Description Editorial Solutions (526) Submissions

1934. Confirmation Rate

Medium 402 29

Companies

SQL Schema

Table: `Signups`

```
+----------------+----------+
| Column Name    | Type     |
+----------------+----------+
| user_id        | int      |
| time_stamp     | datetime |
+----------------+----------+
user_id is the primary key for this table.
Each row contains information about the signup time for the
user with ID user_id.
```

Table: `Confirmations`

```
+----------------+----------+
| Column Name    | Type     |
+----------------+----------+
| user_id        | int      |
| time_stamp     | datetime |
| action         | ENUM     |
+----------------+----------+
(user_id, time_stamp) is the primary key for this table.
user_id is a foreign key with a reference to the Signups table.
action is an ENUM of the type ('confirmed', 'timeout')
Each row of this table indicates that the user with ID user_id
requested a confirmation message at time_stamp and that
confirmation message was either confirmed ('confirmed') or
expired without confirming ('timeout').
```

The **confirmation rate** of a user is the number of `'confirmed'` messages divided by the total number of requested confirmation messages. The confirmation rate of a user that did not request any confirmation messages is `0`. Round the confirmation rate to **two decimal** places.

Write an SQL query to find the **confirmation rate** of each user.

Return the result table in **any order**.

The query result format is in the following example.

Example 1:

Input:

Signups table:

```
+---------+---------------------+
| user_id | time_stamp          |
+---------+---------------------+
| 3       | 2020-03-21 10:16:13 |
| 7       | 2020-01-04 13:57:59 |
| 2       | 2020-07-29 23:09:44 |
| 6       | 2020-12-09 10:39:37 |
+---------+---------------------+
```

Confirmations table:

```
+---------+---------------------+-----------+
| user_id | time_stamp          | action    |
+---------+---------------------+-----------+
| 3       | 2021-01-06 03:30:46 | timeout   |
| 3       | 2021-07-14 14:00:00 | timeout   |
| 7       | 2021-06-12 11:57:29 | confirmed |
| 7       | 2021-06-13 12:58:28 | confirmed |
| 7       | 2021-06-14 13:59:27 | confirmed |
| 2       | 2021-01-22 00:00:00 | confirmed |
| 2       | 2021-02-28 23:59:59 | timeout   |
+---------+---------------------+-----------+
```

Output:

```
+---------+--------------------+
| user_id | confirmation_rate  |
+---------+--------------------+
| 6       | 0.00               |
| 3       | 0.00               |
| 7       | 1.00               |
| 2       | 0.50               |
+---------+--------------------+
```

Explanation:

User 6 did not request any confirmation messages. The confirmation rate is 0.
User 3 made 2 requests and both timed out. The confirmation rate is 0.
User 7 made 3 requests and all were confirmed. The confirmation rate is 1.
User 2 made 2 requests where one was confirmed and the other timed out. The confirmation rate is 1 / 2 = 0.5.

MySQL Auto

```mysql
# Write your MySQL query statement below
SELECT
  user_id,
  ROUND(
    SUM(
      CASE
      WHEN action = 'timeout' THEN 0
      WHEN action = 'confirmed' THEN 1
      WHEN action is NULL THEN 0
      END)
      /COUNT(*),
    2) AS confirmation_rate
FROM Signups s
LEFT JOIN Confirmations c
USING(user_id)
GROUP BY user_id
```

Ln 12, Col 8

Console Run Submit

Accepted 44.6K | Submissions 76.3K | Acceptance Rate 58.7%

Seen this question in a real interview before? 1/4

Yes No

Discussion (21)

Related Topics