

# Excel Portfolio

By Mariia Bingeli

Welcome to my Excel portfolio, a showcase of my proficiency in utilizing **Microsoft Excel** to analyze data, streamline processes, and drive informed decision-making. As a dedicated professional with a strong background in data analysis and reporting, I have leveraged Excel's powerful features to transform raw data into valuable insights that support strategic business objectives. This portfolio highlights my expertise in creating **dynamic spreadsheets**, developing **complex formulas**, visualizing data through **charts and graphs**, and automating tasks to enhance efficiency and accuracy. I invite you to explore my portfolio and discover how my advanced Excel skills can add value to your organization.

## Project #1

### [Bike Sales Project](#)

In the scope of this project, my primary assignment entailed the creation of an interactive dashboard enriched with visually engaging graphs and charts. Additionally, a key objective was to conduct an in-depth analysis to pinpoint and understand the predominant demographic profile of the customer base associated with this particular store. By leveraging data visualization techniques and analytical tools within Excel, I aimed to provide valuable insights into the customer demographics, enabling strategic decision-making and targeted marketing initiatives for the business.

Screenshot of an Excel spreadsheet titled "Excel Project Bike Sales.xlsxb (2)". The spreadsheet contains data from row 1 to 47, spanning columns A to U. The data includes columns for ID, Marital Status, Gender, Income, Children, Education, Occupation, Home Owner, Cars, Commute Dist., Region, Age, and Purchased Bike.

**Column Headers:**

- A: ID
- B: Marital Status
- C: Gender
- D: Income
- E: Children
- F: Education
- G: Occupation
- H: Home Owner
- I: Cars
- J: Commute Dist.
- K: Region
- L: Age
- M: Purchased Bike
- N: (empty)
- O: (empty)
- P: (empty)
- Q: (empty)
- R: (empty)
- S: (empty)
- T: (empty)
- U: (empty)

**Sample Data:**

ID	Marital Status	Gender	Income	Children	Education	Occupation	Home Owner	Cars	Commute Dist.	Region	Age	Purchased Bike	(empty)	(empty)	(empty)	(empty)	(empty)
1	12496	M	\$40,000.00	1	Bachelors	Skilled Manual	Yes	0	0-1 Miles	Europe	42	No					
2	24107	M	\$30,000.00	3	Partial College	Clerical	Yes	1	0-1 Miles	Europe	43	No					
3	14177	M	\$80,000.00	5	Partial College	Professional	No	2	2-5 Miles	Europe	60	No					
4	24381	S	\$70,000.00	0	Bachelors	Professional	Yes	1	5-10 Miles	Pacific	41	Yes					
5	25958	M	\$10,000.00	0	Partial College	Clerical	No	0	0-1 Miles	Europe	36	Yes					
6	13507	M	\$10,000.00	2	Partial College	Manual	Yes	0	1-2 Miles	Europe	40	No					
7	23791	S	\$160,000.00	2	High School	Management	Yes	4	0-1 Miles	Pacific	33	Yes					
8	19364	M	\$40,000.00	1	Bachelors	Skilled Manual	Yes	0	0-1 Miles	Europe	43	Yes					
9	22155	M	\$20,000.00	2	Partial High Scl	Clerical	Yes	2	1-2 Miles	Pacific	58	No					
10	19280	M	\$120,000.00	2	Partial College	Manual	Yes	1	0-1 Miles	Europe	40	Yes					
11	22173	M	\$30,000.00	3	High School	Skilled Manual	No	2	1-2 Miles	Pacific	54	Yes					
12	12697	S	\$90,000.00	0	Bachelors	Professional	No	4	10+ Miles	Pacific	36	No					
13	11434	M	\$170,000.00	5	Partial College	Professional	Yes	0	0-1 Miles	Europe	55	No					
14	25598	M	\$80,000.00	0	Bachelors	Professional	No	4	1-2 Miles	Pacific	35	No					
15	23542	M	\$40,000.00	2	Partial College	Skilled Manual	Yes	1	0-1 Miles	Europe	55	No					
16	23543	S	\$60,000.00	1	Partial College	Skilled Manual	No	1	0-1 Miles	Pacific	46	Yes					
17	20870	S	\$10,000.00	2	High School	Manual	Yes	1	0-1 Miles	Europe	38	Yes					
18	23316	S	\$30,000.00	3	Partial College	Clerical	No	2	1-2 Miles	Pacific	59	Yes					
19	12610	M	\$30,000.00	1	Bachelors	Clerical	Yes	0	0-1 Miles	Europe	47	No					
20	27183	S	\$40,000.00	2	Partial College	Clerical	Yes	1	1-2 Miles	Europe	35	Yes					
21	25940	S	\$20,000.00	2	Partial High Scl	Clerical	Yes	2	5-10 Miles	Pacific	55	Yes					
22	25598	M	\$40,000.00	0	Graduate Degr	Clerical	Yes	0	0-1 Miles	Europe	36	Yes					
23	21564	S	\$80,000.00	0	Bachelors	Professional	No	4	10+ Miles	Pacific	35	No					
24	19364	S	\$40,000.00	2	Partial College	Skilled Manual	Yes	0	1-2 Miles	Europe	54	No					
25	26412	M	\$80,000.00	5	High School	Management	No	3	5-10 Miles	Europe	56	No					
26	27184	S	\$40,000.00	2	Partial College	Clerical	No	1	0-1 Miles	Europe	34	No					
27	12590	S	\$30,000.00	1	Bachelors	Clerical	Yes	0	0-1 Miles	Europe	63	No					
28	17841	S	\$30,000.00	0	Partial College	Clerical	No	1	0-1 Miles	Europe	29	Yes					
29	18283	S	\$100,000.00	0	Bachelors	Professional	No	1	5-10 Miles	Pacific	40	No					
30	18299	M	\$70,000.00	5	Partial College	Skilled Manual	Yes	2	5-10 Miles	Pacific	44	No					
31	16466	S	\$20,000.00	0	Partial High Scl	Manual	No	2	0-1 Miles	Europe	32	Yes					
32	19364	M	\$30,000.00	2	Partial College	Manual	Yes	0	0-1 Miles	Europe	63	No					
33	32400	M	\$10,000.00	0	Partial College	Manual	No	1	0-1 Miles	Pacific	46	Yes					
34	20942	S	\$20,000.00	0	High School	Manual	No	1	5-10 Miles	Europe	31	No					
35	18484	S	\$80,000.00	2	High School	Skilled Manual	No	2	1-2 Miles	Pacific	50	Yes					
36	12291	S	\$90,000.00	5	Partial College	Professional	No	2	2-5 Miles	Europe	62	Yes					
37	28380	S	\$10,000.00	5	Partial High Scl	Manual	No	2	0-1 Miles	Europe	41	No					
38	17891	M	\$10,000.00	2	Partial College	Manual	Yes	1	0-1 Miles	Europe	50	Yes					
39	27832	S	\$30,000.00	0	Partial College	Clerical	No	1	2-5 Miles	Europe	30	No					
40	20870	S	\$20,000.00	0	High School	Manual	No	1	5-10 Miles	Europe	40	No					
41	16259	S	\$10,000.00	4	Partial High Scl	Manual	Yes	2	0-1 Miles	Europe	40	Yes					
42	27803	S	\$30,000.00	2	Partial College	Clerical	No	0	0-1 Miles	Europe	43	No					
43	14347	S	\$40,000.00	2	Bachelors	Management	Yes	2	5-10 Miles	Pacific	65	Yes					
44	17703	M	\$10,000.00	1	Graduate Degr	Manual	Yes	0	0-1 Miles	Europe	40	No					
45	17185	M	\$170,000.00	4	Partial College	Professional	No	3	5-10 Miles	Europe	48	Yes					
46	29380	M	\$20,000.00	3	High School	Manual	Yes	0	0-1 Miles	Europe	41	Yes					
47	23986	M	\$20,000.00	1	Bachelors	Clerical	Yes	0	0-1 Miles	Europe	66	Yes					

Screenshot 1  
The original data

Screenshot of Microsoft Excel showing a data analysis project titled "Excel Project Bike Sales.xlsx". The data is contained in a table with columns including Gender, Income, Children, Education, Occupation, Home Owner, Cars, Commute Distance, Region, Age, Age Bracket, and Purchased Bike.

