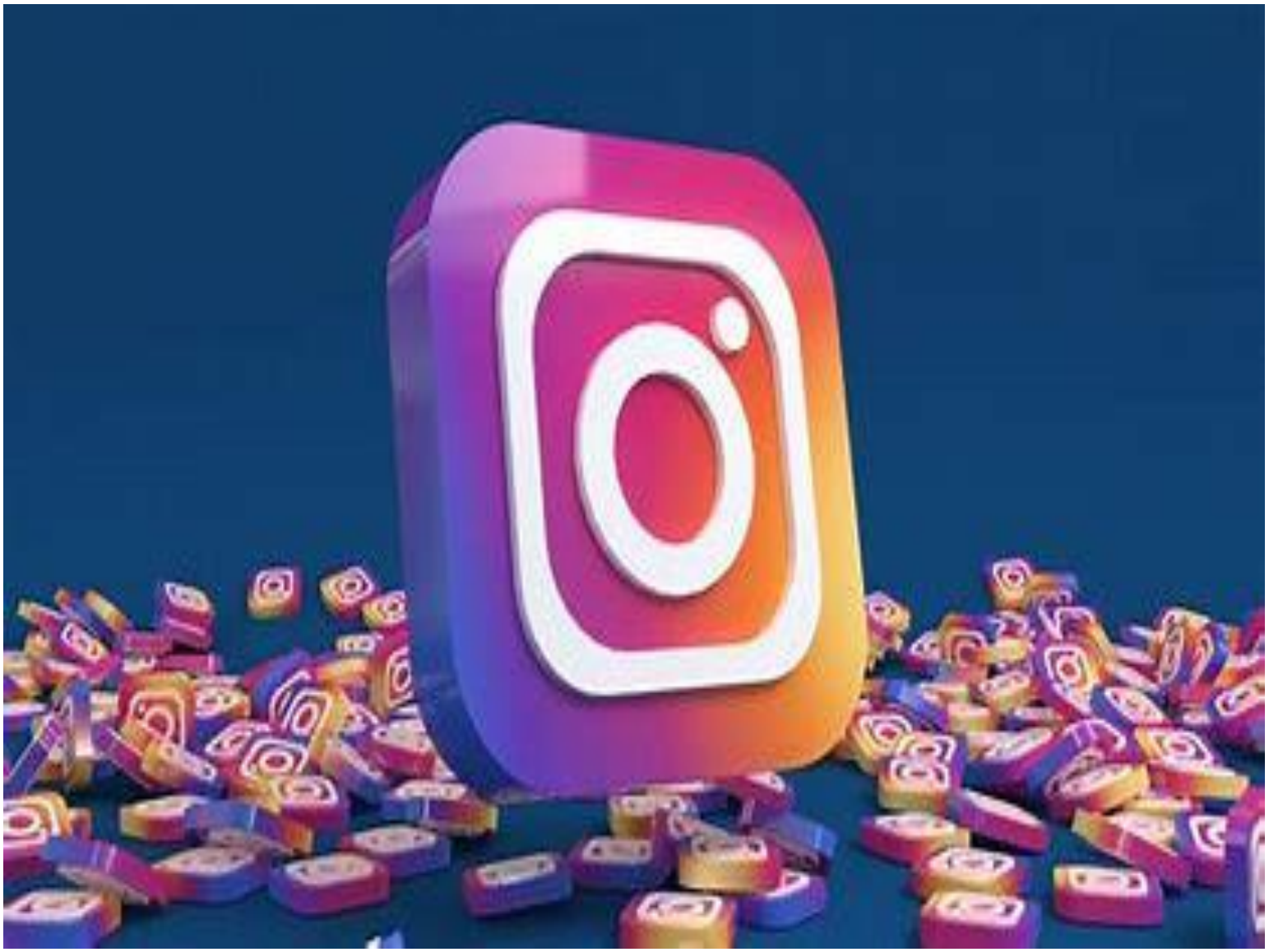
INSTAGRAM USER ANALYTICS



PROJECT DESCRIPTION

This project involves analyzing users' interaction and activities to provide valuable insights that might help business to grow, such insights are used by various teams such as product team launch a new feature, marketing team to launch a marketing campaign.

APPRAOCH

Briefly analyzed all the tables and columns to its business context, business questions and used functions of MySQL like joins, clauses like group by, day of the week, average with various others as per needed, according to different business questions.

