🏠 House Price Prediction Dashboard

Predict house prices using a Linear Regression model with interactive visualizations

📁 Dataset Overview

Dataset Shape

Rows

21613

Columns

21

Missing Values

	0
id	
date	
price	
bedrooms	
bathrooms	
sqft_living	
sqft_lot	
floors	
waterfront	
view	

|	id	date	price	bedrooms	bathrooms	sqft_living	sqft_lot	floors	waterfront	view	condition	grade	sqft_above	sqft_basement
0	7129300520	20141013T000000	221900	3	1	1180	5650	1	0	0	3	7	1180	0
1	6414100192	20141209T000000	538000	3	2.25	2570	7242	2	0	0	3	7	2170	400
2	5631500400	20150225T000000	180000	2	1	770	10000	1	0	0	3	6	770	0
3	2487200875	20141209T000000	604000	4	3	1960	5000	1	0	0	5	7	1050	910
4	1954400510	20150218T000000	510000	3	2	1680	8080	1	0	0	3	8	1680	0
5	7237550310	20140512T000000	1230000	4	4.5	5420	101930	1	0	0	3	11	3890	1530
6	1321400060	20140627T000000	257500	3	2.25	1715	6819	2	0	0	3	7	1715	0
7	2008000270	20150115T000000	291850	3	1.5	1060	9711	1	0	0	3	7	1060	0
8	2414600126	20150415T000000	229500	3	1	1780	7470	1	0	0	3	7	1050	730
9	3793500160	20150312T000000	323000	3	2.5	1890	6560	2	0	0	3	7	1890	0

