Lab 1: Loading Data In Looker

In this lab, let's go through the data that will be analyzing when we're creating our analysis reports, looks and dashboards. So, you have a familiarity with what we're working with.

So you can find this Excel file in the GitHub repository of this course.

`https://github.com/fenago/looker-bootcamp/blob/main/ElementRentalData.xlsx`

Note: You can open open the file in microsoft office or view the file in below online viewer:

`https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fraw.githubusercontent.com%2Ffenago%2Flooker-bootcamp%2Fmain%2FElementRentalData.xlsx&wdOrigin=BROWSELINK`

So, well, what I've done over here is I've created a sample company called Element Rental.

What they do is they simply rent out heavy equipment to companies.

OK, and they have offices all over the U.S.

So the first table simply tells us the products that are available to be rented.

	A	B	C	D	E	F	G	H
1	product_id	product_name	product_categ	product_hourly_price				
2	1	Back Truck	Medium	1238				
3	2	Bulldozer	Medium	1583				
4	3	Compactor	Light	1904				
5	4	Crawler	Light	1735				
6	5	Dragline	Light	1633				
7	6	Dump Truck	Heavy	1948				
8	7	Excavator	Heavy	1979				
9	8	Grader	Heavy	1325				
10	9	Scraper	Heavy	1894				
11	10	Skid-Steer	Medium	1506				
12	11	Trencher	Medium	1217				
13								
14								
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16								
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20								
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23								

Product | Salesperson | Customer | Office | Transaction | Inventory

You can see here that there are 11 products at truck bulldozer, compactor crawlers, things like that,

For example, they might have like 20 bulldozers, right?

But all of them have a product idea of to any product name of bulldozer, and each product also gets a category.

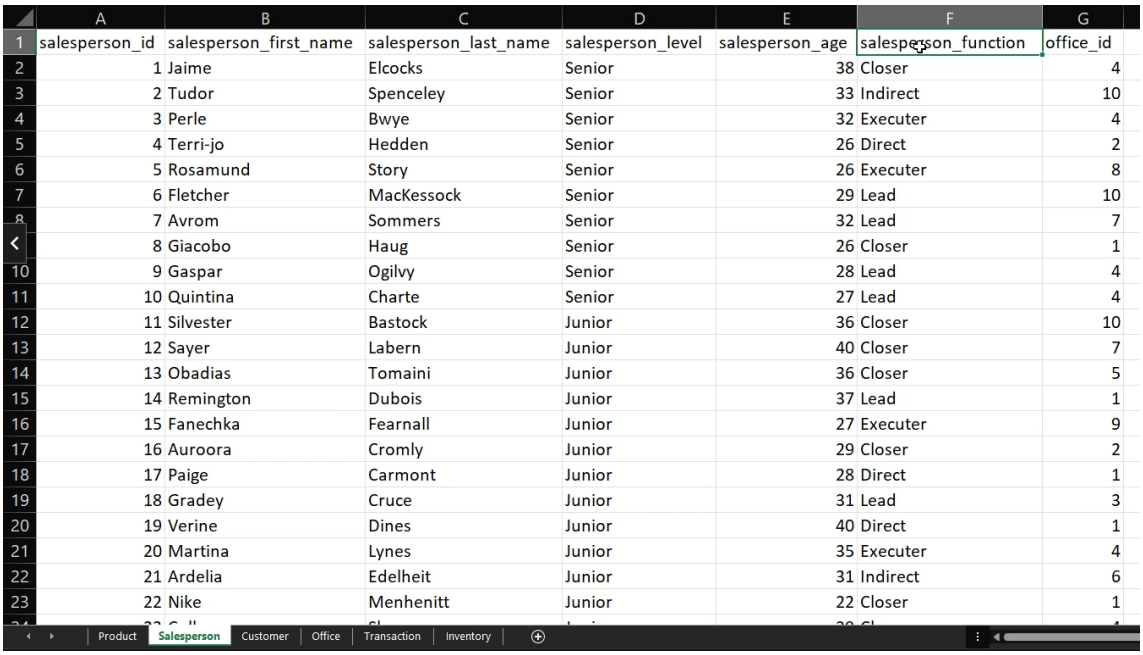
There can be medium products, light products or heavy products.

And you also know what the hourly price for rent is for every product.

So, for example, if a customer wants to rent out a `compactor`, it would be `$1904` per hour.

