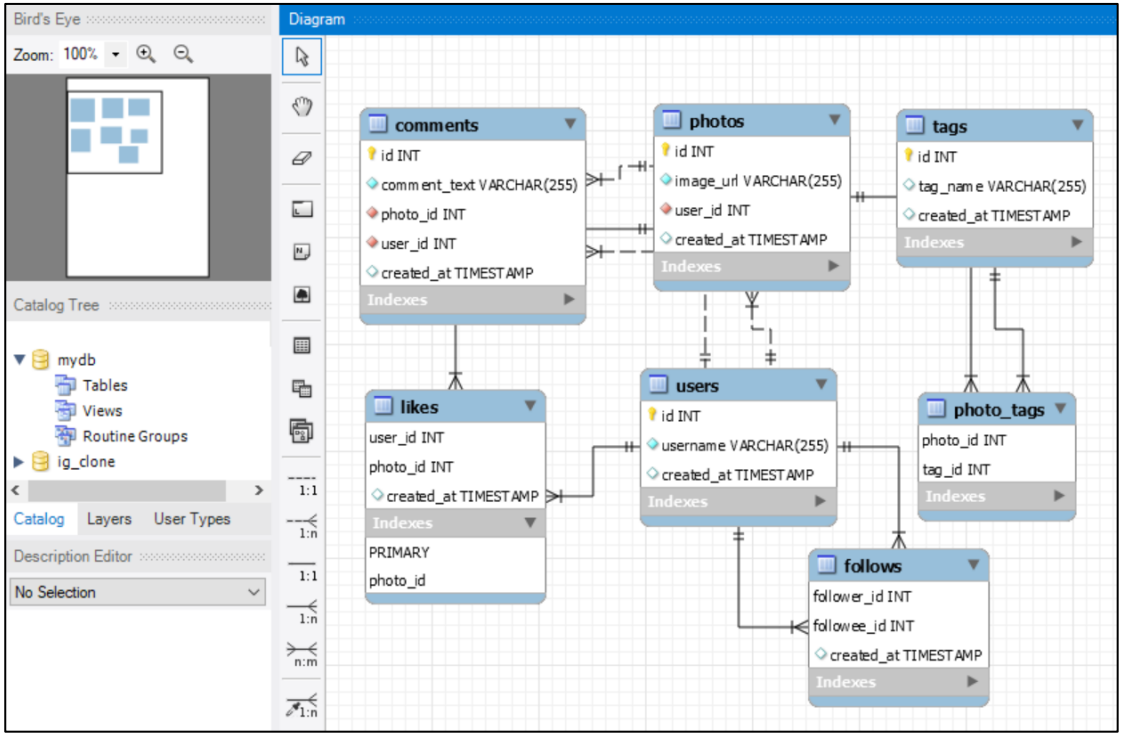
Inverznim inženjeringom želimo da nam Workbench prikaže EER dijagram ukoliko smo definisali šemu svih tabela u bazi.





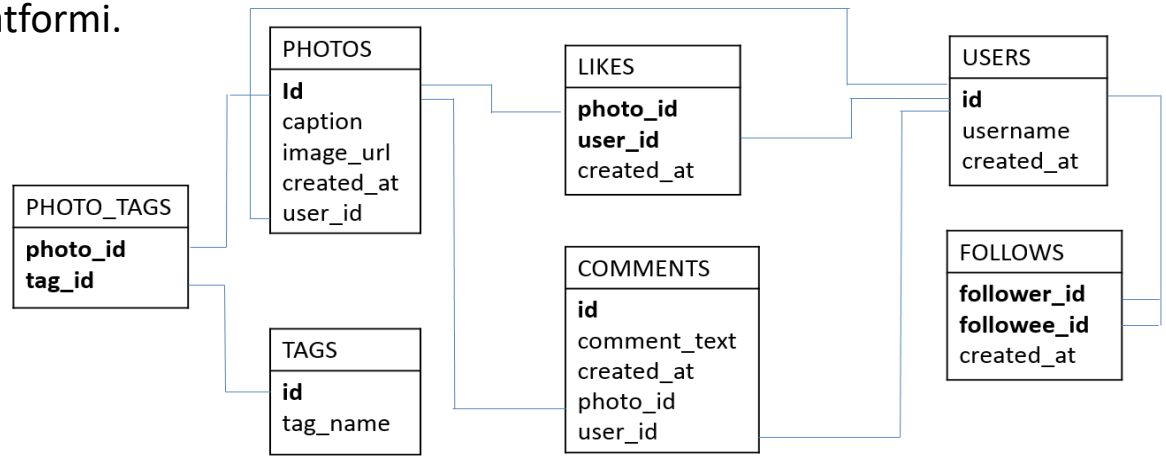
Instagram Clone
– Reverse Engineering –

- Inverznim inženjeringom je prikazan EER dijagram.
- EER dijagram je koristan da se lakše razumeju veze između relacija i šema svake relacije



