Learn SQL from Scratch

Capstone Project

Usage Funnels with Warby Parker

Lindsay Harrop

Quiz Funnel

1:

```
1    SELECT *
2    FROM survey
3    LIMIT 10;
```

Survey table displays the columns:
question, *user_id*, and *response*

Quiz Funnel

2:

```
1   SELECT question, COUNT(response) AS
    'responses'
2   FROM survey
3   GROUP BY 1;
```

question	responses
1. What are you looking for?	500
2. What's your fit?	475
3. Which shapes do you like?	380
4. Which colors do you like?	361
5. When was your last eye exam?	270

Response Totals

code|cademy

Quiz Funnel

3:

```
1  SELECT question, COUNT(response) AS
   'responses'
2  FROM survey
3  GROUP BY 1;
```

question	responses	responses %
1. What are you looking for?	500	100.00%
2. What's your fit?	475	95.00%
3. Which shapes do you like?	380	76.00%
4. Which colors do you like?	361	72.20%
5. When was your last eye exam?	270	54.00%

Which question(s) of the quiz have a lower completion rates?

The percentage of responses decrease with each new question, with question 5 having the lowest response rate overall. You are less likely to retain your audience the more questions you ask them.

codecademy

Quiz Funnel

4:

```sql
1  SELECT *
2  FROM quiz
3  LIMIT 5;
4
5  SELECT *
6  FROM home_try_on
7  LIMIT 5;
8
9  SELECT *
10 FROM purchase
11 LIMIT 5;
```

quiz table columns:

user_id, style, fit, shape, color

home_try_on table columns:

user_id, number_of_pairs, address

purchase table columns:

User_id, product_id, style, model_name, color, price

codecademy

Quiz Funnel

5: Left Join to combine three tables

```sql
1    SELECT DISTINCT quiz.user_id,
2      home_try_on.user_id IS NOT NULL AS 'is_home_try_on',
3      home_try_on.number_of_pairs,
4      purchase.user_id IS NOT NULL AS 'is_purchase'
5    FROM quiz
6    LEFT JOIN home_try_on
7      ON quiz.user_id = home_try_on.user_id
8    LEFT JOIN purchase
9      ON purchase.user_id = quiz.user_id
10   LIMIT 10;
```

user_id	is_home_try_on	number_of_pairs	is_purchase
4e8118dc-bb3d-49bf-85fc-cca8d83232ac	1	3 pairs	0
291f1cca-e507-48be-b063-002b14906468	1	3 pairs	1
75122300-0736-4087-b6d8-c0c5373a1a04	0	Ø	0
75bc6ebd-40cd-4e1d-a301-27ddd93b12e2	1	5 pairs	0
ce965c4d-7a2b-4db6-9847-601747fa7812	1	3 pairs	1
28867d12-27a6-4e6a-a5fb-8bb5440117ae	1	5 pairs	1
5a7a7e13-fbcf-46e4-9093-79799649d6c5	0	Ø	0
0143cb8b-bb81-4916-9750-ce956c9f9bd9	0	Ø	0
a4ccc1b3-cbb6-449c-b7a5-03af42c97433	1	5 pairs	0
b1dded76-cd60-4222-82cb-f6d464104298	1	3 pairs	0

Query Results

code|cademy

Quiz Funnel

6: Actionable Insights

More users are likely to make a purchase when they are given more choices of glasses to choose from. Aside from potential costs or efforts that would go into sending more glasses, I'd recommend sending 5 pairs each time.

```sql
SELECT COUNT(DISTINCT quiz.user_id) AS 'Total Users',
  home_try_on.user_id IS NOT NULL AS 'is_home_try_on',
  home_try_on.number_of_pairs,
  purchase.user_id IS NOT NULL AS 'is_purchase'
FROM quiz
LEFT JOIN home_try_on
  ON quiz.user_id = home_try_on.user_id
LEFT JOIN purchase
  ON purchase.user_id = quiz.user_id
WHERE is_purchase = 1 AND number_of_pairs = '3 pairs';

SELECT COUNT(DISTINCT quiz.user_id) AS 'Total Users',
  home_try_on.user_id IS NOT NULL AS 'is_home_try_on',
  home_try_on.number_of_pairs,
  purchase.user_id IS NOT NULL AS 'is_purchase'
FROM quiz
LEFT JOIN home_try_on
  ON quiz.user_id = home_try_on.user_id
LEFT JOIN purchase
  ON purchase.user_id = quiz.user_id
WHERE is_purchase = 1 AND number_of_pairs = '5 pairs';
```

Query Results			
Total Users	is_home_try_on	number_of_pairs	is_purchase
201	1	3 pairs	1
Total Users	is_home_try_on	number_of_pairs	is_purchase
294	1	5 pairs	1

codecademy

Quiz Funnel

Fin