OK, so that's a product.

We also have a table that lists all of our salespeople.



	A	B	C	D	E	F	G
1	salesperson_id	salesperson_first_name	salesperson_last_name	salesperson_level	salesperson_age	salesperson_function	office_id
2	1	Jaime	Elcocks	Senior	38	Closer	4
3	2	Tudor	Spenceley	Senior	33	Indirect	10
4	3	Perle	Bwye	Senior	32	Executer	4
5	4	Terri-jo	Hedden	Senior	26	Direct	2
6	5	Rosamund	Story	Senior	26	Executer	8
7	6	Fletcher	MacKessock	Senior	29	Lead	10
8	7	Avrom	Sommers	Senior	32	Lead	7
9	8	Giacobo	Haug	Senior	26	Closer	1
10	9	Gaspar	Ogilvy	Senior	28	Lead	4
11	10	Quintina	Charte	Senior	27	Lead	4
12	11	Silvester	Bastock	Junior	36	Closer	10
13	12	Sayer	Labern	Junior	40	Closer	7
14	13	Obadias	Tomaini	Junior	36	Closer	5
15	14	Remington	Dubois	Junior	37	Lead	1
16	15	Fanechka	Fearnall	Junior	27	Executer	9
17	16	Auroora	Cromly	Junior	29	Closer	2
18	17	Paige	Carmont	Junior	28	Direct	1
19	18	Gradey	Cruce	Junior	31	Lead	3
20	19	Verine	Dines	Junior	40	Direct	1
21	20	Martina	Lynes	Junior	35	Executer	4
22	21	Ardelia	Edelheit	Junior	31	Indirect	6
23	22	Nike	Menhenitt	Junior	22	Closer	1

Product | Salesperson | Customer | Office | Transaction | Inventory

We can see we have 100 salespeople.

We have their first name, last name, what level they are.

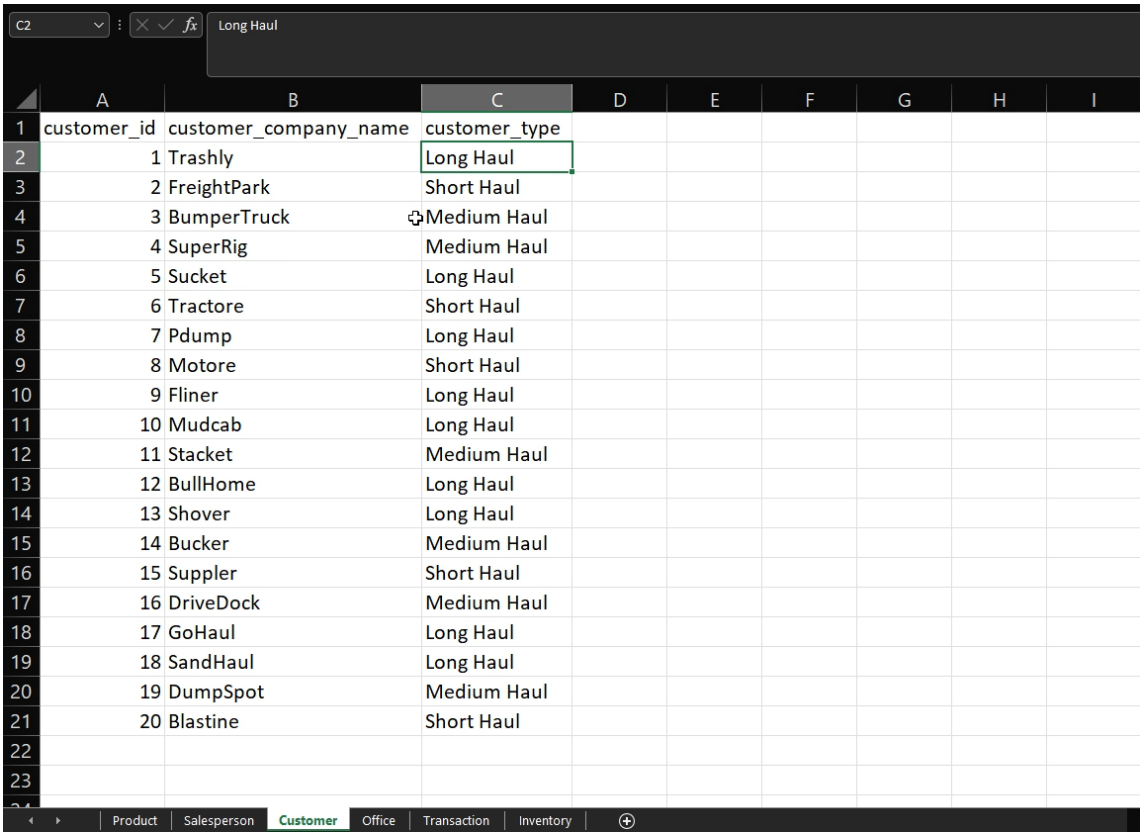
There are about 10 seniors and the rest are juniors.

