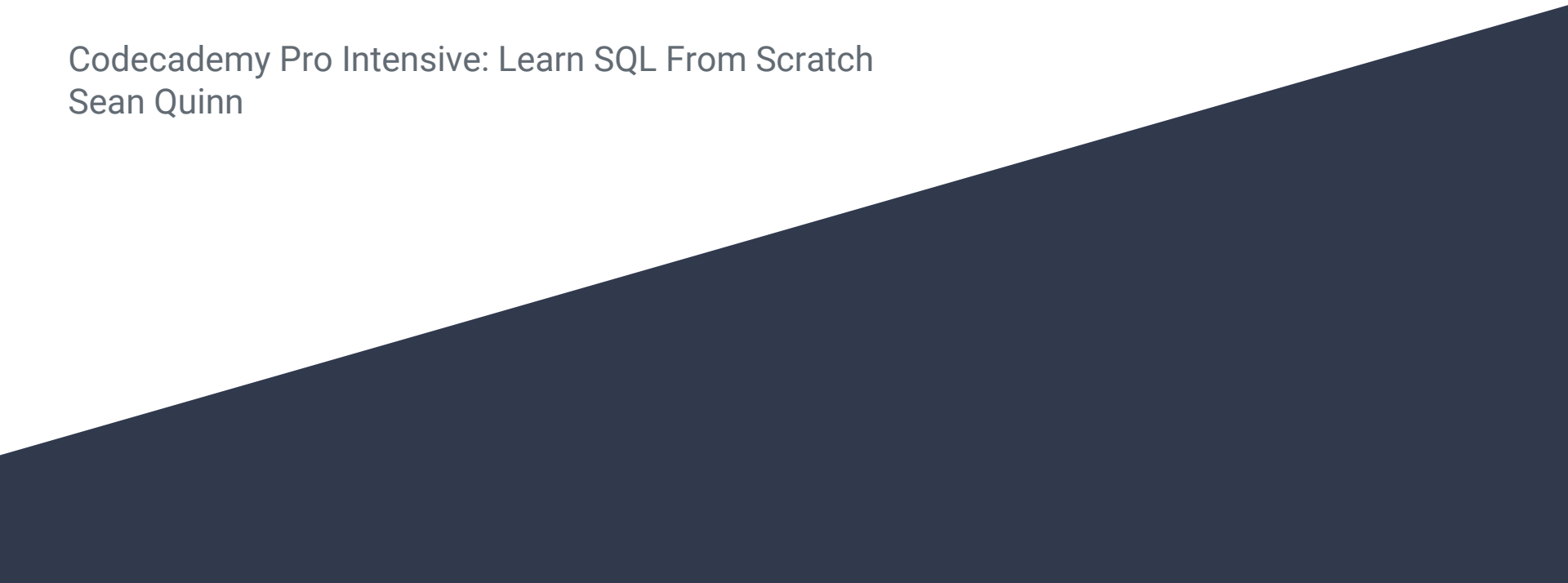


Warby Parker Capstone Project

Codecademy Pro Intensive: Learn SQL From Scratch
Sean Quinn

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Style Quiz Funnel

1. "What are you looking for?"
2. "What's your fit?"
3. "Which shapes do you like?"
4. "Which colors do you like?"
5. "When was your last eye exam?"

- To help users find the glasses that are best for them, Warby Parker has users complete a Style Quiz, which stores the responses in a table called 'survey.'
- *What columns does the table have?*
 - Has following columns:
 - question
 - user_id
 - response

Style Quiz Funnel

```
1 -- Quiz Funnel Discovery
2 SELECT *
3 FROM survey
4 LIMIT 10;
5
6 -- Quiz Funnel Grouped By Question
7 SELECT question, COUNT(DISTINCT user_id)
8 FROM survey
9 GROUP BY question;
```

- *What is the number of responses for each question?*
 - 1. What are you looking for? - 500
 - 100% answered
 - 2. What's your fit? - 475
 - 95% answered
 - 3. Which shapes do you like? - 380
 - 80% answered
 - 4. Which colors do you like? - 361
 - 95% answered
 - 5. When was your last eye exam? - 270
 - 74.79% answered
- *Which question(s) of the quiz have a lower completion rates?*
 - Lowest completion rates were Question 3 and Question 5
- *What do you think is the reason?*
 - Question 3 and Question 5 required a bit more complicated thinking and memory (Q5 requires user to remember if they've had an eye exam -- and when -- while Q3 asks about eyeglass shape.)