📊 Data Analysis & Visualization

Correlation Heatmap

Distribution of price

🏠 House Price Prediction
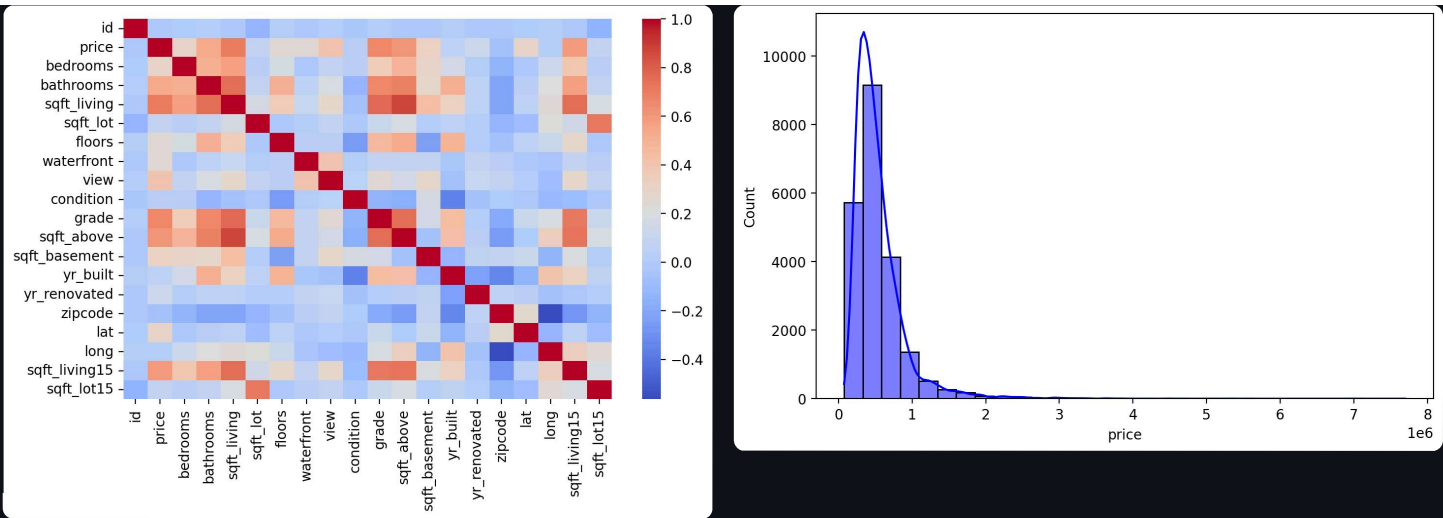
🔍 Top Features vs price
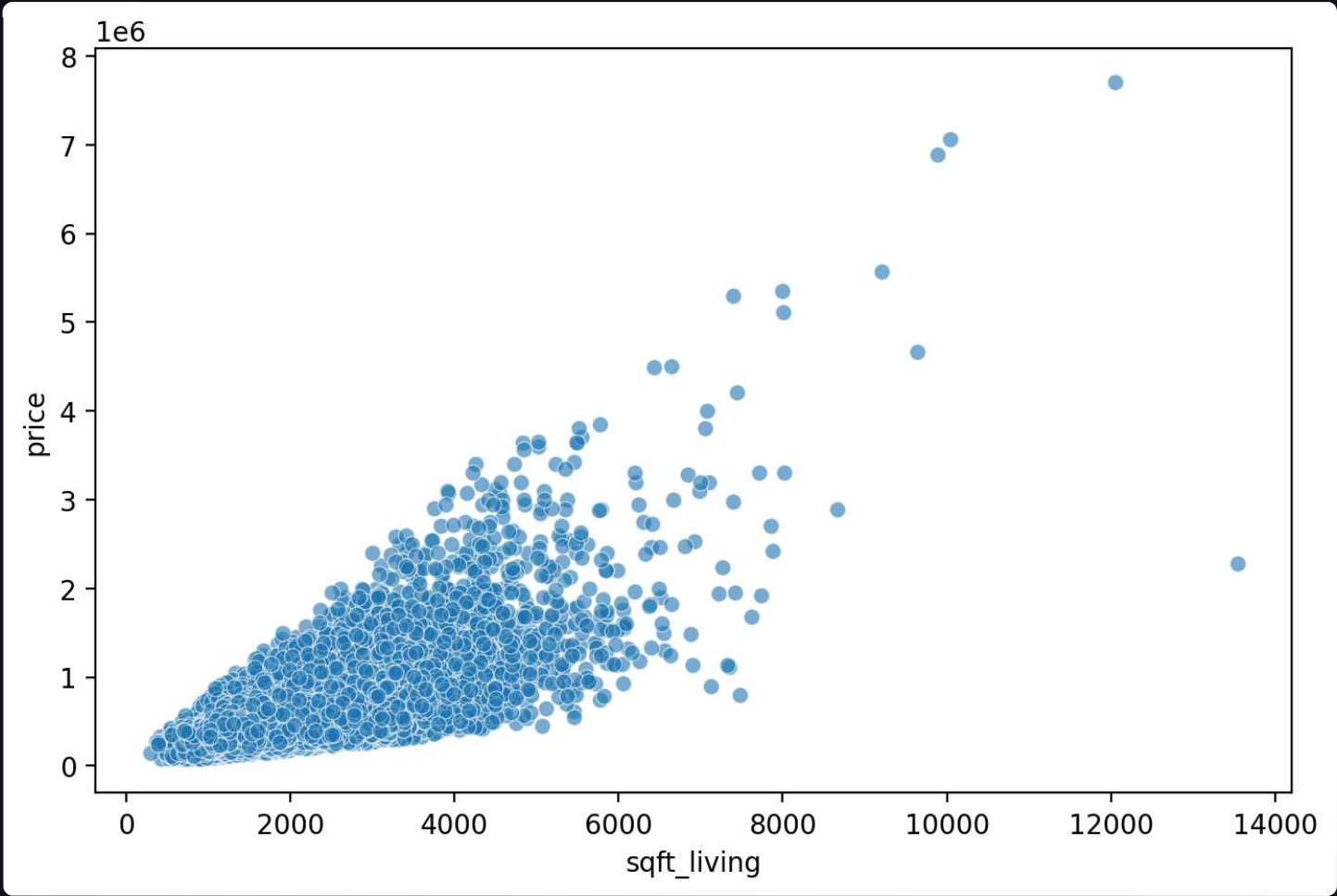