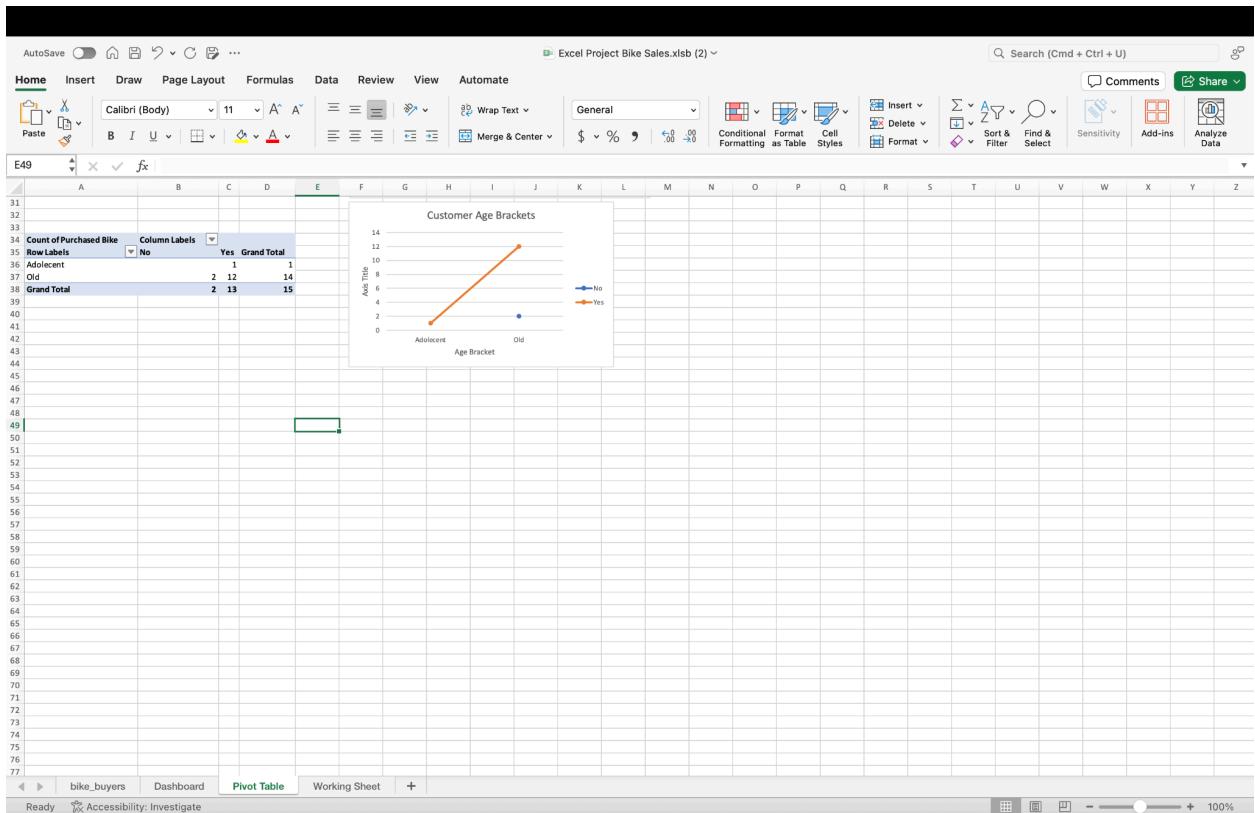
The formula in cell M2 is: =IF(L2>M854,"Old",IF(L2>=31,"Middle Age",IF(L2<31,"Adolescent","Invalid")))

The table data is as follows:

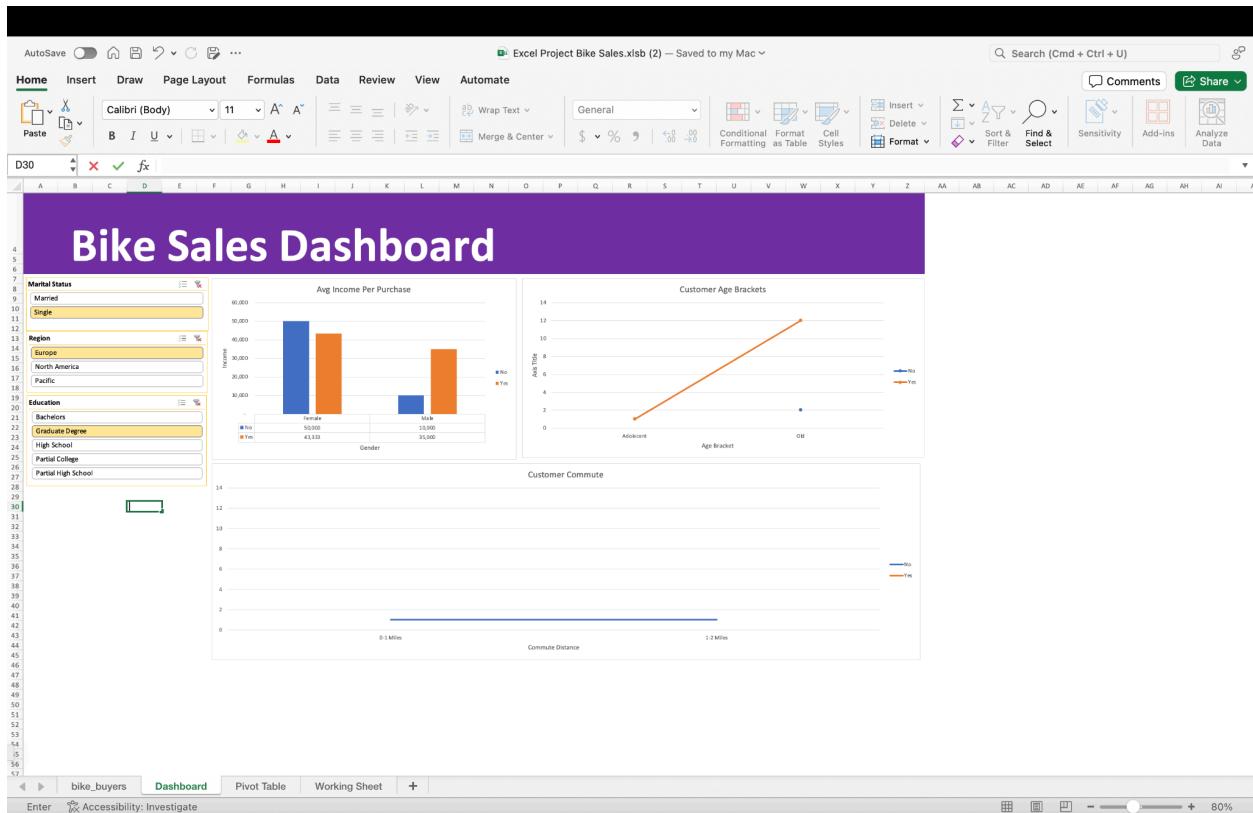
	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Gender	Income	Children	Education	Occupation	Home Owner	Cars	Commute Distance	Region	Age	Age Bracket	Purchased Bike						
2	Female	\$40,000.00	1	Bachelors	Skilled Manual	Yes	0	0-1 Miles	Europe	42	Middle Age	No						
3	Male	\$30,000.00	3	Partial College	Clerical	Yes	1	0-1 Miles	Europe	43	Middle Age	No						
4	Male	\$80,000.00	5	Partial College	Professional	No	2	2-5 Miles	Europe	60	Middle Age	No						
5	Male	\$70,000.00	0	Bachelors	Professional	Yes	1	5-10 Miles	Pacific	41	Middle Age	Yes						
6	Male	\$30,000.00	0	High School	Clerical	No	0	0-1 Miles	Europe	46	Middle Age	Yes						
7	Female	\$20,000.00	2	Partial College	Manual	Yes	0	1-2 Miles	Europe	50	Middle Age	No						
8	Male	\$160,000.00	2	High School	Management	Yes	4	0-1 Miles	Pacific	33	Middle Age	Yes						
9	Male	\$40,000.00	1	Bachelors	Skilled Manual	Yes	0	0-1 Miles	Europe	43	Middle Age	Yes						
10	Male	\$20,000.00	2	Partial High School	Clerical	Yes	2	5-10 Miles	Pacific	58	Middle Age	No						
11	Male	\$120,000.00	2	Partial College	Manual	Yes	1	0-1 Miles	Europe	40	Middle Age	Yes						
12	Female	\$30,000.00	3	High School	Skilled Manual	No	2	1-2 Miles	Pacific	54	Middle Age	Yes						
13	Female	\$90,000.00	0	Bachelors	Professional	No	4	10 Miles+	Pacific	36	Middle Age	No						
14	Male	\$170,000.00	5	Partial College	Professional	Yes	0	0-1 Miles	Europe	55	Middle Age	No						
15	Male	\$50,000.00	2	Partial College	Clerical	Yes	1	1-2 Miles	Europe	55	Middle Age	No						
16	Male	\$60,000.00	1	Partial College	Skilled Manual	No	0	1-2 Miles	Pacific	45	Middle Age	Yes						
17	Female	\$10,000.00	2	High School	Manual	Yes	0	1-2 Miles	Europe	38	Middle Age	Yes						
18	Male	\$30,000.00	3	Partial College	Clerical	No	2	1-2 Miles	Pacific	59	Middle Age	Yes						
19	Female	\$30,000.00	1	Bachelors	Clerical	Yes	0	0-1 Miles	Europe	47	Middle Age	No						
20	Male	\$40,000.00	2	Partial College	Clerical	Yes	1	1-2 Miles	Europe	35	Middle Age	Yes						
21	Male	\$20,000.00	2	Partial High School	Clerical	Yes	2	5-10 Miles	Pacific	55	Middle Age	Yes						
22	Female	\$40,000.00	0	Graduate Degree	Clerical	Yes	0	0-1 Miles	Europe	36	Middle Age	Yes						
23	Female	\$80,000.00	0	Bachelors	Professional	Yes	4	10 Miles+	Pacific	35	Middle Age	No						
24	Male	\$40,000.00	2	Partial College	Clerical	Yes	0	1-2 Miles	Europe	55	Middle Age	No						
25	Female	\$80,000.00	5	High School	Management	No	3	5-10 Miles	Europe	56	Middle Age	No						
26	Male	\$40,000.00	2	Partial College	Clerical	No	1	0-1 Miles	Europe	34	Middle Age	No						
27	Male	\$30,000.00	1	Bachelors	Clerical	Yes	0	0-1 Miles	Europe	63	Middle Age	No						
28	Male	\$30,000.00	0	Partial College	Clerical	No	1	0-1 Miles	Europe	29	Adolescent	Yes						
29	Female	\$100,000.00	0	Bachelors	Professional	No	1	5-10 Miles	Pacific	40	Middle Age	No						
30	Male	\$70,000.00	5	Partial College	Skilled Manual	Yes	2	5-10 Miles	Pacific	44	Middle Age	No						
31	Female	\$20,000.00	0	Partial High School	Manual	No	2	0-1 Miles	Europe	32	Middle Age	Yes						
32	Female	\$30,000.00	2	Partial College	Manual	Yes	0	0-1 Miles	Europe	63	Middle Age	No						
33	Male	\$10,000.00	0	Partial College	Manual	No	1	0-1 Miles	Pacific	26	Adolescent	Yes						
34	Female	\$20,000.00	0	High School	Manual	No	1	5-10 Miles	Europe	31	Middle Age	No						
35	Male	\$80,000.00	2	High School	Skilled Manual	No	2	1-2 Miles	Pacific	50	Middle Age	Yes						
36	Male	\$90,000.00	5	Partial College	Professional	No	2	2-5 Miles	Europe	62	Middle Age	Yes						
37	Female	\$10,000.00	5	Partial High School	Manual	No	2	0-1 Miles	Europe	41	Middle Age	No						
38	Female	\$10,000.00	2	Partial College	Manual	Yes	1	0-1 Miles	Europe	50	Middle Age	Yes						
39	Female	\$30,000.00	0	Partial College	Clerical	No	1	2-5 Miles	Europe	30	Adolescent	No						
40	Male	\$20,000.00	2	High School	Manual	No	1	2-5 Miles	Europe	38	Adolescent	No						
41	Female	\$10,000.00	4	Partial High School	Manual	Yes	2	0-1 Miles	Europe	40	Middle Age	Yes						
42	Female	\$30,000.00	2	Partial College	Clerical	No	0	0-1 Miles	Europe	43	Middle Age	No						
43	Female	\$40,000.00	2	Bachelors	Management	Yes	2	5-10 Miles	Pacific	65	Middle Age	Yes						
44	Female	\$10,000.00	1	Graduate Degree	Manual	Yes	0	0-1 Miles	Europe	40	Middle Age	No						
45	Female	\$170,000.00	4	Partial College	Professional	No	3	5-10 Miles	Europe	48	Middle Age	Yes						
46	Female	\$20,000.00	3	High School	Manual	Yes	0	0-1 Miles	Europe	41	Middle Age	Yes						
47	Female	\$20,000.00	1	Bachelors	Clerical	Yes	0	0-1 Miles	Europe	66	Middle Age	Yes						

Screenshot 2

This is filtered data that has been cleaned and analyzed using formulas.



Screenshot 3  
Pivot Table



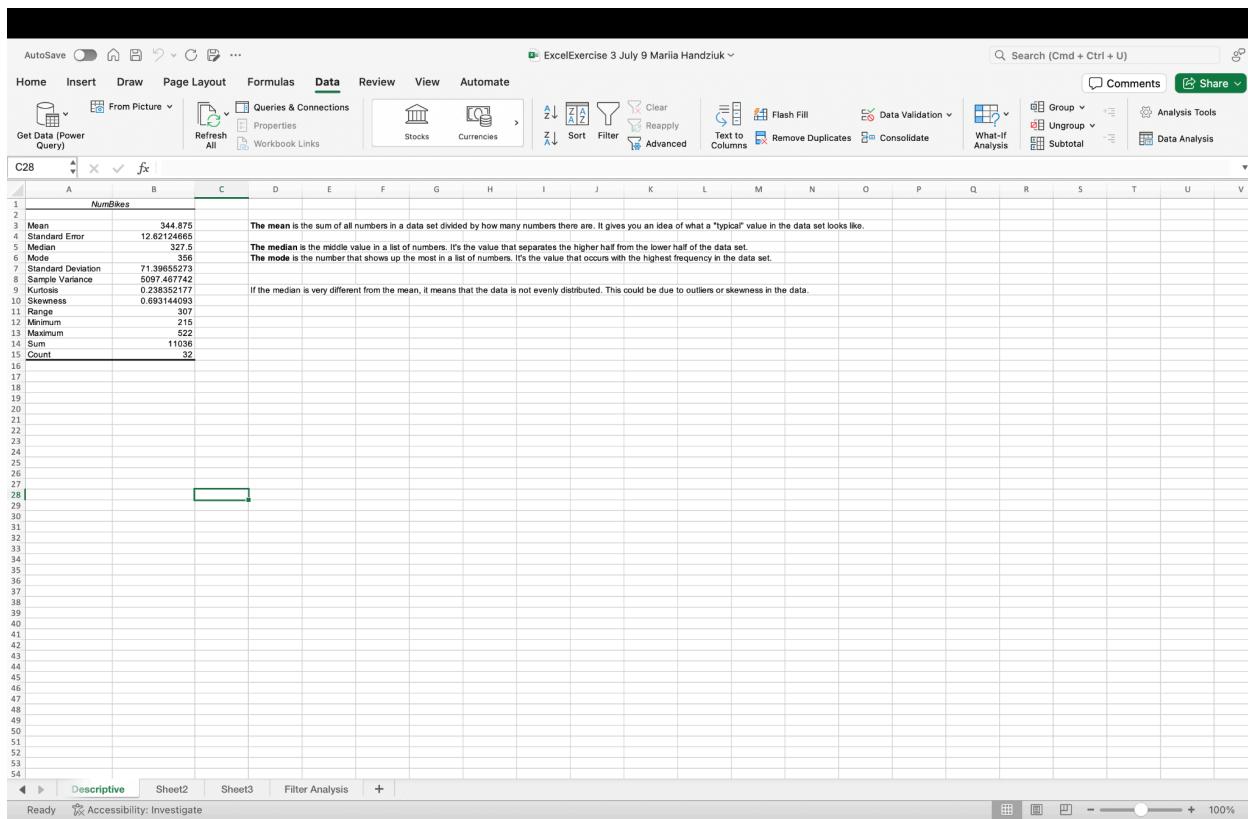
Screenshot 4

Dashboard with the final results. Three interactable visualizations.

# Project #2

## UMGC data literacy project 1

In this project, our overarching goal was to meticulously craft a comprehensive Descriptive Statistics table, design Interactive Pivot Tables, and craft visually compelling Charts that adhere to the prevailing industry standards and best practices. Within this context, my specific task revolved around conducting an in-depth analysis to identify the bike category that delivers the highest financial returns for the company, as well as determining the most lucrative business location. By leveraging advanced data analysis techniques and interactive visualization tools, I aimed to provide actionable insights that would guide strategic decision-making and drive business growth and profitability.

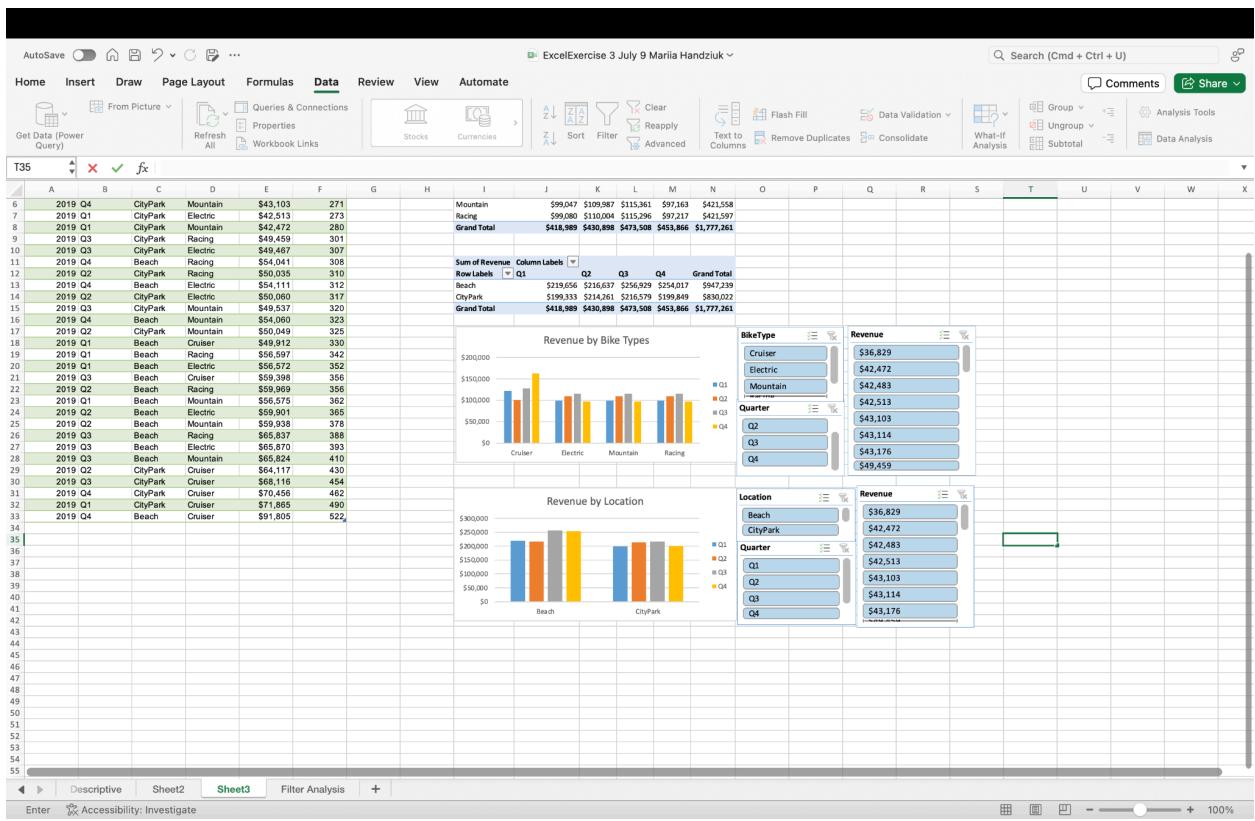


The screenshot shows a Microsoft Excel spreadsheet titled "ExcelExercise 3 July 9 Marlia Handziuk". The Data tab is selected. A table titled "NumBikes" is displayed in columns A and B. The table includes descriptive statistics such as Mean (344.975), Standard Error (12.62124865), Median (327.5), Mode (356), Standard Deviation (71.36935273), Sample Variance (5087.467742), Kurtosis (0.238352177), and Skewness (0.893144093). Column C contains explanatory text for each statistic. The formula bar shows the formula =AVERAGE(A1:A15) for the mean. The status bar at the bottom right indicates "100%".

