



# KING

## HOMES & LAND

**King County Homes - E.D.A**

**Case Study**

**Jennifer Montgomery - Dream Home**

**By: Mohamed Radwan**

Hi everyone, I'm Radwan, and today I'm excited to share my analysis of houses in King County, Meet Jennifer Montgomery she's looking for her dream home, and I'm here to help!

We're going to look at some cool data, find great houses for Jennifer Montgomery, and see what it tells us. Let's get started!





## What's This All About?

- Jennifer Montgomery is a big-shot art dealer who just landed a huge deal in Seattle. She's tired of cramped city condos and wants a stunning waterfront house, something renovated, super fancy, with a grade of 10 or more.
- Why? She's hosting VIP clients next year and needs a jaw-dropping spot to impress them, then sell it for a profit.
- I found her the perfect match!
- so I worked with a big list of houses from King County, think prices, sizes, and all that good stuff. My goal was to explore it and find the best waterfront homes for Jennifer.
- She wants something fancy, renovated after 2000, with a top quality grade of 10 or higher. so I let the data do most of the talking!

# Getting the Data Ready

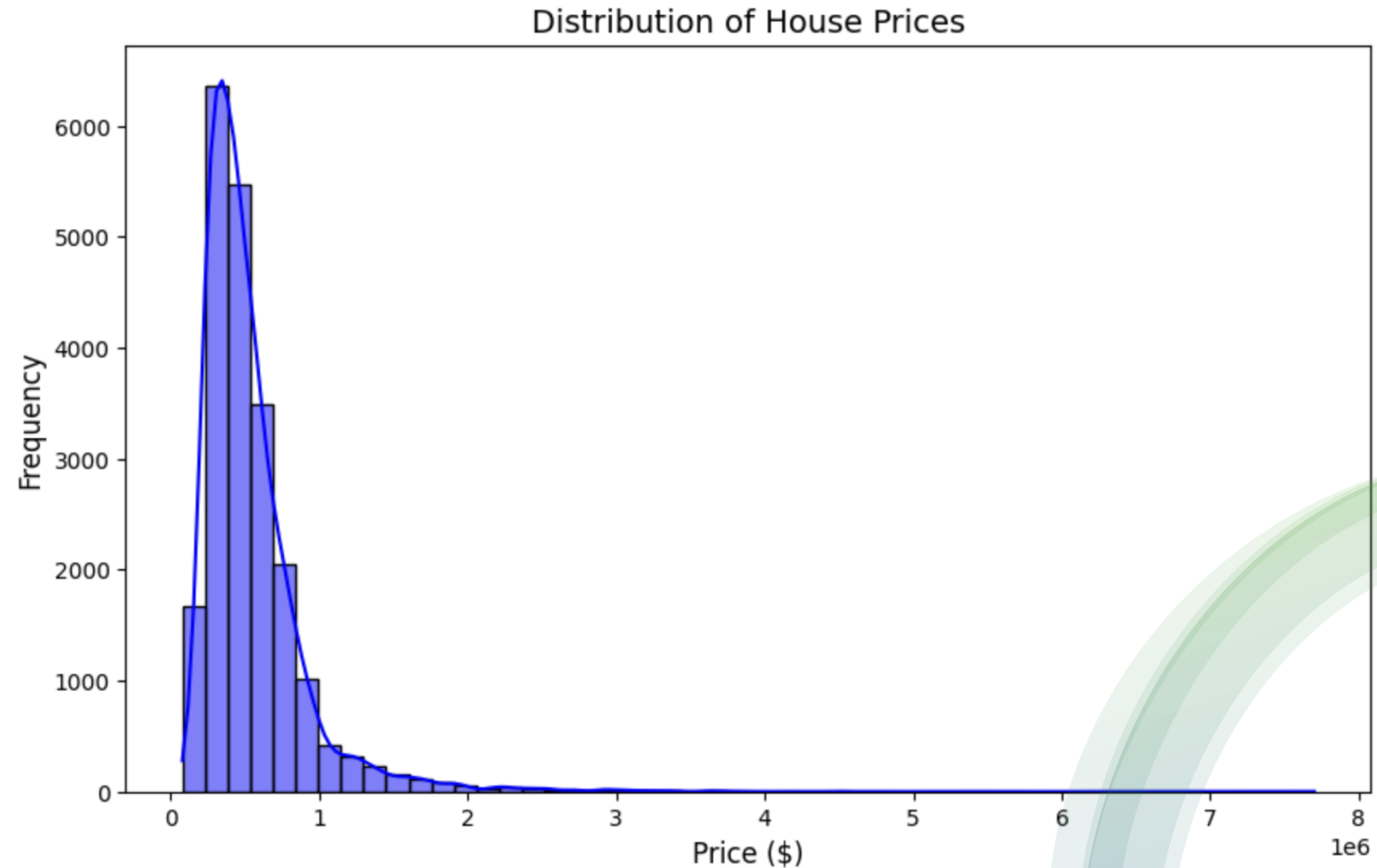
- First, I had to load the data and tidy it up.
- Imagine a messy closet, I found some weird renovation years, like 20010, which should've been 2001.
- I fixed those so everything made sense.