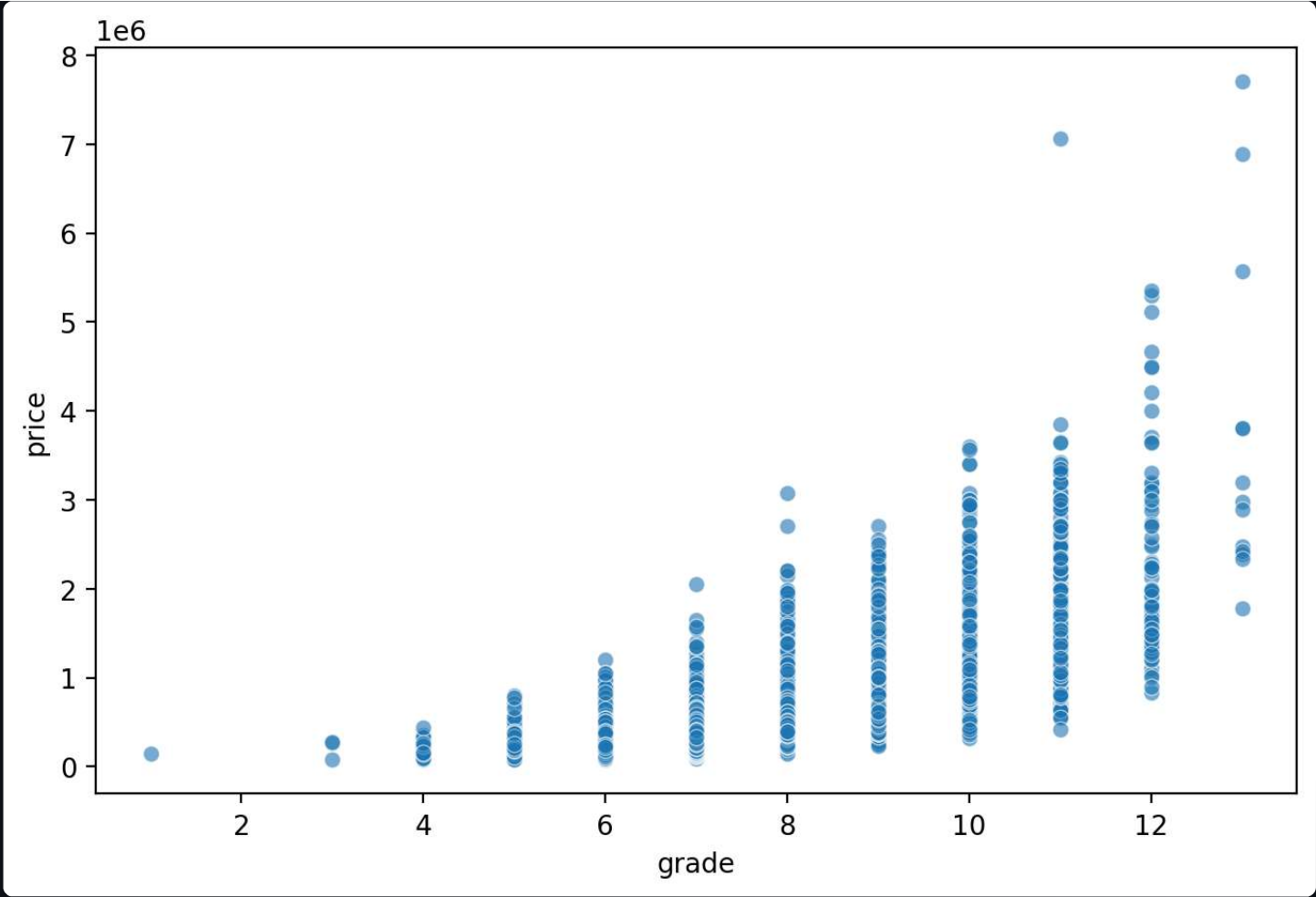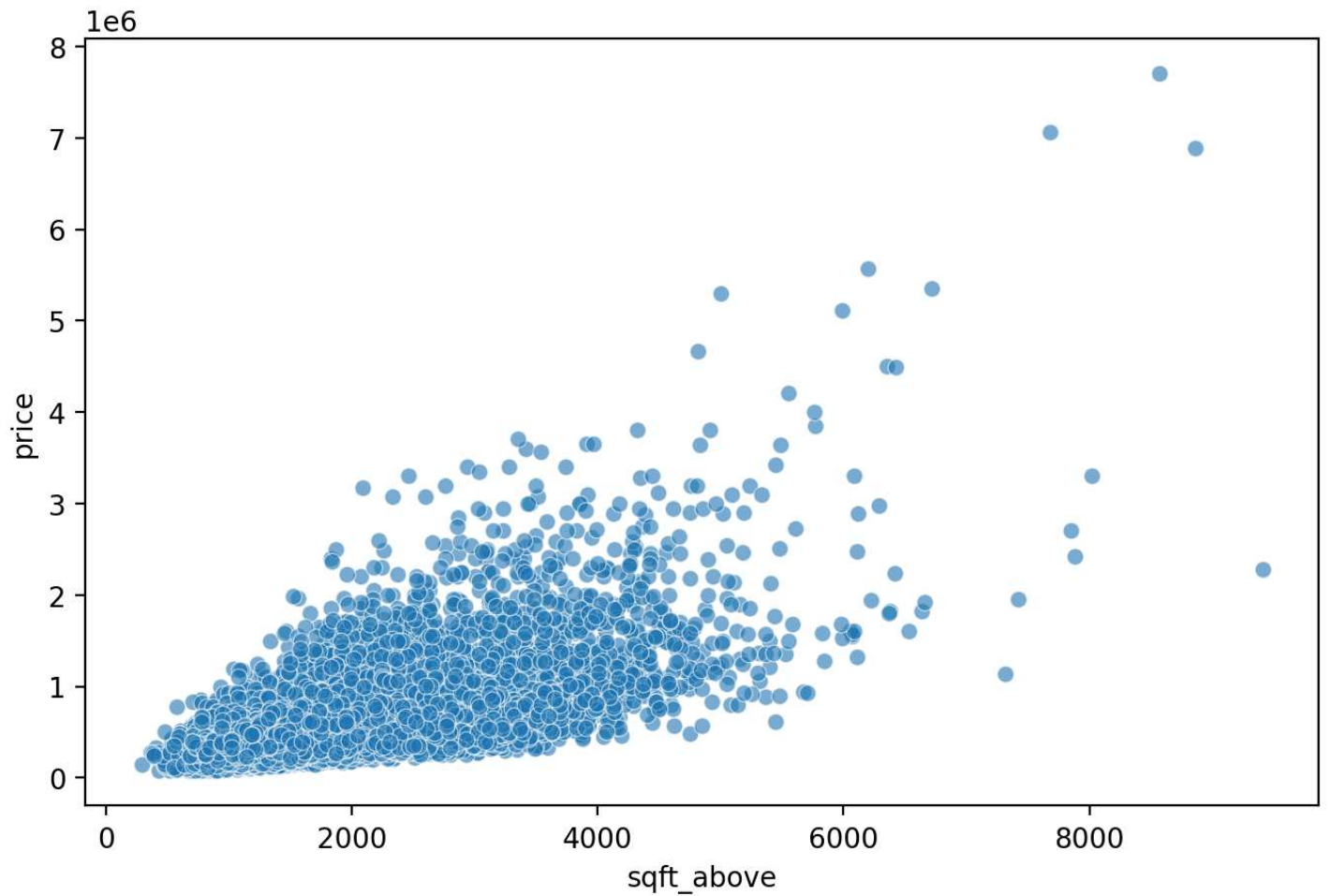
⚙️ Model Training & Evaluation