	A	B	C
1			NumBikes
2			
3	Mean	344.975	The mean is the sum of all numbers in a data set divided by how many numbers there are. It gives you an idea of what a "typical" value in the data set looks like.
4	Standard Error	12.62124865	
5	Median	327.5	The median is the middle value in a list of numbers. It's the value that separates the higher half from the lower half of the data set.
6	Mode	356	The mode is the number that shows up the most in a list of numbers. It's the value that occurs with the highest frequency in the data set.
7	Standard Deviation	71.36935273	
8	Sample Variance	5087.467742	
9	Kurtosis	0.238352177	If the median is very different from the mean, it means that the data is not evenly distributed. This could be due to outliers or skewness in the data.
10	Skewness	0.893144093	
11	Range	307	
12	Minimum	215	
13	Maximum	522	
14	Sum	11036	
15	Count	32	
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
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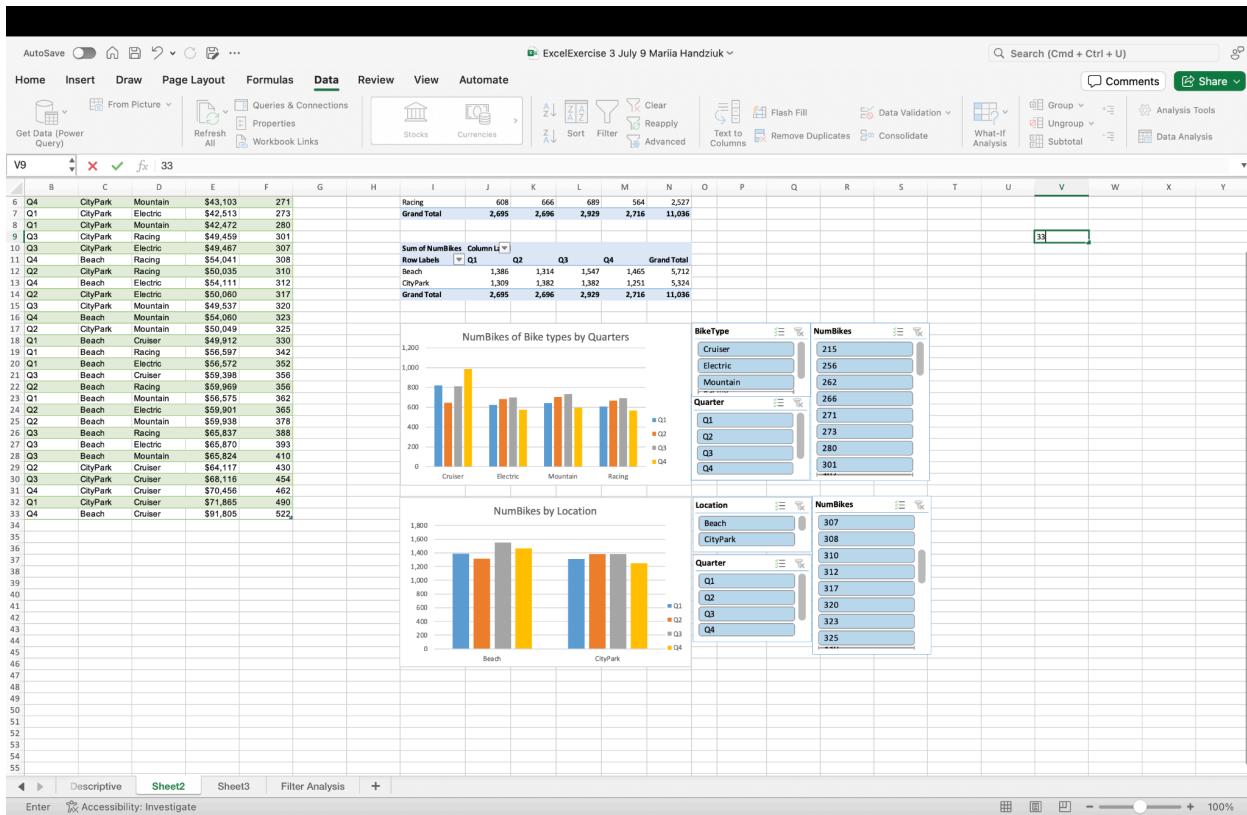
Screenshot 1

Descriptive Statistics performed with data. Part of the task was to give definitions to the elements in the table.



Screenshot 2

Here I created an interactive visualization of the revenue by bike types and locations.



Screenshot 3

Interactive visualizations of the number of bikes sold by locations.

# Project #3

This project was meticulously crafted as a pivotal component of the data literacy course curriculum at UMGC, aimed at honing analytical skills and practical data manipulation techniques. Tasked with the crucial responsibility of selecting the most suitable cars for acquisition by the recently inaugurated car shop, I delved deep into the dataset. Employing advanced data analysis methods, I meticulously curated a pivot table and developed interactive charts to extract valuable insights and patterns. Given the extensive nature of the dataset, it was impractical to upload it to Github; however, I have thoughtfully included a comprehensive screenshot to provide a visual representation of the findings and analysis conducted.

T8	paint_color	image_url	description
26			
27			
28			
29	white	<a href="https://images.craigslist.org/00R0R_lwWjXSEWNa7z_0c20oM_600x450.jpg">https://images.craigslist.org/00R0R_lwWjXSEWNa7z_0c20oM_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
30	blue	<a href="https://images.craigslist.org/00R0R_lwWjXSEWNa7z_0c20oM_600x450.jpg">https://images.craigslist.org/00R0R_lwWjXSEWNa7z_0c20oM_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
31	red	<a href="https://images.craigslist.org/01212_jjWjWdyD2z_0gwoCo_600x450.jpg">https://images.craigslist.org/01212_jjWjWdyD2z_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
32	red	<a href="https://images.craigslist.org/000bx_1y9K0zCzCfz_0gwoCo_600x450.jpg">https://images.craigslist.org/000bx_1y9K0zCzCfz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
33	black	<a href="https://images.craigslist.org/00404_14oxl4vQer_0C0l0T2_600x450.jpg">https://images.craigslist.org/00404_14oxl4vQer_0C0l0T2_600x450.jpg</a>	2013 F-150 XL TWS 4 Doo. Good condition. Leveling kit. New Tires
34	black	<a href="https://images.craigslist.org/000Vv_tJkK0gpl5z_0gwoCo_600x450.jpg">https://images.craigslist.org/000Vv_tJkK0gpl5z_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
35	silver	<a href="https://images.craigslist.org/00E0E_kN07Sh7ou_0gwoCo_600x450.jpg">https://images.craigslist.org/00E0E_kN07Sh7ou_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
36	gray	<a href="https://images.craigslist.org/00101_dxZtH7Vmz2_0c20z2_600x450.jpg">https://images.craigslist.org/00101_dxZtH7Vmz2_0c20z2_600x450.jpg</a>	Selling my 2019 Toyota Tacoma TRD Off Road Double Cab 5ft Bed in Cement Grey. This beautiful truck
37	red	<a href="https://images.craigslist.org/00NON_1MPMvxRAU2_0gwoCo_600x450.jpg">https://images.craigslist.org/00NON_1MPMvxRAU2_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
38	red	<a href="https://images.craigslist.org/00UUJ_kYn51WhB2_0gwoCo_600x450.jpg">https://images.craigslist.org/00UUJ_kYn51WhB2_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
39		<a href="https://images.craigslist.org/00Maa0t640g_0dp0r2_600x450.jpg">https://images.craigslist.org/00Maa0t640g_0dp0r2_600x450.jpg</a>	192k miles brand new TLS 4x4 jeep xj. 4x4 works amazing. Hot heat, ac needs recharged. Text for more info
40	silver	<a href="https://images.craigslist.org/00UuL_bb3kp483z_0gwoCo_600x450.jpg">https://images.craigslist.org/00UuL_bb3kp483z_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
41	white	<a href="https://images.craigslist.org/00151_IDRoRHysGm_0gwoCo_600x450.jpg">https://images.craigslist.org/00151_IDRoRHysGm_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
42	blue	<a href="https://images.craigslist.org/000pp_cfpEPHPz3k2_0gwoCo_600x450.jpg">https://images.craigslist.org/000pp_cfpEPHPz3k2_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
43	red	<a href="https://images.craigslist.org/00001_1cPmHhPmz2_0gwoCo_600x450.jpg">https://images.craigslist.org/00001_1cPmHhPmz2_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
44	red	<a href="https://images.craigslist.org/00003_1m7mHmDz2_0gwoCo_600x450.jpg">https://images.craigslist.org/00003_1m7mHmDz2_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
45	red	<a href="https://images.craigslist.org/00003_uM0d0nUmrz_0gwoCo_600x450.jpg">https://images.craigslist.org/00003_uM0d0nUmrz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
46	black	<a href="https://images.craigslist.org/00002_4f29pW8p8z_0gwoCo_600x450.jpg">https://images.craigslist.org/00002_4f29pW8p8z_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
47	silver	<a href="https://images.craigslist.org/00QQQ_4dPiGhwozr_0gwoCo_600x450.jpg">https://images.craigslist.org/00QQQ_4dPiGhwozr_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
48		<a href="https://images.craigslist.org/00BBR_5la1pFvFv_0gwoCo_600x450.jpg">https://images.craigslist.org/00BBR_5la1pFvFv_0gwoCo_600x450.jpg</a>	Call or text now 800-213-0336 Open 9:00-6:00pm https://www.augca.com/ Can work with down px
49	white	<a href="https://images.craigslist.org/00Vov_cGwJETzNz_0gwoCo_600x450.jpg">https://images.craigslist.org/00Vov_cGwJETzNz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
50	red	<a href="https://images.craigslist.org/00050_3mEC13RWVz_0gwoCo_600x450.jpg">https://images.craigslist.org/00050_3mEC13RWVz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
51	silver	<a href="https://images.craigslist.org/00Vov_c22tgPhyrmz_0gwoCo_600x450.jpg">https://images.craigslist.org/00Vov_c22tgPhyrmz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
52		<a href="https://images.craigslist.org/00001_614nNaVZFrz_0gwoCo_600x450.jpg">https://images.craigslist.org/00001_614nNaVZFrz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
53	white	<a href="https://images.craigslist.org/00UUJ_nvVm8Ukwz_0gwoCo_600x450.jpg">https://images.craigslist.org/00UUJ_nvVm8Ukwz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
54		<a href="https://images.craigslist.org/00Vov_d0WVwz_0gwoCo_600x450.jpg">https://images.craigslist.org/00Vov_d0WVwz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
55	white	<a href="https://images.craigslist.org/01133_92ne288Vwz_0gwoCo_600x450.jpg">https://images.craigslist.org/01133_92ne288Vwz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
56	black	<a href="https://images.craigslist.org/00Vov_NmW3hmgz_0gwoCo_600x450.jpg">https://images.craigslist.org/00Vov_NmW3hmgz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
57	blue	<a href="https://images.craigslist.org/01313_4Y4ogpZxpC_020CI_600x450.jpg">https://images.craigslist.org/01313_4Y4ogpZxpC_020CI_600x450.jpg</a>	Here I have a unmodified Ford F-250 6.0 power stroke. This truck runs great with zero issues. Was bou
58	red	<a href="https://images.craigslist.org/00Vov_z5a524dByV_0gwoCo_600x450.jpg">https://images.craigslist.org/00Vov_z5a524dByV_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
59	black	<a href="https://images.craigslist.org/00Vov_hdOF15uqz_0gwoCo_600x450.jpg">https://images.craigslist.org/00Vov_hdOF15uqz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
60	white	<a href="https://images.craigslist.org/00Vov_2-5a25TNsBz_0gwoCo_600x450.jpg">https://images.craigslist.org/00Vov_2-5a25TNsBz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
61	silver	<a href="https://images.craigslist.org/01717_afhCslmmtP_0gwoCo_600x450.jpg">https://images.craigslist.org/01717_afhCslmmtP_0gwoCo_600x450.jpg</a>	Ready to utilize. Excellent condition, clean carfax, no accident. I am the second owner.
62	white	<a href="https://images.craigslist.org/00404_ljHnHnhlmz_0gwoCo_600x450.jpg">https://images.craigslist.org/00404_ljHnHnhlmz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
63		<a href="https://images.craigslist.org/00EE0_is09dHEQfGz_0gwoCo_600x450.jpg">https://images.craigslist.org/00EE0_is09dHEQfGz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
64	white	<a href="https://images.craigslist.org/00NON_3LIW7ipY7z_0gwoCo_600x450.jpg">https://images.craigslist.org/00NON_3LIW7ipY7z_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
65	black	<a href="https://images.craigslist.org/00006_942WvEuDE96z_0C0I2_600x450.jpg">https://images.craigslist.org/00006_942WvEuDE96z_0C0I2_600x450.jpg</a>	Ford Super Duty F-450, XL with King Ranch seats and headliner added - 7.3L turbo diesel, 5 speed man
66	white	<a href="https://images.craigslist.org/00QQQ_1K0npP9wZz_0gwoCo_600x450.jpg">https://images.craigslist.org/00QQQ_1K0npP9wZz_0gwoCo_600x450.jpg</a>	Carvana is the safer way to buy a car During these uncertain times, Carvana is dedicated to ensuring s
67	black	<a href="https://images.craigslist.org/00Vov_600x450.jpg">https://images.craigslist.org/00Vov_600x450.jpg</a>	

Screenshot 1

Original data

Cars Data analysis project Marlia

ID	price	year	manufacturer	model	condition
37669	\$800	1998	acura	3.0cl	fair
37671	\$3,500	1997	acura	3.0cl	excellent
37673	\$6,000	2003	acura	3.2cl types	excellent
37677	\$1,290	2003	acura	3.2tl	fair
37681	\$3,200	2005	acura	3.2tl	like new
37684	\$4,500	2005	acura	3.2tl	excellent
37685	\$4,700	2006	acura	3.2tl	like new
37686	\$5,000	2005	acura	3.2tl	excellent
37687	\$5,500	2003	acura	3.2tl	excellent
37688	\$5,995	2003	acura	3.2tl	excellent
37692	\$150	2003	acura	3.2tl-sport	excellent
37695	\$4,500	1996	acura	3.2tl	excellent
37700	\$4,500	2003	acura	3.5tl	fair
37703	\$5,500	2000	acura	3.5tl	excellent
37704	\$5,500	2000	acura	3.5rl	excellent
37705	\$5,200	2004	acura	3.5rl	excellent
37710	\$3,500	1998	acura	cl	good
37713	\$3,900	2001	acura	cl	good
37716	\$10,995	2003	acura	cl3.0	good
37719	\$3,750	1997	acura	cl3.0	excellent
37721	\$4,995	2003	acura	cl3.2 types	excellent
37723	\$2,500	2002	acura	cltypes	good
37726	\$3,990	2003	acura	cltypes	good
37727	\$7,500	2003	acura	cltypes	good
37751	\$495	2014	acura	lx	excellent
37755	\$8,000	2013	acura	lx	excellent
37756	\$8,500	2010	acura	lx	good
37761	\$9,500	2010	acura	lx	excellent
37762	\$9,750	2010	acura	lx	excellent
37770	\$10,995	2015	acura	lx	excellent
37775	\$10,999	2013	acura	lx	excellent
37776	\$10,999	2013	acura	lx	excellent
37777	\$10,999	2013	acura	lx	excellent
37786	\$11,999	2013	acura	lx	excellent
37787	\$11,999	2013	acura	lx	excellent
37793	\$12,499	2014	acura	lx	excellent
37794	\$12,500	2014	acura	lx	excellent
37795	\$12,500	2013	acura	lx	excellent
37808	\$13,500	2013	acura	lx	excellent
37824	\$16,990	2015	acura	lx	good
37827	\$17,300	2019	acura	lx	excellent
37829	\$17,950	2014	acura	lx	excellent
37830	\$17,950	2014	acura	lx	excellent

Screenshot 2  
Cleaned and filtered Data

The screenshot shows a Microsoft Excel spreadsheet titled "Cars Data analysis project Maria~". The data is organized into two main sections: "Numerical Field" and "Categorical Field".

