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Capstone

Usage Funnels with Warby Parker
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1. Quiz Funnel: Survey

1.Survey: Quiz
Steps 1-3

1. What columns does the table have?
- Question, user_id and response

2. What is the number of responses for each question?
- By performing an aggregate count function on the unique user ids and grouping by question, one can see the number of respondents per question- see below

3. Which question(s) of the quiz have a lower completion rates? What do you think is the reason?
- See below for completion rate executed on Excel
- The questions with the lowest rates are 3 and 5. 3 could be low because it is vague and consumers may not know what 'fit' means in context, and 5 could be low because it is a personal question that consumers may not know the answer to

Question	COUNT(DISTINCT user_id)	% Completing this question
1. What are you looking for?	500	100%
2. What's your fit?	475	95%
3. Which shapes do you like?	380	80%
4. Which colors do you like?	361	95%
5. When was your last eye exam?	270	75%

```
SELECT *
FROM survey
LIMIT 10;

SELECT question, COUNT(DISTINCT
user_id)
FROM survey
GROUP BY question;
```

2. Home Try-On Funnel: Quiz

2. Home Try-On Funnel: Quiz, Home Try-On, Purchase Steps 4-5

1. What are the column names?
- **Quiz:** user_id, style, fit, shape, color
- **Home_try_on:** user_id, number_of_pairs, address
- **Purchase:** user_id, product_id, style, model_name, color, price

2. Left Join combining the three tables
- By performing a left join, it will return every row for the left table, and if the condition isn't met, null values are used to fill in the columns from the right table(s)
- By putting the information of three tables into one from the top of the funnel (browse) to the end (purchase), one can begin to analyze the effect of the A/B test during the Home Try-On stage (the number of pairs of glasses influencing the decision to purchase)

user_id	is_home_try_on	number_of_pairs	is_purchase
4e8118dc-bb3d-49bf-85fc-cca8d83232ac	1	3 pairs	0

*example of one row from the 10 that were pulled

```
SELECT *
FROM quiz
LIMIT 5;

SELECT *
FROM home_try_on
LIMIT 5;

SELECT *
FROM purchase
LIMIT 5;

SELECT DISTINCT q.user_id,
    h.user_id IS NOT NULL AS 'is_home_try_on',
    h.number_of_pairs,
    p.user_id IS NOT NULL AS 'is_purchase'
FROM quiz q
LEFT JOIN home_try_on h
    ON q.user_id = h.user_id
LEFT JOIN purchase p
    ON p.user_id = q.user_id
LIMIT 10;
```

3. Home Try-On Funnel: Actionable Insight

3. Home Try-On Funnel: Actionable Insight Step 6

1. What are some actionable insights for Warby Parker?
- One can calculate the difference in purchase rates between customers who had 3 pairs versus those with 5
- First, find the total number of users who received 3 and 5 pairs and how many who received 3 and 5 pairs purchased
- Second, find the total of those who received 3 pairs, then those who received 3 pairs and actually purchased
- The code to the right shows what I performed on both 3 pairs and 5 pairs (only shows example for 3 pairs, but same for 5 pairs).

Total_pairs
750
Total_pairs_purchased
495

Three_pairs	Five_pairs
379	371
Three_pairs_purchased	**Five_pairs_purchased**
201	294

```
WITH results AS (
SELECT DISTINCT q.user_id,
    h.user_id IS NOT NULL AS 'is_home_try_on',
    h.number_of_pairs,
    p.user_id IS NOT NULL AS 'is_purchase'
FROM quiz q
LEFT JOIN home_try_on h
    ON q.user_id = h.user_id
LEFT JOIN purchase p
    ON p.user_id = q.user_id)

SELECT COUNT(number_of_pairs) AS three_pairs
FROM results
WHERE number_of_pairs IN ('3 pairs', '5 pairs');

WITH results AS (
…)
SELECT COUNT(is_purchase)
FROM results
WHERE is_purchase IN (1);

WITH results AS (
…)

SELECT COUNT(number_of_pairs) AS three_pairs_purchased
FROM results
WHERE number_of_pairs IN ('3 pairs');


WITH results AS (
…)

SELECT COUNT(number_of_pairs) AS three_pairs_purchased
FROM results
WHERE number_of_pairs IN ('3 pairs') AND is_purchase IN (1);
```

3. Home Try-On Funnel: Actionable Insight Step 6

- A conclusion that can be drawn from comparing the purchase rates of those who received 3 pairs to those that received 5 pairs is that those who received 5 pairs were more likely to make a purchase
- An actionable insight could be to provide all consumers who request an at home trial with five pairs as they may be more inclined to purchase

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