📉 MSE	📈 R² Score	🔢 Features Used
45216641478.01	0.70	19

📊 Actual vs Predicted House Prices

Actual vs Predicted Prices
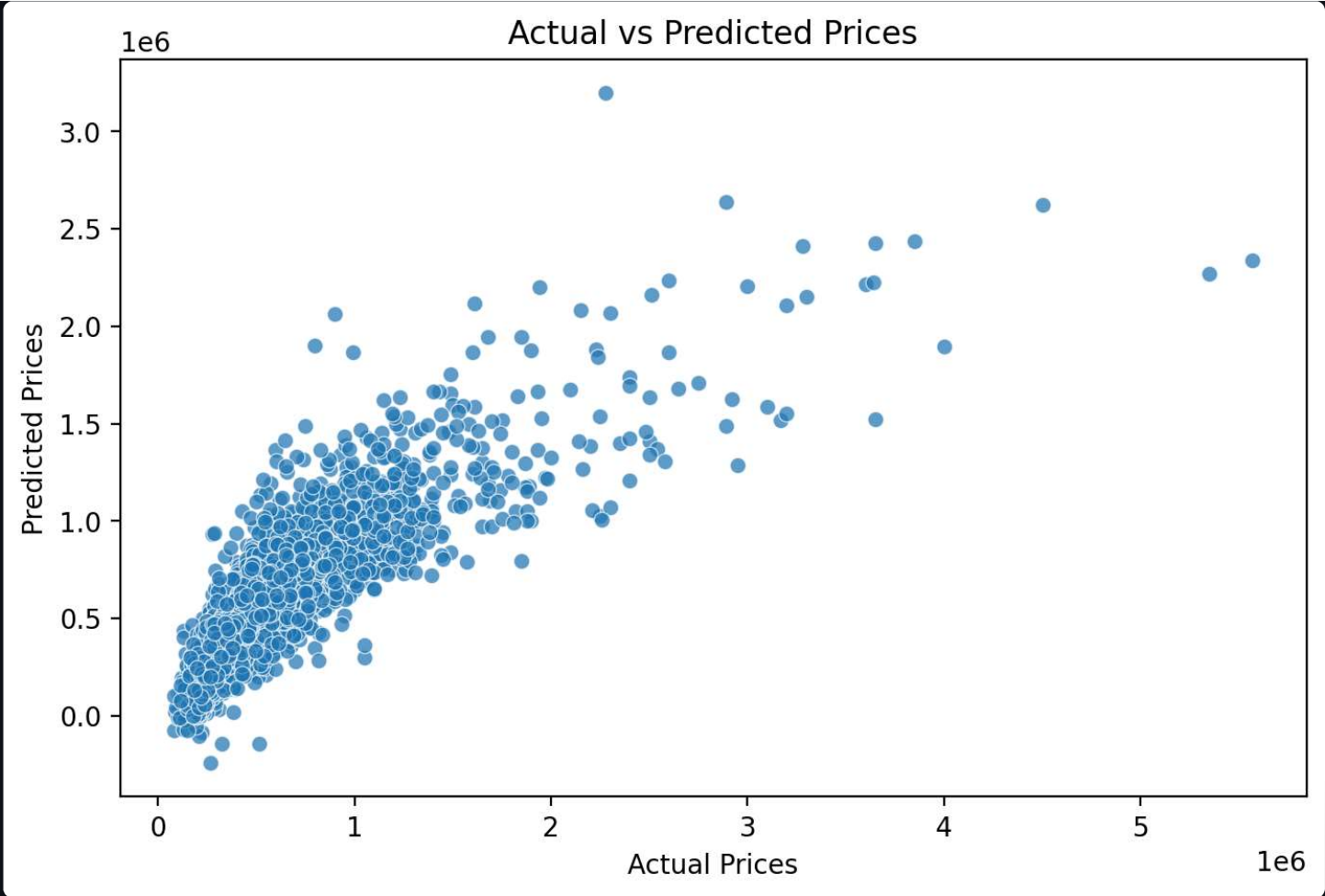
🏠 Predict House Price

id			bedrooms			bathrooms		
4580301520.86	−	+	3.37	−	+	2.11	−	+

sqft_living			sqft_lot			floors		
2079.90	−	+	15106.97	−	+	1.49	−	+

waterfront			view			condition		
0.01	−	+	0.23	−	+	3.41	−	+

grade			sqft_above			sqft_basement		
7.66	−	+	1788.39	−	+	291.51	−	+

yr_built			yr_renovated			zipcode		
1971.01	−	+	84.40	−	+	98077.94	−	+

lat			long			sqft_living15		
47.56	−	+	-122.21	−	+	1986.55	−	+

sqft_lot15		
12768.46	−	+

💰 **Predicted House Price: 539549.23**

🏠 House Price Prediction