	date	price	id	bedrooms	bathrooms	sqft_living	sqft_lot	floors	waterfront	view	...	grade	sqft_above	sqft_basement	yr_built	yr_renovated	zipcode
0	2014-10-13	221900.0	7129300520	3.0	1.00	1180.0	5650.0	1.0	0	0	...	7	1180.0	0.0	1955	0	98178
1	2014-12-09	538000.0	6414100192	3.0	2.25	2570.0	7242.0	2.0	0	0	...	7	2170.0	400.0	1951	19910	98125
2	2015-02-25	180000.0	5631500400	2.0	1.00	770.0	10000.0	1.0	0	0	...	6	770.0	0.0	1933	0	98028
3	2014-12-09	604000.0	2487200875	4.0	3.00	1960.0	5000.0	1.0	0	0	...	7	1050.0	910.0	1965	0	98136
4	2015-02-18	510000.0	1954400510	3.0	2.00	1680.0	8080.0	1.0	0	0	...	8	1680.0	0.0	1987	0	98074

5 rows x 21 columns

# Exploring the Big Picture - Prices

Now, let's peek at the data. I made this graph to show how house prices look. See how most are lower, but there's a long tail of expensive ones? It's like shopping, lots of affordable stuff, but a few luxury items really stand out. This helped me understand what's out there.