We know their age and function they they serve.

Some are direct salespeople, some are lead salespeople and so on and so forth.

And we also know the office that they belong to.

The next is our list of customers.



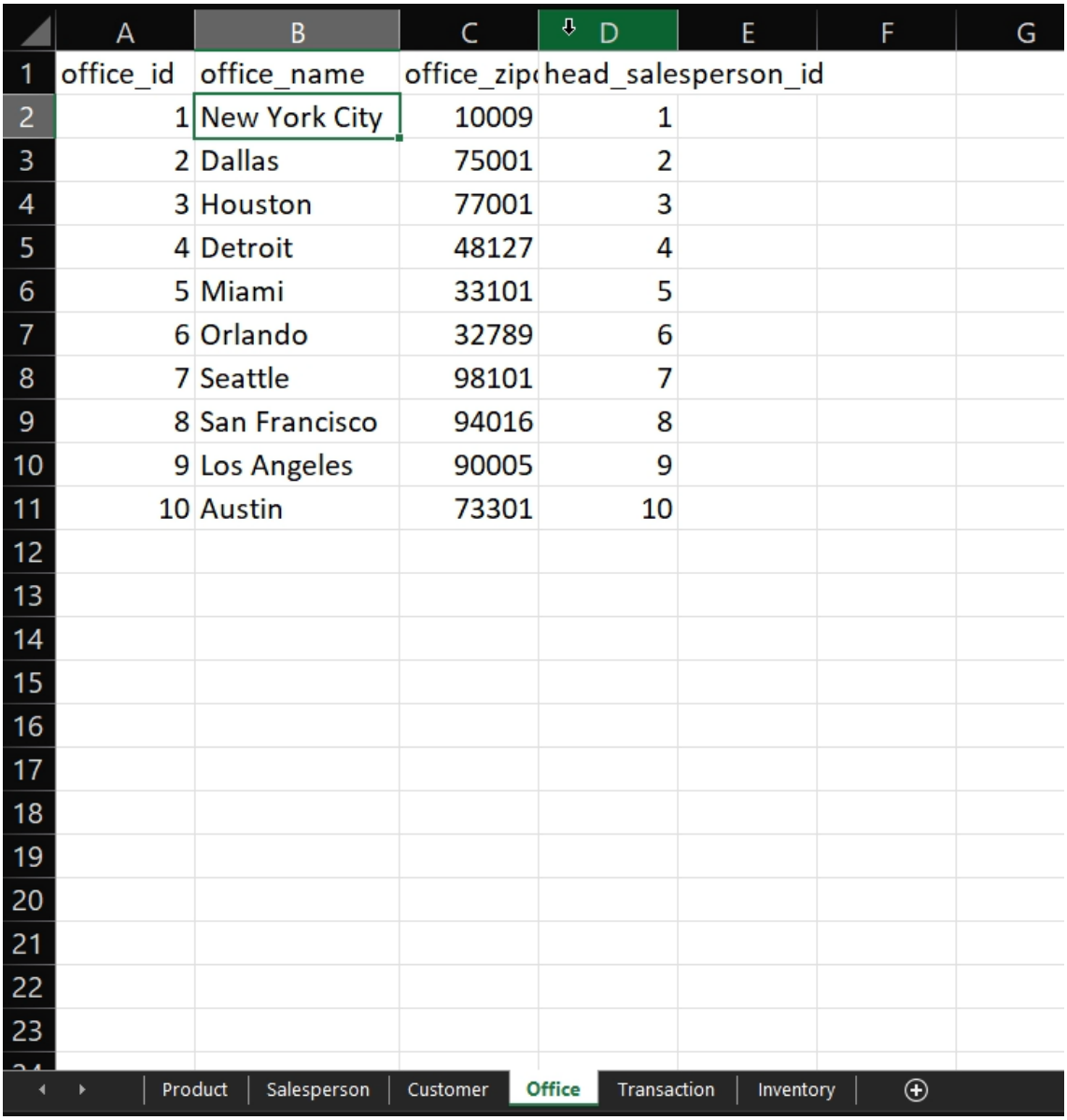
customer_id	customer_company_name	customer_type
1	Trashly	Long Haul
2	FreightPark	Short Haul
3	BumperTruck	Medium Haul
4	SuperRig	Medium Haul
5	Sucket	Long Haul
6	Tractore	Short Haul
7	Pdump	Long Haul
8	Motore	Short Haul
9	Fliner	Long Haul
10	Mudcab	Long Haul
11	Stacket	Medium Haul
12	BullHome	Long Haul
13	Shover	Long Haul
14	Bucker	Medium Haul
15	Suppler	Short Haul
16	DriveDock	Medium Haul
17	GoHaul	Long Haul
18	SandHaul	Long Haul
19	DumpSpot	Medium Haul
20	Blastine	Short Haul

This company has 20 customers.

So we have their customer I.D., we have their customer company name.

And then you also know with a customer type is so `Trashly` is a long haul customer, whereas `BumperTruck` is a medium haul customer, for example.

OK, next, we have data about our offices, so we know for.



	A	B	C	D	E	F	G
1	office_id	office_name	office_zip	head_salesperson_id			
2	1	New York City	10009	1			
3	2	Dallas	75001	2			
4	3	Houston	77001	3			
5	4	Detroit	48127	4			
6	5	Miami	33101	5			
7	6	Orlando	32789	6			
8	7	Seattle	98101	7			
9	8	San Francisco	94016	8			
10	9	Los Angeles	90005	9			
11	10	Austin	73301	10			
12							
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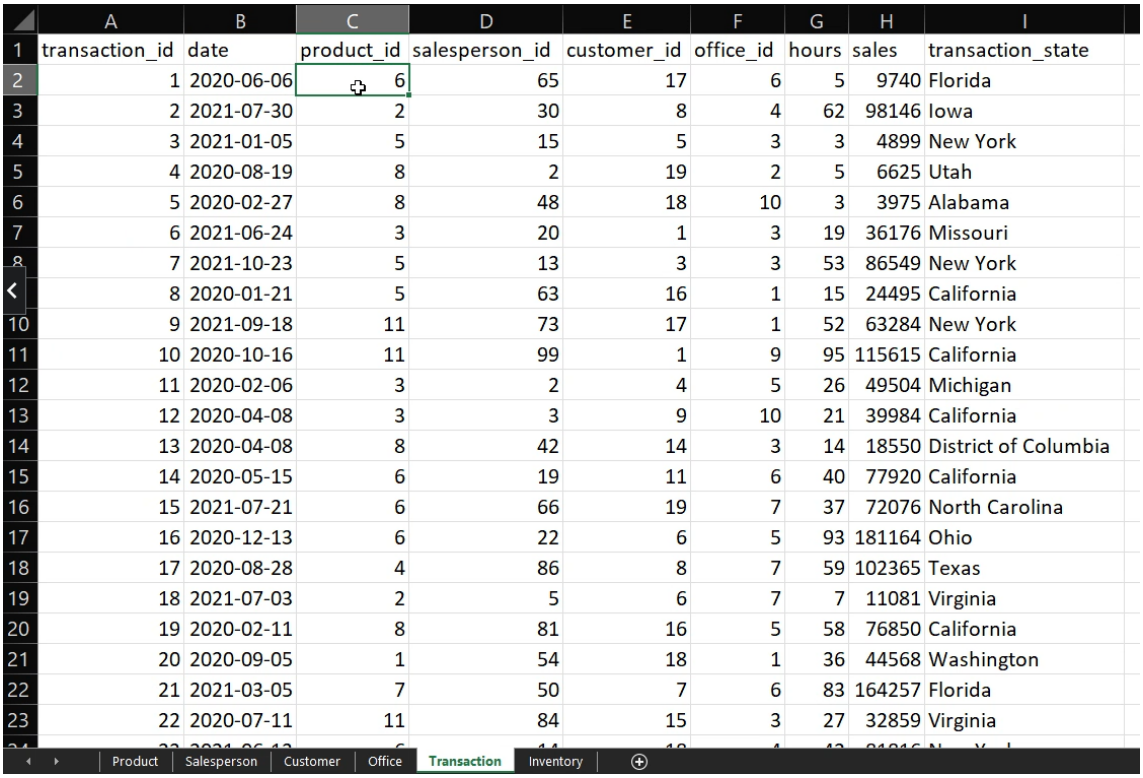
Product | Salesperson | Customer | Office | Transaction | Inventory

We have 10 offices. Each office has a name and zip code.

And we know who the sales person who the head salesperson id for each office.

OK, then we go to our biggest dataset, which is transaction.



	A	B	C	D	E	F	G	H	I
1	transaction_id	date	product_id	salesperson_id	customer_id	office_id	hours	sales	transaction_state
2	1	2020-06-06	6	65	17	6	5	9740	Florida
3	2	2021-07-30	2	30	8	4	62	98146	Iowa
4	3	2021-01-05	5	15	5	3	3	4899	New York
5	4	2020-08-19	8	2	19	2	5	6625	Utah
6	5	2020-02-27	8	48	18	10	3	3975	Alabama
7	6	2021-06-24	3	20	1	3	19	36176	Missouri
8	7	2021-10-23	5	13	3	3	53	86549	New York
9	8	2020-01-21	5	63	16	1	15	24495	California
10	9	2021-09-18	11	73	17	1	52	63284	New York
11	10	2020-10-16	11	99	1	9	95	115615	California
12	11	2020-02-06	3	2	4	5	26	49504	Michigan
13	12	2020-04-08	3	3	9	10	21	39984	California
14	13	2020-04-08	8	42	14	3	14	18550	District of Columbia
15	14	2020-05-15	6	19	11	6	40	77920	California
16	15	2021-07-21	6	66	19	7	37	72076	North Carolina
17	16	2020-12-13	6	22	6	5	93	181164	Ohio
18	17	2020-08-28	4	86	8	7	59	102365	Texas
19	18	2021-07-03	2	5	6	7	7	11081	Virginia
20	19	2020-02-11	8	81	16	5	58	76850	California
21	20	2020-09-05	1	54	18	1	36	44568	Washington
22	21	2021-03-05	7	50	7	6	83	164257	Florida
23	22	2020-07-11	11	84	15	3	27	32859	Virginia

Product | Salesperson | Customer | Office | Transaction | Inventory

Each row here represents a transaction or basically like a buying or selling.

Over here, what we see is basically a list of transactions and for each transaction ID.

So for each transaction, we know the date it occurred, what product was sold?

Who sold it to the salesperson ID, who it was sold to the customer and what officer was sold in.

The number of hours that the product was rented out for and the total sales.

Basically, the rental happened on June 6th. And perfect, the next thing, and the last one we have is the inventory.

	A	B	C	D	E	F	G
1	inventory_id	product_id	status	condition	office_id		
2	1	2	Held	94	1		
3	2	1	Open	51	8		
4	3	2	Open	55	9		
5	4	2	Open	58	2		
6	5	4	Open	34	3		
7	6	8	Held	8	2		
8	7	7	Held	40	1		
9	8	2	Open	16	1		
10	9	5	Open	86	7		
11	10	3	Held	40	4		
12	11	5	Open	94	6		
13	12	11	Open	46	2		
14	13	3	Held	20	5		
15	14	4	Held	11	5		
16	15	4	Open	15	8		
17	16	9	Open	88	3		
18	17	6	Open	51	10		
19	18	5	Held	86	1		
20	19	6	Held	26	7		
21	20	7	Open	39	4		
22	21	7	Held	90	3		
23	22	7	Held	65	5		

Product | Salesperson | Customer | Office | Transaction | Inventory

So all of our inventory and looks like we have about 200 pieces of inventory.

From one to 200, and each piece tells us what product ideas, the status of it, so if it's held by someone or if it's opened to be sold, the condition it's in, which is a number between zero to 100,

100 being high condition, zero being low condition and the office that it's currently in.

So, for example, inventory ID `1` is a bulldozer that is being held.

It's in pretty good condition.

Hell, it means it's with a customer right now, and it's part of Office `1`, which is New York City.

Loading Data

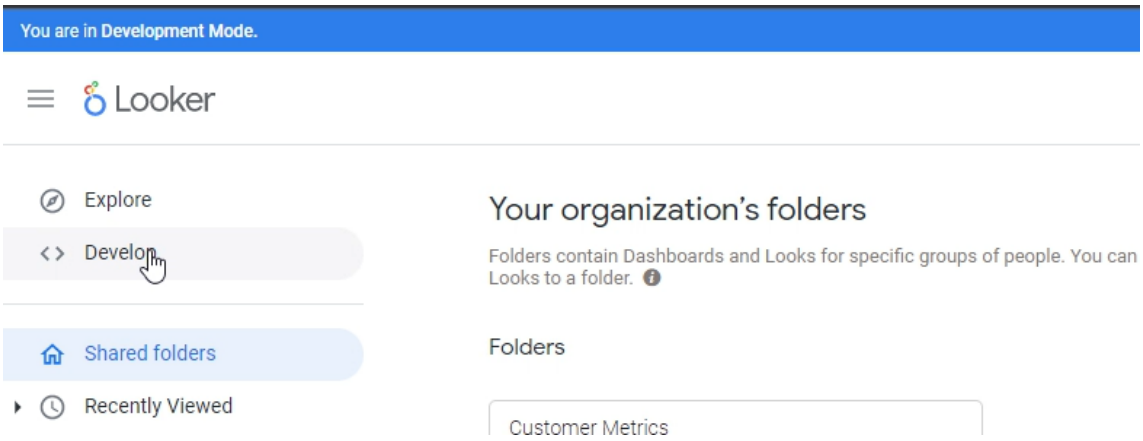
The next thing that we need to learn how to do is to import our element rental data i-e: Product, salesperson, customer, office, transaction and inventory to our looker instance.

So what we're going to learn is how to bring in that excel data into Looker.

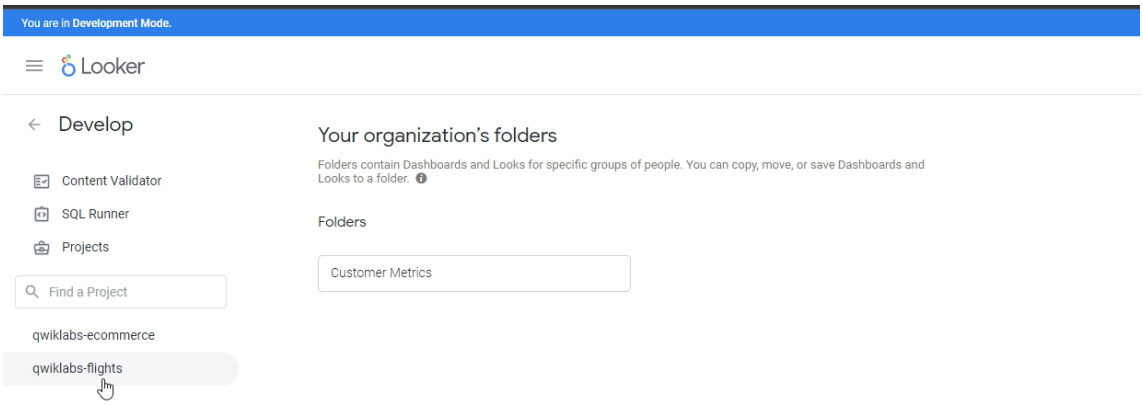
This method will work both if you're using the sandbox environment or if you have your own locker instance.

Let's turn on development mode over here.

Go to develop.



