**2. Instagram User Analytic**

1. **) 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.
2. **) 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.
3. **) Tech Stack Used**: The tech stack used included MySQL Workbench v8.0.30.0, an excellent tool for querying the database, thanks to its ease of access, simple setup, and GUI, as well as its troubleshooting support.

Project:

A) Marketing:

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

**Answer**: These are the oldest user of Instagram.

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

**Code**: SELECT \* FROM users

ORDER BY created\_at LIMIT 5;

These are the Five Most Loyal Users of Instagram.

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

5 Aniya\_Hackett

7 Kasandra\_Homenick

14 Jaclyn81

21 Rocio33

24 Maxwell.Halvorson

25 Tierra.Trantow

34 Pearl7

36 Ollie\_Ledner37

41 Mckenna17

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

75 Leslie67

76 Janelle.Nikolaus81

80 Darby\_Herzog

81 Esther.Zulauf61

83 Bartholome.Bernhard

89 Jessyca\_West

90 Esmeralda.Mraz57

91 Bethany20

**These are the accounts who don’t have any post.**

**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.

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;

**Answer: Zack\_Kemmer93 is the winner of most likes contest.**

4.) **Hashtag Researching**: A partner brand wants to know, which hashtags to use in the post to reach the most people on the platform.

**Most used hashtags are:**

|  |  |
| --- | --- |
| smile | 59 |
| beach | 42 |
| party | 39 |
| fun | 38 |
| food | 24 |
| lol | 24 |
| concert | 24 |
| hair | 23 |
| happy | 22 |
| beauty | 20 |
| dreamy | 20 |
| sunset | 19 |
| fashion | 19 |
| drunk | 19 |
| sunrise | 17 |
| landscape | 17 |
| style | 17 |

photography 16

stunning 16

delicious 15

foodie 11

**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;

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;

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

# Answer: These days would be best for AD campaign.

Thursday 16

Sunday 16

# Code:

SELECT

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

FROM users GROUP BY day

ORDER BY total DESC LIMIT 2;

B) Investor Metrics

1.) **User Engagement:** Are users still as active and post on Instagram or they are making fewer posts

# Answer: A user’s average post is more than 2.

2.5700

Code: SELECT

(SELECT COUNT (\*) FROM photos) / (SELECT COUNT (\*) FROM

users) AS avg;

2.) **Bots & Fake Accounts**: The investors want to know if the platform is crowded with fake and dummy accounts

# Answer :These are some user who can be boat and fake account.

|  |  |
| --- | --- |
| Aniya\_Hackett | 257 |
| Bethany20 | 257 |
| Duane60 | 257 |
| Jaclyn81 | 257 |

Janelle.Nikolaus81 257

Julien\_Schmidt 257

Leslie67 257

Maxwell.Halvorson 257

|  |  |
| --- | --- |
| Mckenna17 | 257 |
| Mike.Auer39 | 257 |
| Nia\_Haag | 257 |
| Ollie\_Ledner37 | 257 |
| Rocio33 | 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);