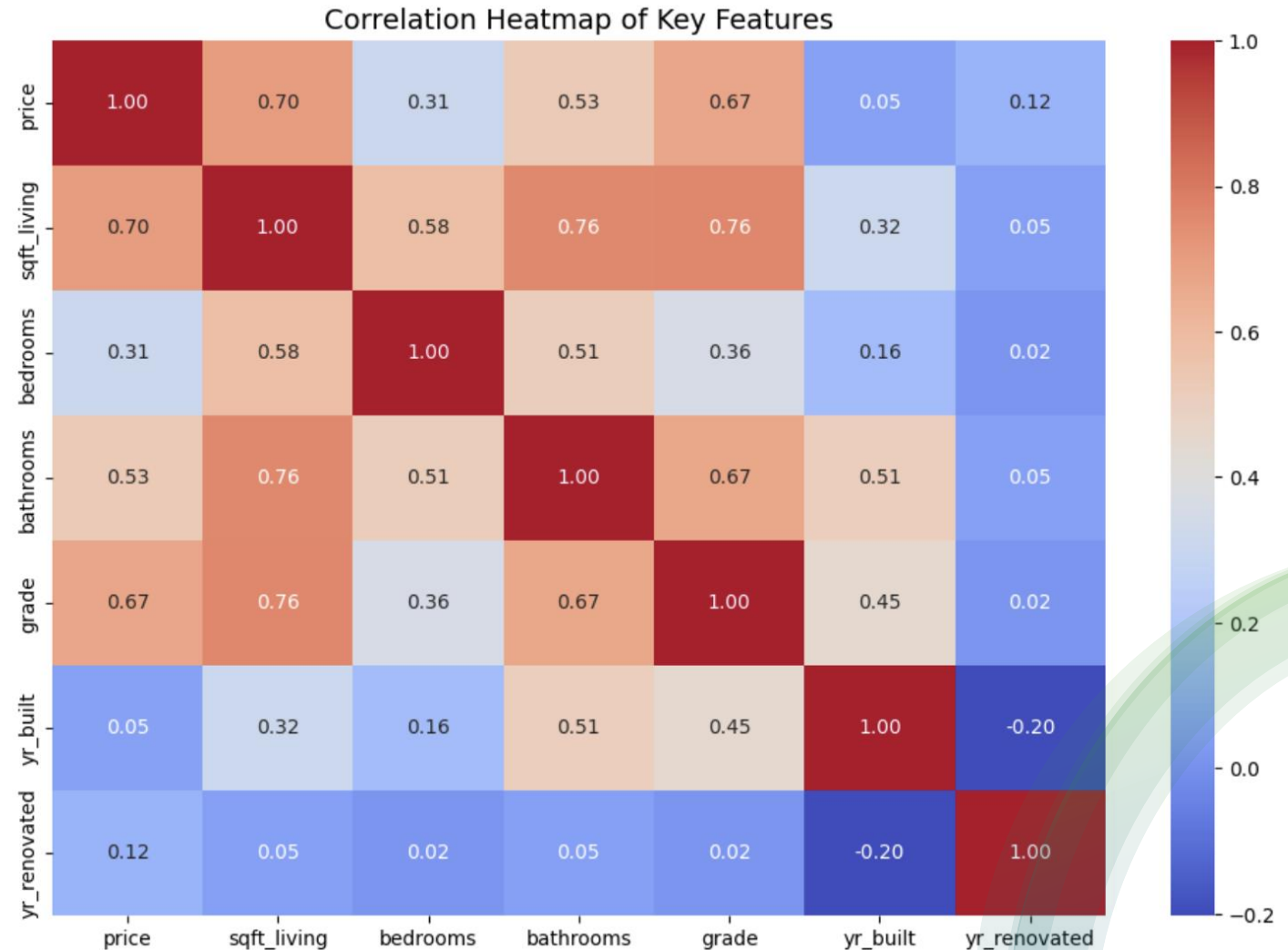


# Exploring the Big Picture - Connections

Next, I checked how things like size and price connect.

This colorful map shows it, like a cheat sheet! Red means a strong link, like price and living area.

It's not super technical, just a way to see what matters when picking a house.





# Finding Jennifer's Dream Houses

Okay, time to find Jennifer's houses! I looked for waterfront homes, renovated after 2000, with a grade of 10 or better. I sorted them by price and picked the top 3. If nothing matched, I even had a backup plan, relaxing the grade a bit. It's like being a house detective!