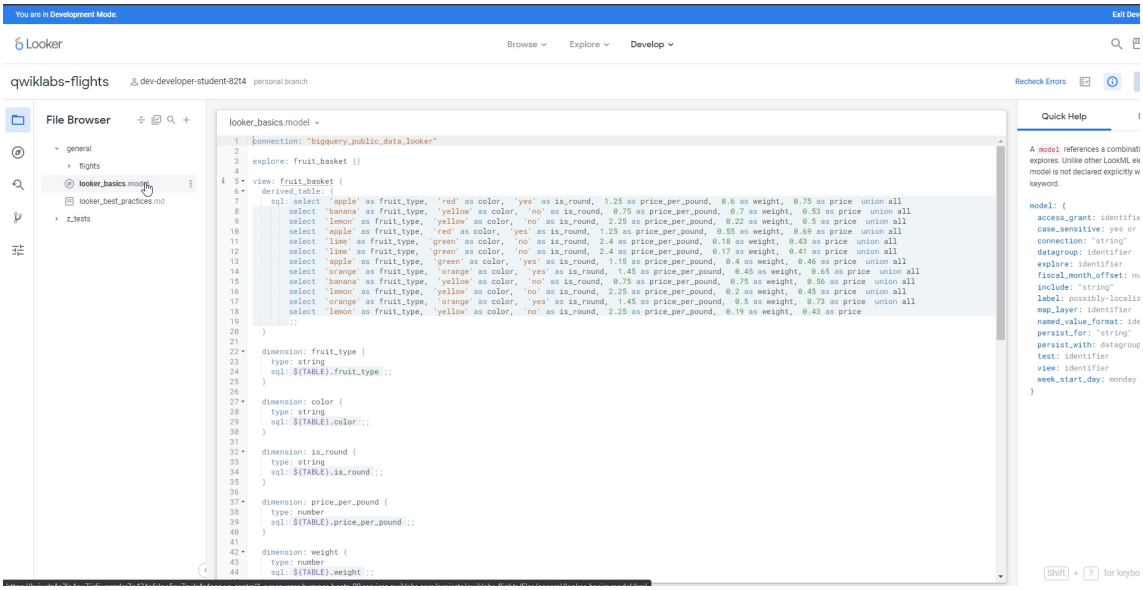
Go to if you're in your sandbox instance, then click with clubs flights, if you're not, then there should be another project that you can use instead, so just click any project that's in here.



If you are using your own instance, you can select any project.

And what you're going to do is you're going to find any thought model file, OK, in your file browser here.

Now, if you're again using the sandbox instance I Google provides, then choose this one looker underscored basic site model.

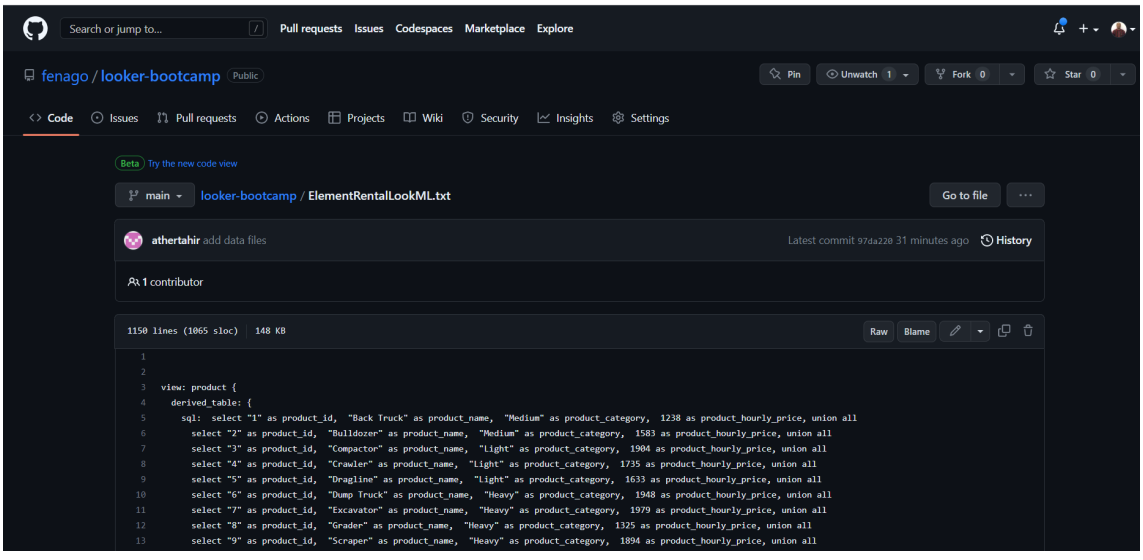


But if you're in your own instance, you can choose any .model.