Tech-Stack Used

MySQL is the tech stack that is used to complete this project, with sets of given its functions like mathematical and clauses select, group by and where made it simple and easier answer the business questions, to derive insight from various database.

INSIGHTS

There were several after completing the project such as most loyal user is Darby_Herzog, the users who have never posted a single photo on Instagram are Aniya_Hackett, Kasandra_Homenick, Jaclyn81, Rocio33, Maxwell. Halvorson, Tierra. Trantow, Pearl7, Ollie_Ledner37 and many others and user with most likes is Zack_Kemmer93, top 5 commonly most used #tag is smile, beach, party, fun and concert, day of the week most user register is Thursday, average post per users is 3.47 and bots are Aniya_Hackett, Jaclyn81, Rocio33, Maxwell. Halvorson, Ollie_Ledner37 and many others.

RESULT

By completing this project, I learned how to apply various concept of data analytics and clauses and functions of MySQL to answer the business questions by deriving various insights from tables and these all learning constituted towards elevating data analytics skills.

A) Marketing Analysis:

TASK 1- Most loyal user

```
# MOST LOYAL USER ON INSTAGRAM
use ig_clone;
SELECT
    *
FROM
    users
ORDER BY created_at
LIMIT 1;
```

id	username	created_at
80	Darby_Herzog	2016-05-06 00:14:21
NULL	NULL	NULL

TASK – 2 Users who have never posted a single photo on Instagram.

```
SELECT
   username, id
FROM
   users
WHERE
   id NOT IN (SELECT
         user_id
      FROM
         photos);
```

username	id
Aniya_Hackett	5
Kasandra_Homenick	7
Jadyn81	14
Rocio33	
Maxwell.Halvorson	24
Tierra.Trantow	25
Pearl7	34
Ollie_Ledner37	36
Mckenna17	41
David.Osinski47	45

Jaclyn81

Morgan.Kassulke	49
Linnea59	53
Duane60	54
Julien_Schmidt	57
Mike.Auer39	66
Franco_Keebler64	68
Nia_Haag	71
Hulda.Macejkovic	74
Leslie67	75
Janelle.Nikolaus81	76

Darby_Herzog	80
Esther.Zulauf61	81
Bartholome.Bernhard	83
Jessyca_West	89
Esmeralda.Mraz57	90
Bethany20	91

TASK 3 - User with the most likes on a single photo

```
select count(photo_id) as
count_of_likes,photo_id,users.username,photos.image_url,users.created_at
from likes
inner join photos on photos.id=likes.photo_id
inner join users on users.id=photos.user_id
group by photo_id
order by count_of_likes desc
limit 1;
```

count_of_likes	photo_id	username	image_url	created_at
48	145	Zack_Kemmer93	https://jarret.name	2017-01-01 05:58:22

TASK 4: Identify and suggest the top five most commonly used hashtags on the platform.

```
select count(tag_id) as Count_of_used,tag_id,tags.tag_name
from photo_tags
inner join tags on tags.id=photo_tags.tag_id
group by tag_id
order by Count_of_used desc
limit 5;
```

Count_of_used	tag_id	tag_name
59	21	smile
42	20	beach
39	17	party
38	13	fun
24	18	concert

TASK 5- : Determine the day of the week when most users register on Instagram.

```
select dayname(created_at) as days, count(*)
from users group by days;
```

days	count(*)
Thursday	16
Sunday	16
Tuesday	14
Saturday	12
Wednesday	13
Monday	14
Friday	15

B) Investor Metrics

TASK 6 -: Calculate the average number of posts per user on Instagram

```
create view post_per_user as (select count(*) as count_of_post,user_id
from photos
group by user_id);
```

avg(count_of_post)
3.4730

```
select avg(count_of_post) from post_per_user;
```

TASK 7- Identify users (potential bots) who have liked every single photo on the site

```
create view all_likes as (
select count(photo_id) as total_likes,user_id
from likes
group by user_id);
```

id	username	created_at
5	Aniya_Hackett	2016-12-07 01:04:39
14	Jadyn81	2017-02-06 23:29:16
21	Rocio33	2017-01-23 11:51:15
24	Maxwell.Halvorson	2017-04-18 02:32:44
36	Ollie_Ledner37	2016-08-04 15:42:20
41	Mckenna17	2016-07-17 17:25:45
54	Duane60	2016-12-21 04:43:38
57	Julien_Schmidt	2017-02-02 23:12:48
66	Mike.Auer39	2016-07-01 17:36:15
71	Nia_Haag	2016-05-14 15:38:50