Home Try-On Stage

- Warby Parker has a purchase funnel that leads from the Style Quiz → Home Try-On → Purchasing the Perfect Pair of Glasses.
- To truly analyze this funnel, we'll need to combine data from three separate tables
 - quiz
 - home_try_on
 - purchase

Home Try-On Stage

```
-- Home Try-On Funnel
```

```
SELECT *  
FROM quiz  
LIMIT 5;
```

```
SELECT *  
FROM home_try_on  
LIMIT 5;
```

```
SELECT *  
FROM purchase  
LIMIT 5;
```

- *What are the column names?*
 - 3 tables: quiz, home_try_on, purchase
 - quiz has the following columns:
 - user_id
 - style
 - fit
 - shape
 - color
 - home_try_on has the following columns:
 - user_id
 - number_of_pairs
 - address
 - purchase has the following columns:
 - user_id
 - product_id
 - style
 - model_name
 - color
 - price

Home Try-On Stage

```
1  -- Home Try-On Funnel Left Join
2  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'
3  FROM quiz AS 'q'
4  LEFT JOIN home_try_on AS 'h' ON q.user_id =
   h.user_id
5  LEFT JOIN purchase as 'p' ON q.user_id =
   p.user_id
6  LIMIT 10;
```

- 1986 users started the survey
 - 1000 completed survey – 50.35% conversion rate
- 1000 total users in the quiz table
 - 750 completed the quiz and moved to home try-on
 - **75% conversion rate from quiz -> home try-on**
 - 37.76% conversion rate from survey -> home try-on
 - 495 completed the quiz and purchased glasses
 - **66% conversion rate from home-try-on -> purchase**
 - 49.5% conversion rate from quiz -> purchase
 - 24.92% conversion rate from survey -> purchase

Home Try-On Stage

```
-- Number of Pairs Comparison (3 Pairs - 201
purchases)

WITH comparison 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 AS 'q'
LEFT JOIN home_try_on AS 'h' ON q.user_id =
h.user_id
LEFT JOIN purchase as 'p' ON q.user_id =
p.user_id)

SELECT SUM(is_purchase)
FROM comparison
WHERE number_of_pairs IS '3 pairs';
```

- *Let's find out whether or not users who get more pairs to try on at home will be more likely to make a purchase.*
 - Users who received 3 pairs made 201 purchases (40.61%)
 - Users who received 5 pairs made 294 purchases (59.39%)
 - Receiving 5 pairs at home-try on is statistically significant in leading to more purchases.

Actionable Insights for Warby Parker

- For the **quiz funnel**, optimize Question 3 and Question 5 to ensure people aren't falling through the funnel
 - How important is the eye exam question during the Style Quiz? Is it something that can be asked later in the process?
 - Perhaps flipping Question 4 with Question 3 would be helpful since people seemed more willing to answer the question about color over shapes.
- For the **purchase funnel**, declare "5 pairs" winner of A/B test and ensure all Home Try-Ons ship with 5 pairs of glasses
- For the purchase funnel, **encourage home try-on**. Completing home try-on makes users more likely than anything else (quiz to purchase glasses).

Additional data/fun facts:

- In the A/B test, 379 received 3 number of pairs and 371 received 5 number of pairs
- The most popular glasses were:
 - Eugene Narrow for women's styles (116 purchases)
 - Dawes for men's styles (107 purchases)
- The most popular colors were:
 - Jet Black for women (86 purchases)
 - Driftwood Fade for men (63 purchases)
- Survey analysis:
 - In the survey, more were looking for men's styles (242) than women's styles (209).
 - However, more women purchased glasses (252) to men (243).
 - Narrow most popular fit in the survey (208), followed by medium (132), then wide (88)
 - Rectangular most preferred shape (141), followed by square (119), then round (91).
 - Tortoise most popular color (117), closely followed by black (112) and then crystal (69).
 - Most had an eye exam within a year (141), followed by those who had one within the last 1-3 years (56)