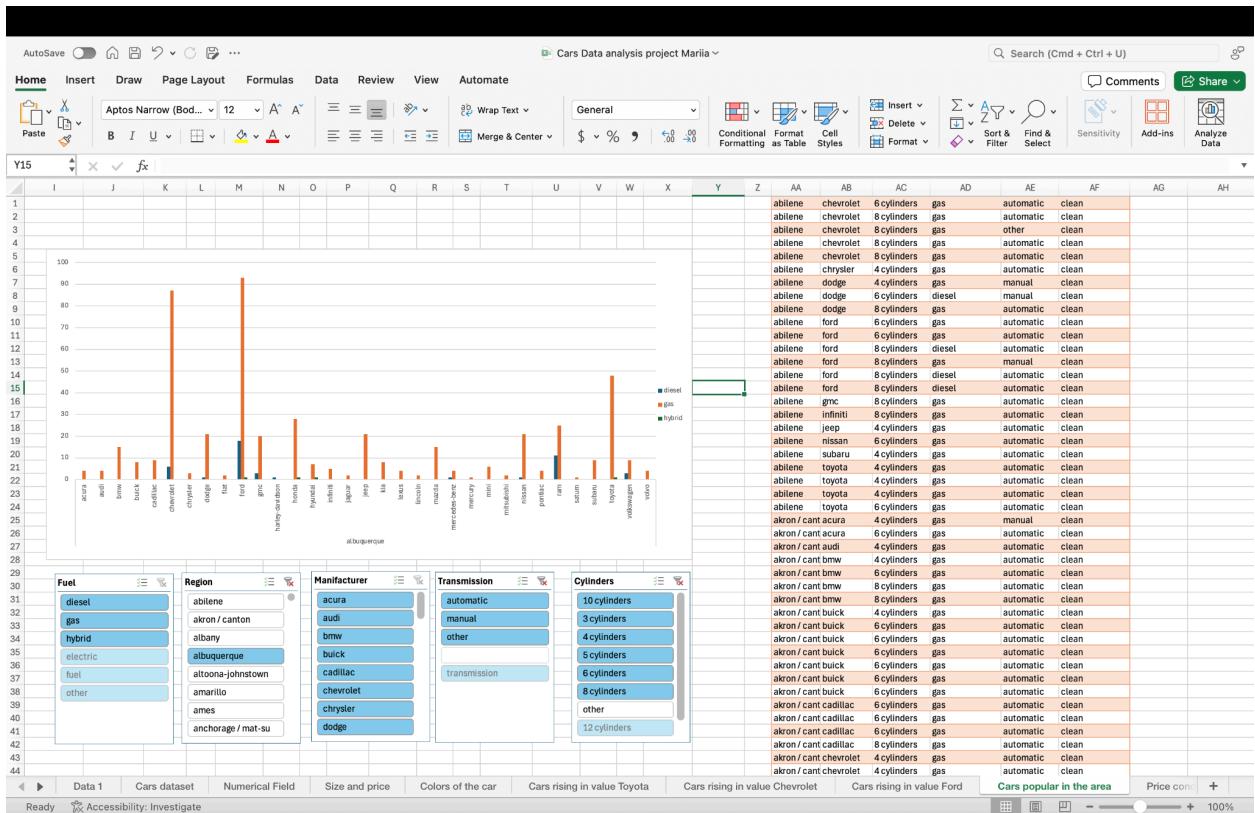
**Numerical Field:**

	Size and price	Colors of the car	Cars rising in value Toyota	Cars rising in value Chevrolet	Cars rising in value Ford	Cars popular in the area	Price conc.
Data 1	Cars dataset	Numerical Field					
Ready	Accessibility: Investigate						

**Categorical Field:**

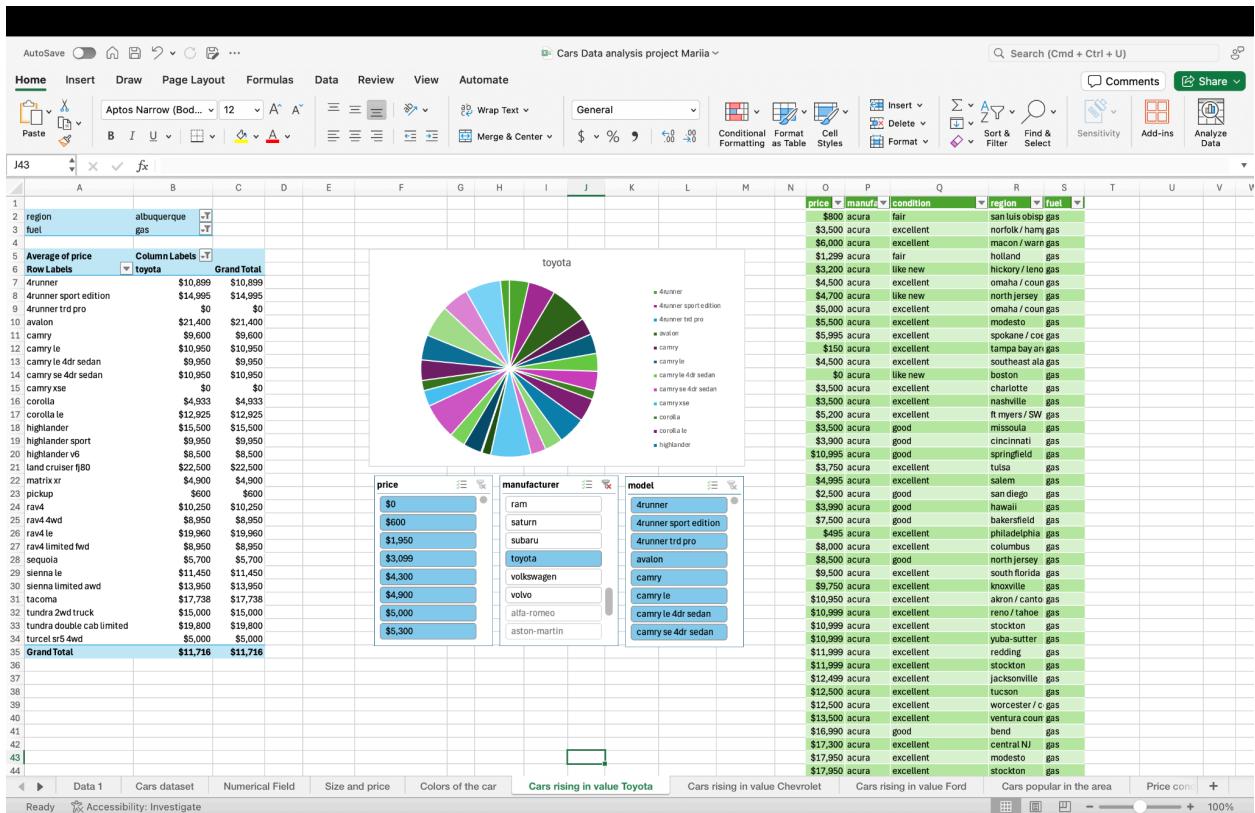
H1	price						
1							
2							
3	Mean	\$74,187					
4	Standard Error	\$18,394					
5	Median	\$13,500					
6	Mode	\$0					
7	Standard Deviation	\$12,099.967					
8	Sample Variance	\$146,409,211,496.172					
9	Kurtosis	\$70,150					
10	Skewness	\$256					
11	Range	\$3,736,928,869					
12	Minimum	\$158					
13	Maximum	\$3,736,928,711					
14	Sum	\$32,104,100,307					
15	Count	432,708					
16	Largest(1)	\$3,736,928,711					
17	Smallest(1)	\$158					
18	Confidence Level(95.0%)	\$36,053					
19							
20							
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44							

