Instagram User Analytics

TASK -2

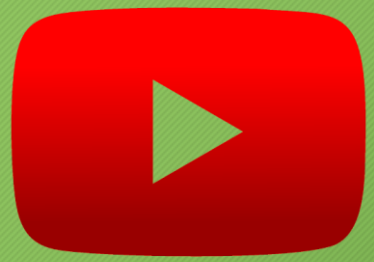
About this project

- In this project , we will analyze the Instagram data and answer the asked question.
- User analysis is the process by which we track how users engage and interact with our digital product.
- Insights are helpful to companies to launch market campaign , feature of app, track success of app to improve experience altogether.
- This level of insight is hugely important for creating a content strategy that drives results for your brand or business — without it, you're essentially working in the dark.
- However, finding the right metrics to track, as well as knowing how to interpret them, can be easier said than done.

Approach

- In this project we analyze Instagram database . For that we first create Instagram clone database (I.e.: Ig_clone) through SQL Query in SQL workbench.
- And then we get the data in the from of table to answer the question required in analysis in Instagram.
- During analysis, we will analyze marketing information and invertor metric information with writing queries in order to get the fruitful data for answering the asked questions.

Tech-used



What is Instagram analytics

- Instagram analytics are the tools that allow you to see key metrics and data related to your Instagram performance. This data can range from the very basic (like how many people saw or liked an individual post) to the very specific (like what time your account's followers are most likely to be online).
- Tracking the data you can access through Instagram analytics is the only way to build an effective Instagram strategy. If you're not tracking data, you're just guessing about what works.
- You might luck out and have some success just based on your intuition — but without the numbers to back your work, you'll never be able to test, refine or grow.

Insights

- **Rewarding Most Loyal Users**

Q1. Find the 5 oldest user of Instagram?

Query:

```
SELECT * FROM ig_clone.users
ORDER BY created_at;
```

Result:

id	username	created_at
80	Darby_Herzog	2016-05-06 00:14:21
67	Emilio_Bernier52	2016-05-06 13:04:30
63	Elenor88	2016-05-08 01:30:41
95	Nicole71	2016-05-09 17:30:22
38	Jordyn.Jacobson2	2016-05-14 07:56:26

Insights

- **Remind Inactive Users to Start Posting:**

Q2.Find the user who have never posted any photo on Instagram?

Query:

```
select id, username
from ig_clone.users
where id not in(select distinct user_id
from photos);
```

Result:

id	username
5	Aniya_Hackett
7	Kasandra_Homenick
14	Jaclyn81
21	Rocio33
24	Maxwell.Halvorson
25	Tierra.Trantow
34	Pearl7
36	Ollie_Ledner37
41	Mckenna17

id	username
45	David.Osinski47
49	Morgan.Kassulke
53	Linnea59
54	Duane60
57	Julien_Schmidt
66	Mike.Auer39
68	Franco_Keebler64
71	Nia_Haag
74	Hulda.Macejkovic

id	username
75	Leslie67
76	Janelle.Nikolaus81
80	Darby_Herzog
81	Esther.Zulauf61
83	Bartholome.Bernhard
89	Jessyca_West
90	Esmeralda.Mraz57
91	Bethany20
NULL	NULL

Insights

- **Declaring Contest Winner:**

Q3.Identify the winner of contest and provide their details to team(who get most like on a single photo)?

Query:

```
 select * from ig_clone.users
where id =( select user_id from
ig_clone.photos
 where id = ( select photo_id from
ig_clone.likes
group by photo_id
order by count(user_id)
 desc limit 1));
```

Result:

	id	username	created_at
▶	52	Zack_Kemmer93	2017-01-01 05:58:22
*	NULL	NULL	NULL

Insights

- **Hashtag Researching**

Q4.Identify and suggest top 5 most commonly used hashtag used on the platform.

Query:

```
select id, tag_name
from ig_clone.tags
where id in (select tag_id from (select
tag_id, count(photo_id) as tag_count from
ig_clone.photo_tags group by tag_id order
by tag_count desc limit 5) top_tag ) ;
```

Result:

	id	tag_name
▶	20	beach
	18	concert
	13	fun
	17	party
	21	smile
	NULL	NULL

Insights

- **Launch AD Campaign**

Q5. What day of the week do most users register on? Provide insights on when to schedule an ad campaign.

Query:

```
SELECT weekday(created_at) as day,
count(id) as new_user_count
FROM ig_clone.users
GROUP BY day
ORDER BY new_user_count desc;
```

Result:

	day	new_user_count
▶	3	16
	6	16
	4	15
	1	14
	0	14
	2	13
	5	12

Note: 0= Monday, 1 = Tuesday, 2 = Wednesday, 3 = Thursday, 4 = Friday, 5=Saturday, 6 = Sunday.

Insights

- **User Engagement**

Provide how many times does average user posts on Instagram. Also, provide the total number of photos on Instagram/total number of users.

Query 1:

```
SELECT round(avg(photo_count)) as
'average_post‘
FROM ( select user_id, count(id) as photo_count
from  ig_clone.photos group by user_id)temp;
```

Result 1:

	average_post
▶	3

Query 2:

```
select (select count(id) as total_photos from
ig_clone.photos)/  (select count(id) as
total_users from ig_clone.users) as "Total photos
/ Total users";
```

Result 2:

	Total photos / Total users
▶	2.5700

Insight

- Bot and Fake Accounts:

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

Query:

```
SELECT id, username as BOT_Names FROM
ig_clone.users
WHERE id in (SELECT user_id FROM
ig_clone.likes GROUP BY user_id having
count(photo_id) = ( select count(id) as
Total_Photos FROM ig_clone.photos));
```

Result:

	id	BOT_Names
▶	5	Aniya_Hackett
	14	Jadyn81
	21	Rocio33
	24	Maxwell.Halvorson
	36	Ollie_Ledner37
	41	Mckenna17
	54	Duane60
	57	Julien_Schmidt
	66	Mike.Auer39
	71	Nia_Haag
	75	Leslie67
	76	Janelle.Nikolaus81
	91	Bethany20
	NULL	NULL

Result

- By completing this project, I have learned SQL workbench usage and its application along with its benefit.
- Through this project, I came to know about usage of analytics in Instagram for the insight that helps in progress of application.
- It helped me to brush up my concepts related to sub-queries and aggregate function.
- It helped me to understand the table schema .
- It helped me to understand dataset through normalization.

Thank you

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