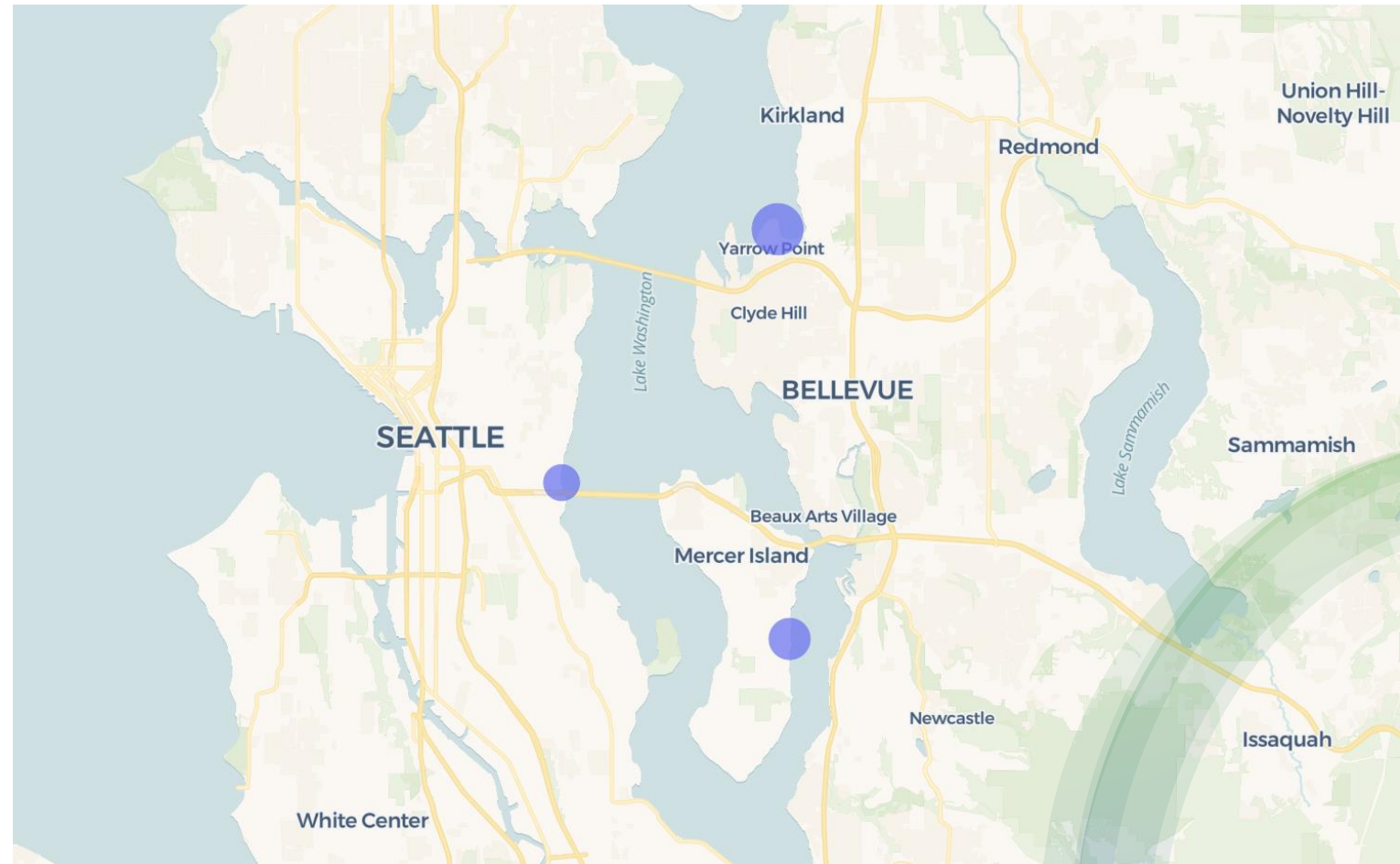
Top 3 Recommended Houses for Jennifer Montgomery

House ID	Price	Zip Code	Living Area (sqft)	Bedrooms	Bathrooms	Quality	Grade	Year Renovated
9808700762	\$7,060,000	98004	10040.0	5.0	4.50		11	2001
1924059029	\$4,670,000	98040	9640.0	5.0	6.75		12	2009
4114601570	\$3,600,000	98144	5020.0	3.0	3.25		10	2002

# Where Are These Houses?

Here's a map of where Jennifer's top 3 houses are. Each dot is a house, and the color shows the price, redder means pricier.

I added price tags so you can see. It's cool to imagine these spots by the water





# A Closer Look at One House

Let's zoom in on one house.

House 1 [9808700762], zip code [98004]. It's got [10040.0] square feet as living Area, [5] bedrooms, and costs [7,060,000 \$], Renovated in [2001], it's top-notch with a grade of [11].

Jennifer will love it because it's modern and fancy—perfect for showing off!