Screenshot 3  
Descriptive Statistics



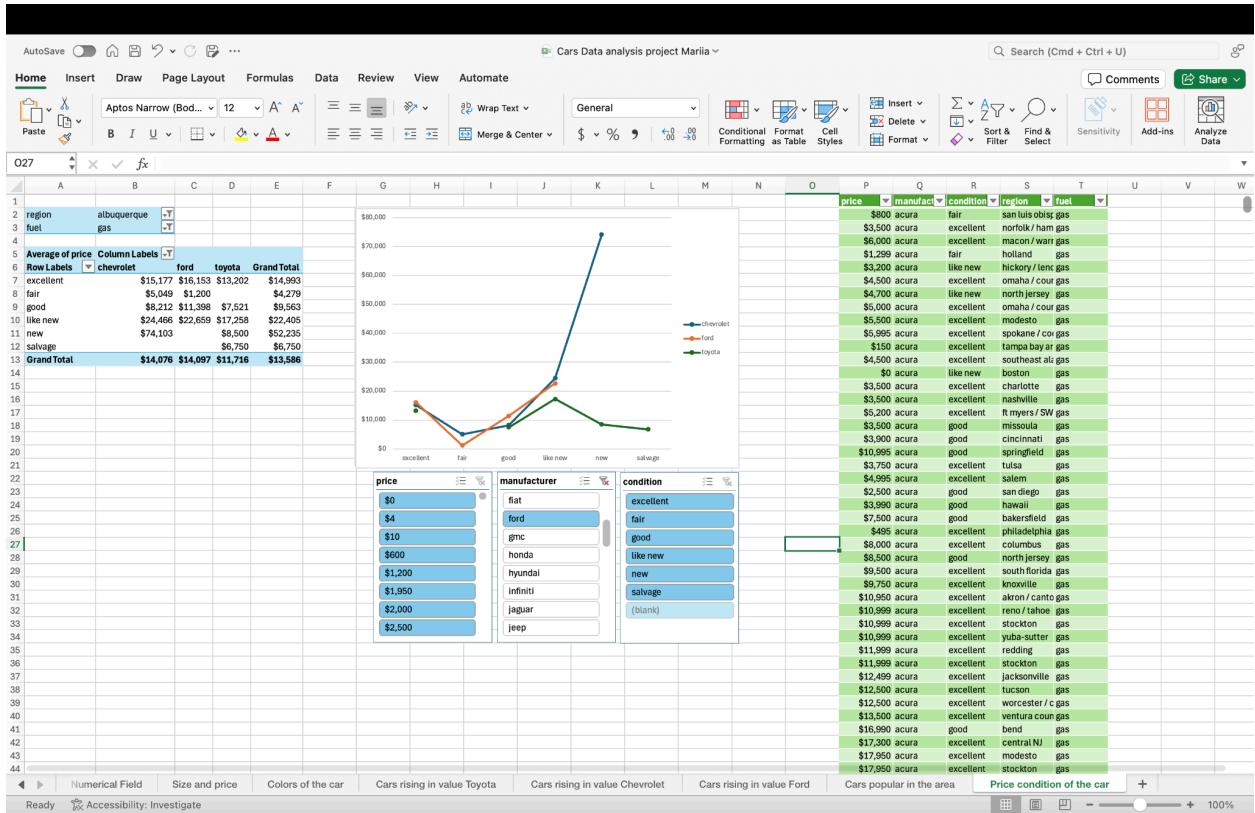
Screenshot 4

Interactive chart showing the most popular cars in the area.

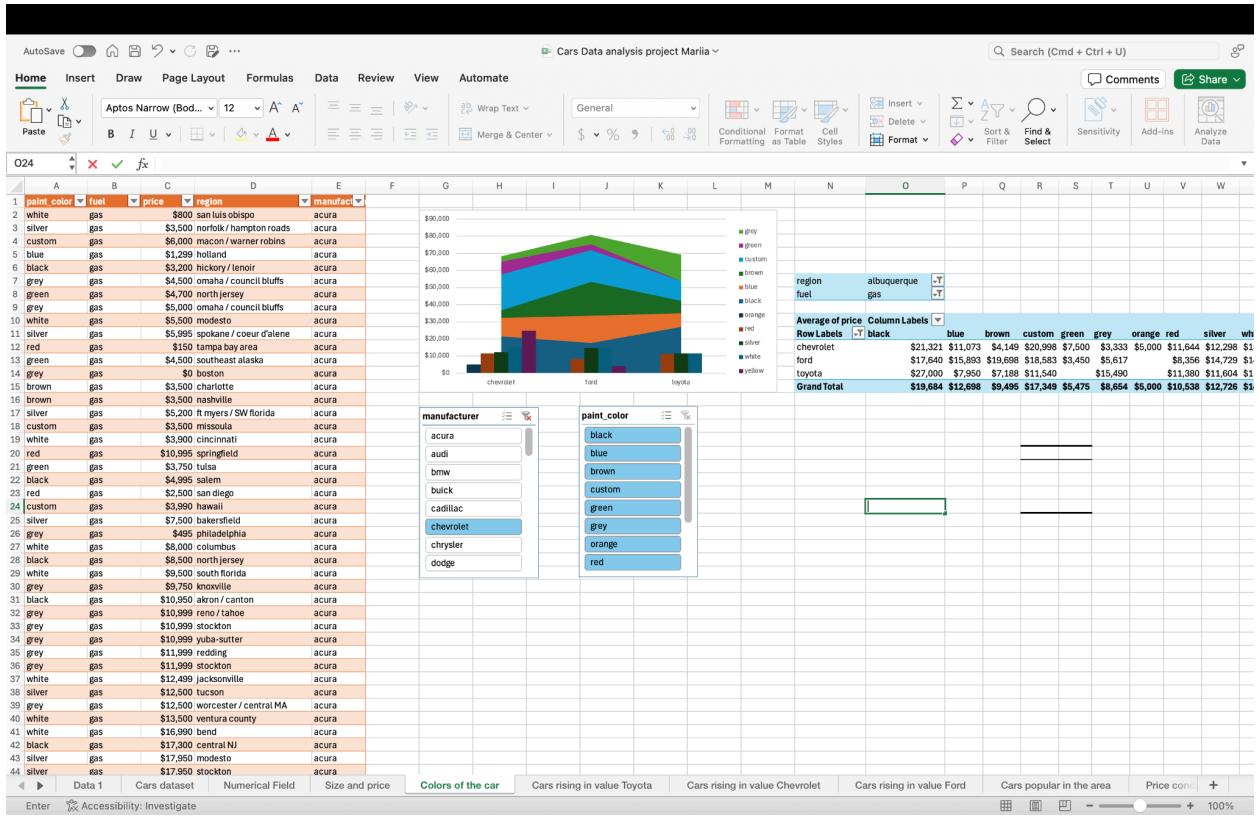


## Screenshots 5

### Interactive pie chart



Screenshots 6  
Interactive line chart



## Screenshots 7

### Interactive chart