BUSINESS ANALYTICS & DIGITAL MARKETING

BUSINESS ANALYTICS

CAPSTONE PROJECT

Submitted By:

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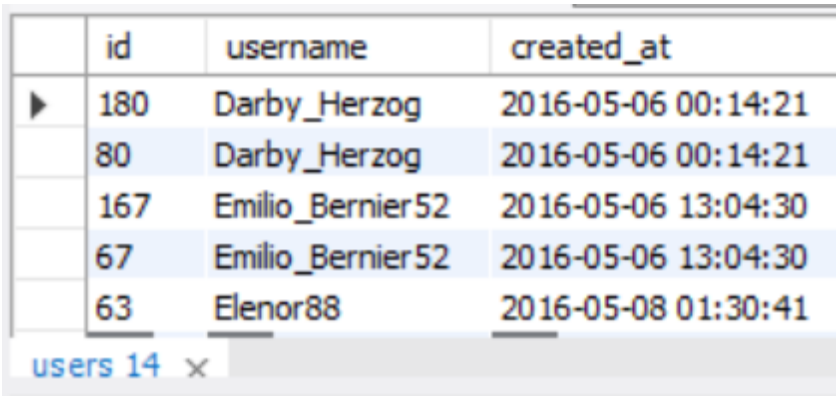
❖ Instagram User Analytics

I. Loyal User Reward:

INPUT:

```
Select * from users
order by created_at asc
limit 5
```

OUTPUT:



id	username	created_at
180	Darby_Herzog	2016-05-06 00:14:21
80	Darby_Herzog	2016-05-06 00:14:21
167	Emilio_Bernier52	2016-05-06 13:04:30
67	Emilio_Bernier52	2016-05-06 13:04:30
63	Elenor88	2016-05-08 01:30:41

users 14

II. INACTIVE USER ENGAGEMENT

INPUT:

```
Select *from users as a
left join photos as b on
a.id=b.user_id and
b.user_id is null
```

OUTPUT:

id	username	created_at	id	image_url	user_id	created_dat
1	Kenton_Kirlin	2017-02-16 18:22:11	NULL	NULL	NULL	NULL
2	Andre_Purdy85	2017-04-02 17:11:21	NULL	NULL	NULL	NULL
3	Harley_Lind18	2017-02-21 11:12:33	NULL	NULL	NULL	NULL
4	Arely_Bogan63	2016-08-13 01:28:43	NULL	NULL	NULL	NULL
5	Aniya_Hackett	2016-12-07 01:04:39	NULL	NULL	NULL	NULL
6	Travon.Waters	2017-04-30 13:26:14	NULL	NULL	NULL	NULL
7	Kasandra_Homenick	2016-12-12 06:50:08	NULL	NULL	NULL	NULL
8	Tabitha_Schamberger11	2016-08-20 02:19:46	NULL	NULL	NULL	NULL
9	Gus93	2016-06-24 19:36:31	NULL	NULL	NULL	NULL
10	Presley_McClure	2016-08-07 16:25:49	NULL	NULL	NULL	NULL
11	Justina.Gaylord27	2017-05-04 16:32:16	NULL	NULL	NULL	NULL
12	Dereck65	2017-01-19 01:34:14	NULL	NULL	NULL	NULL
13	Alexandro35	2017-03-29 17:09:02	NULL	NULL	NULL	NULL
14	Jaclyn81	2017-02-06 23:29:16	NULL	NULL	NULL	NULL
15	Billy52	2016-10-05 14:10:20	NULL	NULL	NULL	NULL

III. Contest Winner Declaration

INPUT:

```
Select * from
(Select user_id, count(photo_id) as cnt from likes
group by user_id
order by cnt desc) as a
left join users as b on a.user_id=b.id
```

OUTPUT:

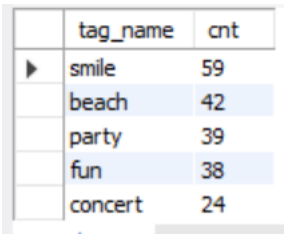
user_id	cnt	id	username	created_at
21	257	21	Rocio33	2017-01-23 11:51:15
71	257	71	Nia_Haag	2016-05-14 15:38:50
5	257	5	Aniya_Hackett	2016-12-07 01:04:39
66	257	66	Mike.Auer39	2016-07-01 17:36:15
41	257	41	Mckenna17	2016-07-17 17:25:45
14	257	14	Jaclyn81	2017-02-06 23:29:16
57	257	57	Julien_Schmidt	2017-02-02 23:12:48
24	257	24	Maxwell.Halvorson	2017-04-18 02:32:44
76	257	76	Janelle.Nikolaus81	2016-07-21 09:26:09
75	257	75	Leslie67	2016-09-21 05:14:01
54	257	54	Duane60	2016-12-21 04:43:38
91	257	91	Bethany20	2016-06-03 23:31:53
36	257	36	Ollie_Ledner37	2016-08-04 15:42:20
16	103	16	Annalise.McKenzi...	2016-08-02 21:32:46
96	98	96	Keenan.Schamber...	2016-08-28 14:57:28

IV. Hashtag Research

INPUT:

```
Select a.tag_name, count(b.tag_id)as cnt from tags as a
left join photo_tags as b
on a.id=b.tag_id
group by a.tag_name
order by cnt desc limit 5
```

OUTPUT:



tag_name	cnt
smile	59
beach	42
party	39
fun	38
concert	24

V. Ad Campaign Launch

INPUT:

```
Select week(created_at) as wk,
count(week(created_at)) as cnt from users
group by wk
order by cnt desc
```

OUTPUT:

	wk	cnt
▶	18	10
	6	10
	40	8
	13	8
	27	8
	19	8
	14	6
	34	6
	23	6
	35	6
	4	6
	22	6
	44	6
	1	6
	41	6

Investor Metrics:

VI. User Engagement:

INPUT:

```
Select b.user_id,avg(a.id) from users as a
left join photos as b
on a.id=b.user_id
group by b.user_id
```

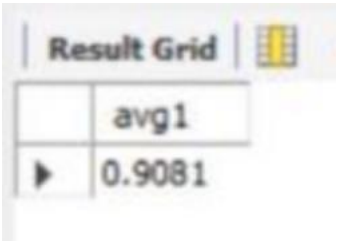
OUTPUT:

	user_id	avg(a.id)
▶	1	1.0000
	2	2.0000
	3	3.0000
	4	4.0000
	NULL	130.6270
	6	6.0000
	8	8.0000
	9	9.0000
	10	10.0000
	11	11.0000
	12	12.0000
	13	13.0000
	15	15.0000
	16	16.0000

INPUT:

```
Select count(b.image_url) / count(a.id) as
avg1 from users as a
left join photos as b
on a.id=b.user_id
```

OUTPUT:



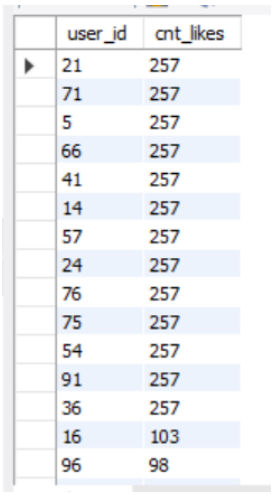
	avg1
▶	0.9081

VII. Bots & Fake Accounts

INPUT:

```
Select user_id, count(photo_id) as cnt_likes from likes
group by user_id
order by cnt_likes desc;
```

OUTPUT:



	user_id	cnt_likes
▶	21	257
	71	257
	5	257
	66	257
	41	257
	14	257
	57	257
	24	257
	76	257
	75	257
	54	257
	91	257
	36	257
	16	103
	96	98

INPUT:

```
create table false_id
select user_id, count(photo_id) as cnt_likes from likes
group by user_id
```

order by cnt_likes desc;

INPUT:

```
select count(*)from false_id
where cnt_likes='257'
```

OUTPUT: