# **Instagram User Analytics**

**A) Project Description:** This project aims to extract useful insights from raw data/metadata, using various database management tools, and even visualize them to increase the platform's efficiency.

**B) Project Approach:** The project was executed using SQL, where queries were utilized to create a database from the provided raw data. Sorting and data extracting queries were then implemented to obtain the required data/insights.

**C) Tech Stack Used:** The tech stack used included MySQL Workbench v8.0.30.0, which was an excellent tool for querying the database, thanks to its ease of access, simple setup, and GUI, as well as its troubleshooting support.

**Project Insights: (Raw Insights :)A) Marketing:**

**1. Rewarding Most Loyal Users:** People who have been using the platform for the longest time.

Conclusion: These are the oldest user of instagram.

|  |  |  |
| --- | --- | --- |
| id | username | created\_at |
| 80 | Darby\_Herzog | 06-05-2016 00:14 |
| 67 | Emilio\_Bernier52 | 06-05-2016 13:04 |
| 63 | Elenor88 | 08-05-2016 01:30 |
| 95 | Nicole71 | 09-05-2016 17:30 |
| 38 | Jordyn.Jacobson2 | 14-05-2016 07:56 |

**Code**:- select \* from users

order by created\_at

limit 5;

**2. Remind Inactive Users to Start Posting:** By sending them promotional emails to post their 1st photo.

Conclusion: These users were inactive after their first post.

|  |
| --- |
| **username** |
| 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 |

**Code:-** select username

from users

left join photos

on users.id = photos.user\_id

where photos.id is null;

**3. Declaring Contest Winner:** The team started a contest and the user who

gets the most likes on a single photo will win the contest now they wish to

declare the winner.

**Conclusion:** He has the most likes in his one post.

|  |  |  |  |
| --- | --- | --- | --- |
| **username** | **id** | **image\_url** | **total** |
| Zack\_Kemmer93 | 145 | https://jarret.name | 48 |

**Code**:- select

username, photos.id, photos.image\_url, count(likes.user\_id) 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;

**4. Hashtag Researching:** A partner brand wants to know, which hashtags to

use in the post to reach the most people on the platform.

**Conclusion:** These are some trending hastags which a partner brand

can use.

|  |  |
| --- | --- |
| **tag\_name** | **total** |
| smile | 59 |
| beach | 42 |
| party | 39 |
| fun | 38 |
| concert | 24 |

**Code:-** 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;

**5. Launch AD Campaign:** The team wants to know, which day would be the

best day to launch ADS.

**Conclusion:** these days would be best for AD campaign.

|  |  |
| --- | --- |
| **day** | **total** |
| Thursday | 16 |
| Sunday | 16 |

**Code:-** select

DAYNAME(created\_at) as day, count(\*) as total

from users

group by day

order by total desc

limit 1;

**B)Investor Metrics:-**

**6. User Engagement:** Are users still as active and post on Instagram or they

are making fewer posts

**Conclusion** :A users avaerage post is more than 2.

**2.5700**

**Code:-** select

(select count(\*) from photos) / (select count(\*) from users) as avg;

**7. Bots & Fake Accounts**: The investors want to know if the platform is

crowded with fake and dummy accounts

**Conclusion:** These are some user who can be boat and fake account.

|  |  |
| --- | --- |
| **username** | **num\_likes** |
| Aniya\_Hackett | 257 |
| Jaclyn81 | 257 |
| Rocio33 | 257 |
| Maxwell.Halvorson | 257 |
| Ollie\_Ledner37 | 257 |
| Mckenna17 | 257 |
| Duane60 | 257 |
| Julien\_Schmidt | 257 |
| Mike.Auer39 | 257 |
| Nia\_Haag | 257 |
| Leslie67 | 257 |
| Janelle.Nikolaus81 | 257 |
| Bethany20 | 257 |

**Code:-**

select user\_id, count(\*) as num\_likes

from likes

group by user\_id

having num\_likes = (select count(\*) from photos);

select u.username, count(\*) as num\_likes

from users u

join likes l on u.id = l.user\_id

group by u.id

having num\_likes = (select count(\*) from photos);