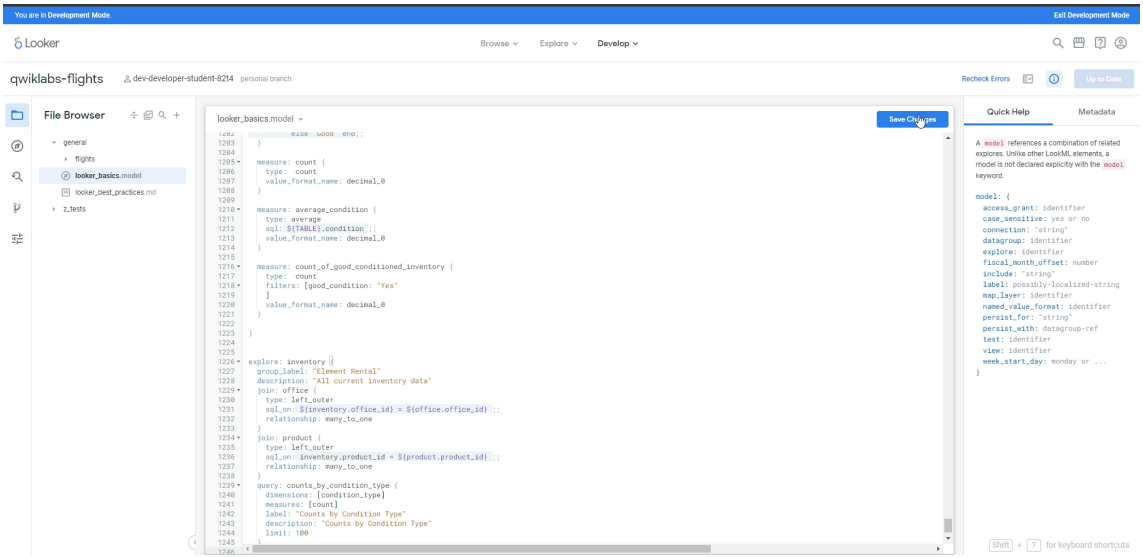
And then all you're going to do, OK, is go to the very end of that file and put in some spaces.

Now, open up the element rental file:

`https://github.com/fenago/looker-bootcamp/blob/main/ElementRentalLookML.txt`



And you're going to copy and paste that into here.



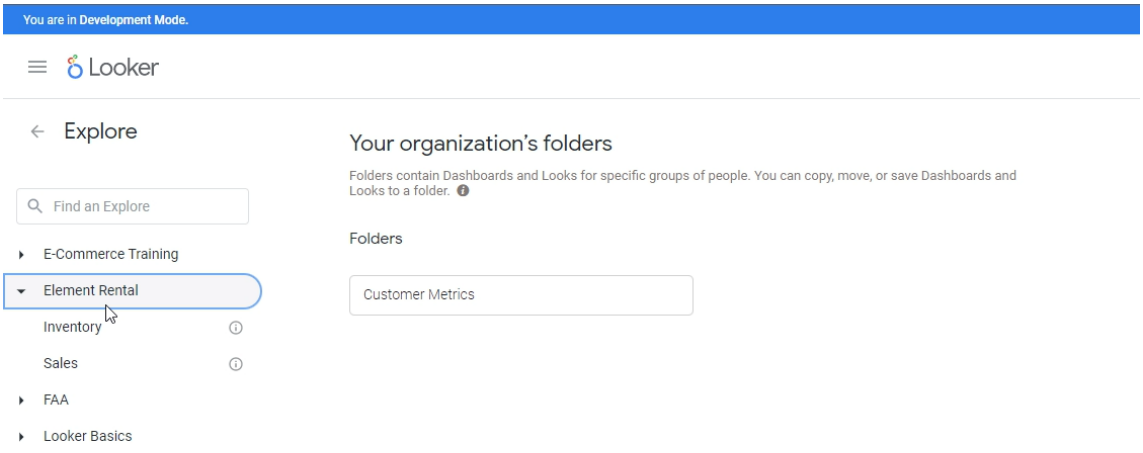
I'm going to copy it when you go back in here and you're going to paste it at the bottom of this file.

If you're using your own instance, then just do it at the bottom of that file.

So I'm going to put that in here and then click save changes.

And that's it, I'm done, what I need to do now is go back to Lookers Home page, so I just click look `Looker` on the top left.

And now if I click Explore. I should see a limited rental category.



And if we click it, we should have access to both sales and inventory.

OK, so if you've reached the stage that awesome, you've set up your environment perfectly.

If you are using sandbox environment, you have to follow the same process again once your instance refreshes.

Again, you have to turn on development mode, go into develop.

Right by any point, model, file copy and paste from the text file and save changes.