

INSTAGRAM USER ANALYTICS

using SQL

INTRODUCTION

- There are 7 tables in the dataset for a single business date i.e. 13/09/2022
- The tables include data regarding
 - Comments
 - Follows
 - Likes
 - Photos
 - Tags
 - Users

Marketing Metrics

- Find the 5 oldest users of the Instagram from the database provided

- Query

```
select *  
from ig_clone.users  
order by created_at limit 5;
```

- Result

The five oldest users are

Darby_Herzog, Emilio_Bernier52, Elenor88, Nicole71, Jordyn.Jacobson2

Marketing Metrics

- Find the users who have never posted a single photo on Instagram
- Query

```
select *  
from ig_clone.users  
where id not in  
(select user_id from ig_clone.photos);
```

- Result

These users are

Aniya_Hackett, Kasandra_Homenick, Jaclyn81, Rocio33, Maxwell.Halvorson, Tierra.Trantow, Pearl7, Ollie_Ledner37, Mckenna17, David.Osinski47, Morgan.Kassulke, Linnea59, Duane60, Julien_Schmidt, Mike.Auer39, Franco_Keebler64, Nia_Haag, Hulda.Macejkovic, Leslie67, Janelle.Nikolaus81, Darby_Herzog, Esther.Zulauf61, Bartholome.Bernhard, Jessyca_West, Esmeralda.Mraz57, Bethany20

Marketing Metrics

- Identify the winner of the contest and provide their details to the team (most likes on a single photo)

- Query

```
select t1.photo_id, count(t1.user_id) as likes, t3.*  
from ig_clone.likes t1  
join ig_clone.photos t2 on t1.photo_id=t2.id  
join ig_clone.users t3 on t2.user_id=t3.id  
group by t1.photo_id  
order by likes desc  
limit 1;
```

- Result

These winner is **Zack_Kemmer93** for **photo_id 145** with **48 likes**.

Marketing Metrics

- Identify and suggest the top 5 most commonly used hashtags on the platform
- Query

```
select t2.*, count(t1.photo_id)
from ig_clone.photo_tags t1
join ig_clone.tags t2 on t1.tag_id=t2.id
group by t2.id
order by count(photo_id) desc
limit 5;
```

Result

The 5 most commonly used hashtags are
smile, beach, party, fun, lol

Marketing Metrics

- What day of the week do most users register on? Provide insights on when to schedule an ad campaign
- Query

```
select dayname(created_at) as day, count(id) as reg_count
from ig_clone.users
group by 1
order by count(id) desc;
```

Result

The day when most users register are **Thursday** and **Sunday**.

Investor Metrics

- Provide data on users (bots) who have liked every single photo on the site (since any normal user would not be able to do this).
- Query

```
select * from ig_clone.users
where id in (
select user_id
from ig_clone.likes
group by user_id
having count(photo_id)=(select distinct count(id) from ig_clone.photos));
```

Result

The list if users suspected to be bots are

Aniya_Hackett, Jaclyn81, Rocio33, Maxwell.Halvorson, Ollie_Ledner37,
Mckenna17, Duane60, Julien_Schmidt, Mike.Auer39, Nia_Haag, Leslie67,
Janelle.Nikolaus81, Bethany20