Zadatak br 1

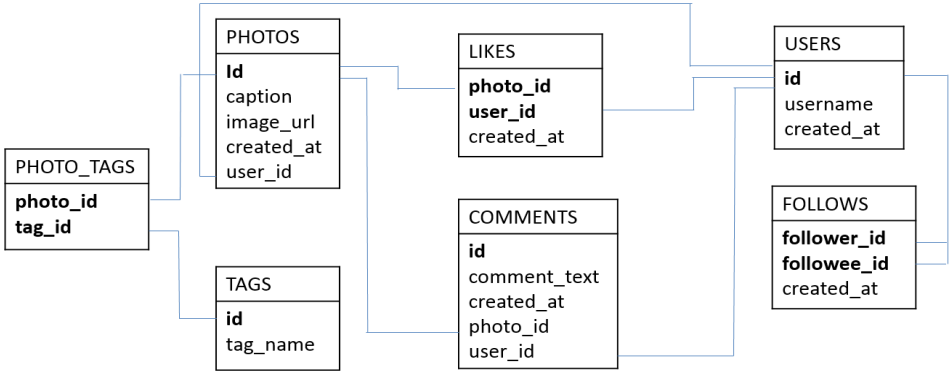
Želimo da nagradimo korisnike koji najduže koriste našu platformu. Pronađite prvih 5 korisnika koji su se registrovali na platformi.




```
SELECT *
FROM users
ORDER BY created_at
LIMIT 5;
```

Zadatak br 2

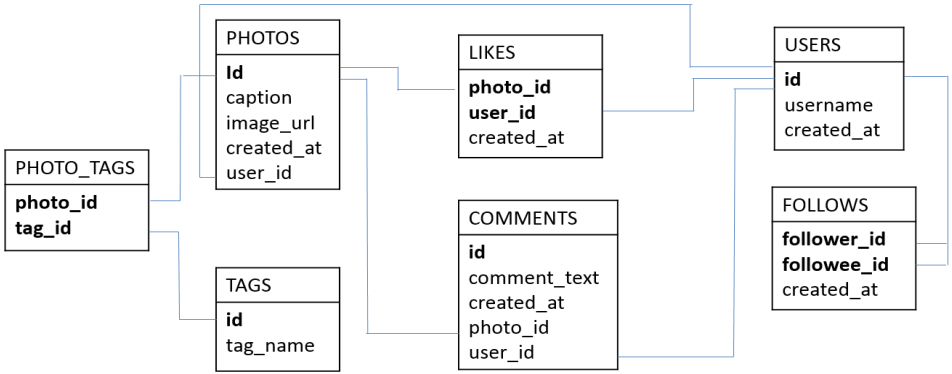
Želimo da saznamo kog dana u nedelji se korisnici najčešće registruju jer želimo da pokrenemo ad kampanju tog dana.




```
SELECT
DAYNAME(created_at) AS day, COUNT(*) AS total
FROM users
GROUP BY day
ORDER BY total DESC
LIMIT 2;
```

Zadatak br 3

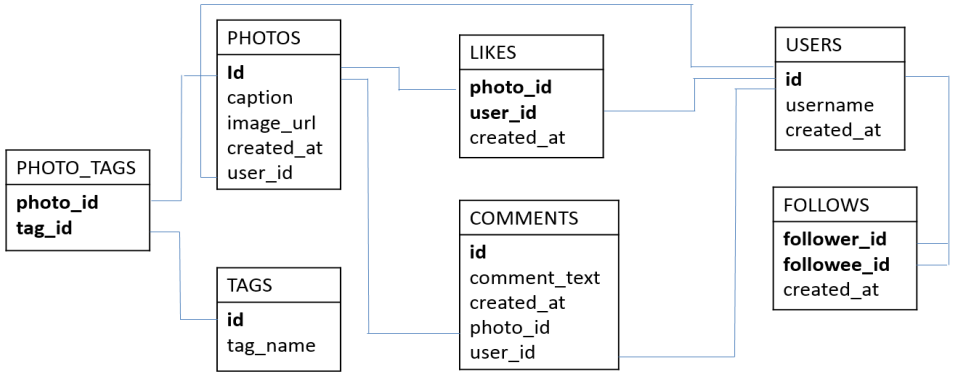
Želimo da motivišemo neaktivne korisnike. Prikaži korisnike koji nisu postovali ni jednu fotografiju.




```
SELECT username
FROM users
LEFT JOIN photos
    ON users.id = photos.user_id
WHERE photos.id IS NULL;
```