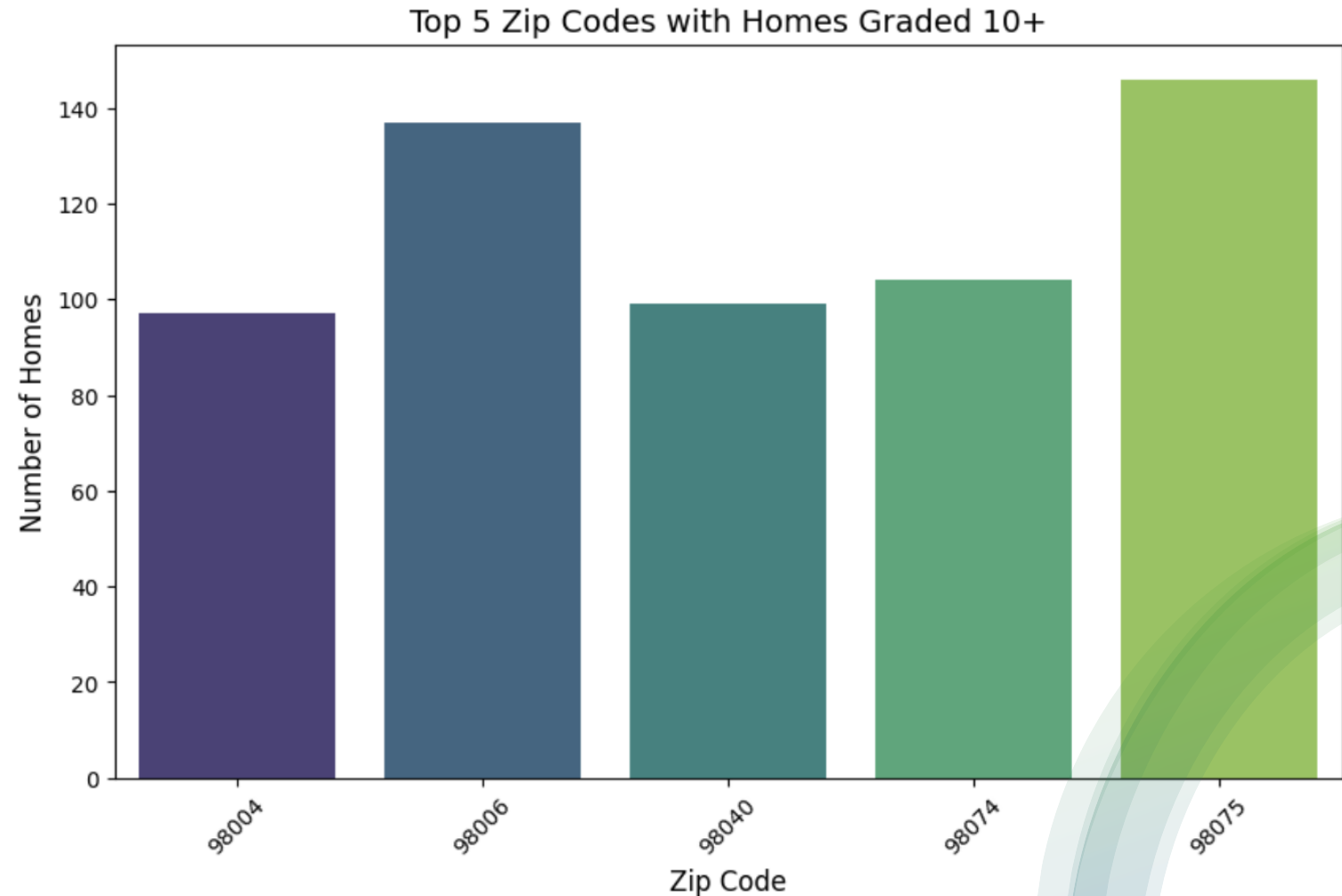


# Where Are the Fancy Houses?

I also checked where most high-grade homes—10 or better—are.

This bar graph shows the top 5 zip codes. In my small sample, places like Bellevue (98006) and Mercer Island (98075) usually shine.

Fancy areas cluster together!





# Wrapping Up

That's it! We explored the data, found Jennifer some amazing houses, and learned where the fancy ones hide.

I'm not an IT pro, but playing with this data was like a treasure hunt.

Thanks for listening, any questions?"