



Usage Funnels with Warby Parker

Learn SQL from Scratch

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Table of Contents

1. Warby Parker Style Quiz
 - 1.1 Funnel Questions
 - 1.2 Survey Table Columns & Query Results
2. Survey Drop-out Points
3. Users Who Answered the Funnel Questions
4. Home Try-On Purchase Funnel
 - 4.1 Tables and Columns
5. User – Purchase Table
6. Purchase Analysis

1. Warby Parker Style Quiz

1.1 Funnel Questions

To help users find their perfect frame, Warby Parker has a Style Quiz that has the following questions:

- ☐ "What are you looking for?"
- ☐ "What's your fit?"
- ☐ "Which shapes do you like?"
- ☐ "Which colors do you like?"
- ☐ "When was your last eye exam?"

1.2 Survey Table Columns & Query Results

Here are the columns of the survey table:

column 1 - question

column 2 - user_id

column 3 - response

Query:

project.sqlite

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

Query Results		
question	user_id	response
1. What are you looking for?	005e7f99-d48c-4fce-b605-10506c85aaf7	Women's Styles
2. What's your fit?	005e7f99-d48c-4fce-b605-10506c85aaf7	Medium
3. Which shapes do you like?	00a556ed-f13e-4c67-8704-27e3573684cd	Round
4. Which colors do you like?	00a556ed-f13e-4c67-8704-27e3573684cd	Two-Tone
1. What are you looking for?	00a556ed-f13e-4c67-8704-27e3573684cd	I'm not sure. Let's skip it.
2. What's your fit?	00a556ed-f13e-4c67-8704-27e3573684cd	Narrow
5. When was your last eye exam?	00a556ed-f13e-4c67-8704-27e3573684cd	<1 Year
3. Which shapes do you like?	00bf9d63-0999-43a3-9e5b-9c372e6890d2	Square
5. When was your last eye exam?	00bf9d63-0999-43a3-9e5b-9c372e6890d2	<1 Year
2. What's your fit?	00bf9d63-0999-43a3-9e5b-9c372e6890d2	Medium

2. Survey Drop-out Points

What is the number of responses for each question?

Question 1 - 500

Question 2 - 475

Question 3 - 380

Question 4 - 361

Question 5 - 270

Query:

project.sqlite

```
1 SELECT question, COUNT(DISTINCT user_id) |
2 FROM survey
3 GROUP BY question;
```

Query Results	
question	COUNT(DISTINCT user_id)
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

3. Users Who Answered the Funnel Questions

	A	B	C	D	E
1					
2		Questions:	# of distinct users	Formula	Percentage
3		1. "What are you looking for?"	500	=SUM(C3/C3)	100%
4		2. "What's your fit?"	475	=SUM(C4/C3)	95%
5		3. "Which shapes do you like?"	380	=SUM(C5/C4)	80%
6		4. "Which colors do you like?"	361	=SUM(C6/C5)	95%
7		5. "When was your last eye exam?"	270	=SUM(C7/C6)	75%
8					

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

Answer: Questions 3 and 5 have lower completion rates.

- What do you think is the reason?

Answer: People care less about the shape of their glasses, some will buy as fashion accessory.
When was your last eye exam? – Most people are not sure when their last eye exam was. Others opted to go online because they don't have insurance and eye exam is probably expensive.

4. Home Try-On Purchase Funnel

Query Results

user_id	style	fit	shape	color
4e8118dc-bb3d-49bf-85fc-cca8d83232ac	Women's Styles	Medium	Rectangular	Tortoise
291f1cca-e507-48be-b063-002b14906468	Women's Styles	Narrow	Round	Black
75122300-0736-4087-b6d8-c0c5373a1a04	Women's Styles	Wide	Rectangular	Two-Tone
75bc6ebd-40cd-4e1d-a301-27ddd93b12e2	Women's Styles	Narrow	Square	Two-Tone
ce965c4d-7a2b-4db6-9847-601747fa7812	Women's Styles	Wide	Rectangular	Black

user_id	number_of_pairs	address
d8add87-3217-4429-9a01-d56d68111da7	5 pairs	145 New York 9a
f52b07c8-abe4-4f4a-9d39-ba9fc9a184cc	5 pairs	383 Madison Ave
8ba0d2d5-1a31-403e-9fa5-79540f8477f9	5 pairs	287 Pell St
4e71850e-8bbf-4e6b-accb-49a7bb46c586	3 pairs	347 Madison Square N
3bc8f97f-2336-4dab-bd86-e391609dab97	5 pairs	182 Cornelia St

user_id	product_id	style	model_name	color	price
00a9dd17-36c8-430c-9d76-df49d4197dcf	8	Women's Styles	Lucy	Jet Black	150
00e15fe0-c86f-4818-9c63-3422211baa97	7	Women's Styles	Lucy	Elderflower Crystal	150
017506f7-aba1-4b9d-8b7b-f4426e71b8ca	4	Men's Styles	Dawes	Jet Black	150
0176bfb3-9c51-4b1c-b593-87edab3c54cb	10	Women's Styles	Eugene Narrow	Rosewood Tortoise	95
01fdf106-f73c-4d3f-a036-2f3e2ab1ce06	8	Women's Styles	Lucy	Jet Black	150

Query:

project.sqlite

```
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;
```


4.1 Tables and Columns

- quiz table has the following columns:

user_id

style

fit

shape

color

- home_try_on table has the following columns:

user_id

number_of_pairs

address

- purchase table has the following columns:

user_id

product_id

style

model_name

color

price

Query:

```
project.sqlite

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;
```

5. User – Purchase Table

Query Results			
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	∅	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	∅	0
0143cb8b-bb81-4916-9750-ce956c9f9bd9	0	∅	0
a4ccc1b3-cbb6-449c-b7a5-03af42c97433	1	5 pairs	0
b1dded76-cd60-4222-82cb-f6d464104298	1	3 pairs	0

IS NOT NULL will return:

1 (True) if a non-empty value is found

0 (False) if a NULL value is found

Query:

```
project.sqlite

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

6. Purchase Analysis

What are some actionable insights for Warby Parker?

70% of the users who took the quiz tried eyeglasses at home and out of those who tried only about 45% purchased.

50% of the users who tried 3 pairs purchased the eyeglasses

Only 33% of the users who tried 5 pairs purchased the eyeglasses.

I conclude that those users who tried 3 pairs are most likely to purchase the eyeglasses because they know what they want and they are more decided to buy eyeglasses.