Zadatak br 4

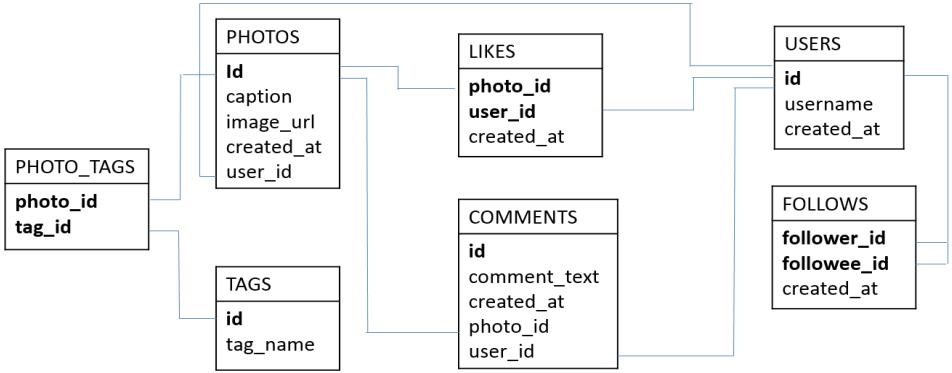
Želimo da pronađemo korisnika koji je postavio fotografiju sa najviše lajkova




```
SELECT username, photos.id, photos.image_url, COUNT(*) AS total
FROM photos INNER JOIN likes ON likes.photo_id = photos.id
                    INNER JOIN users ON photos.user_id = users.id
GROUP BY photos.id
ORDER BY total DESC
LIMIT 1;
```

Zadatak br 5

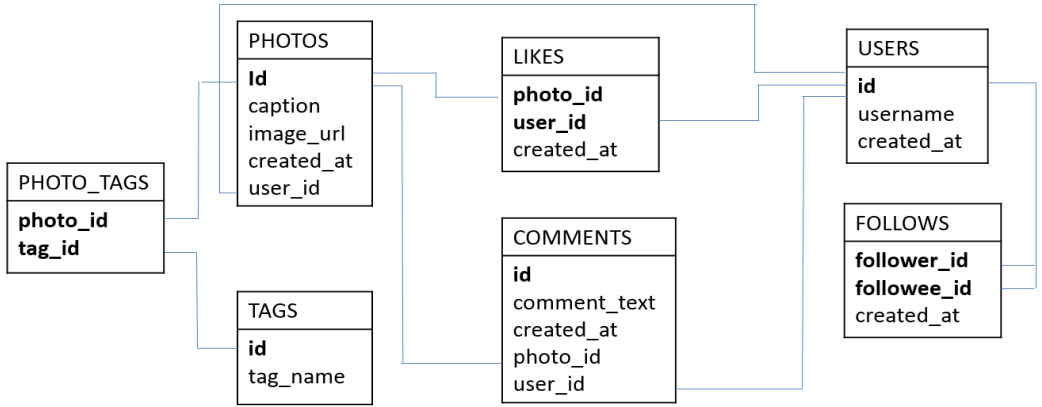
Investitor želi da zna koliko često prosečan korisnik postuje fotografije. Odrediti broj fotografija po korisniku




```
SELECT (SELECT Count(*) FROM   photos) / (SELECT Count(*) FROM   users) AS avg;
```

Zadatak br 6

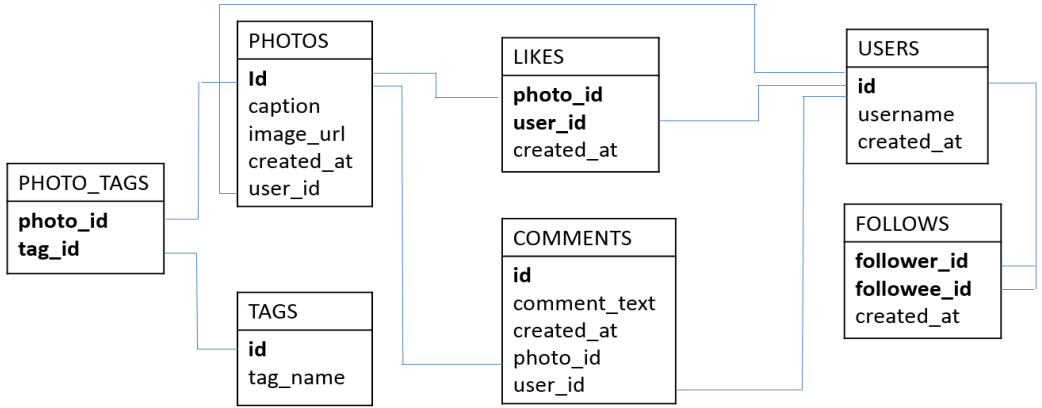
Brand kompanija želi da zna koji hashtag je najbolje da koristi. Potrebno je prikazati 5 najpopularnijih hashtag-ova.




```
SELECT tags.tag_name, Count(*) AS total
FROM   photo_tags JOIN tags ON photo_tags.tag_id = tags.id
GROUP  BY tags.id
ORDER  BY total DESC
LIMIT  5;
```

Zadatak br 7

Postoji problem sa botovima na sajtu. Prikazati korisnike koji su lajkovali svaku fotografiju na sajtu




```
SELECT username,  Count(*) AS num_likes
FROM   users INNER JOIN likes ON users.id = likes.user_id
GROUP  BY likes.user_id
HAVING num_likes = (SELECT Count(*) FROM   photos);
```