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Gurgaon Property Analysis Dashboard

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Challenge

Gurgaon's real estate market is constantly evolving, with frequent fluctuations in property prices, diverse demand across regions, and varying investment opportunities. Buyers and investors often face difficulties in quickly identifying the right properties, leading to longer decision-making cycles and missed opportunities.

Solution and Impact

Solution: To address this, I developed a **Property Analysis Dashboard** using Streamlit, which provides **area-wise price trends**, **society recommendations**, **price predictions** based on user-selected features, and **price ranges** tailored to apartment sizes.

Impact: The dashboard cuts property search time by **30%** by offering real-time insights, helping users quickly identify profitable opportunities and make informed decisions.

Data Source: Web scraped 3000+ property listings from popular sites like 99acres and Magic Bricks using Selenium and Beautiful Soup
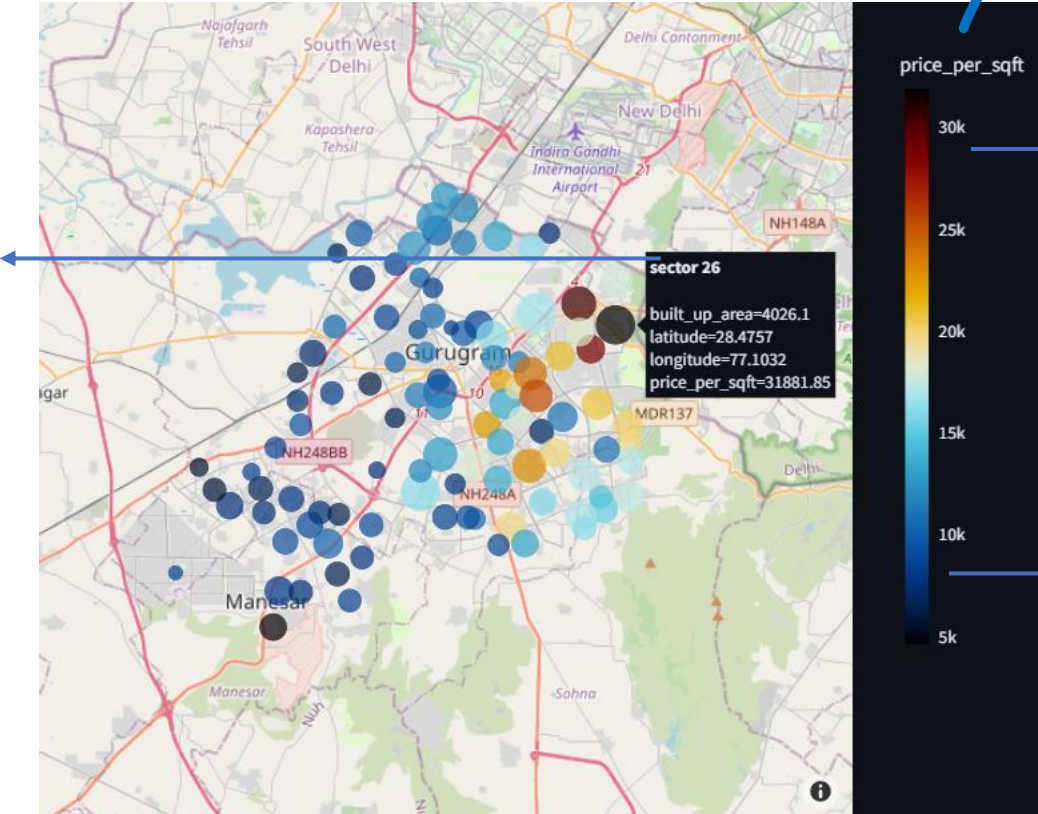
Dashboard

1. **Geo Map**: Price and location info in Map View

2. **Available Amenities Word cloud**

3. **Area Vs Price**: Scatter Plot for relation between Built Area and Price

4. **BHK Distribution**: Pie chart showing the count of 2BHK, 3BHK, etc.

5. **BHK Price Range Comparison**

6. **Price Distribution by Property Type(House and Flat)**

7. **Price Range Prediction (Using Random Forest)**

8. **Similar Society Recommendation**

Geo Map

Color bar representing the **price per sqft range** for each area of Gurgaon

Hovering over the bubble reveals the **price per sqft, sector**, and **location**

Highest Price per Sqft is around > **₹30,000** (**Quite Expensive**)

The lowest Price per Sqft is around **₹5,000**

Available Amenities

Select a Sector to view a list of all **available amenities** in the properties listed online

The large font size for **'Fire Alarm'** indicates its wide availability in **Sector 47**

The **larger** the **text**, the more frequently the amenity is listed in the Selected Area

Area vs Price

Select Property Type (House |Flat)

The y-axis displays the **Price** in **Crores**
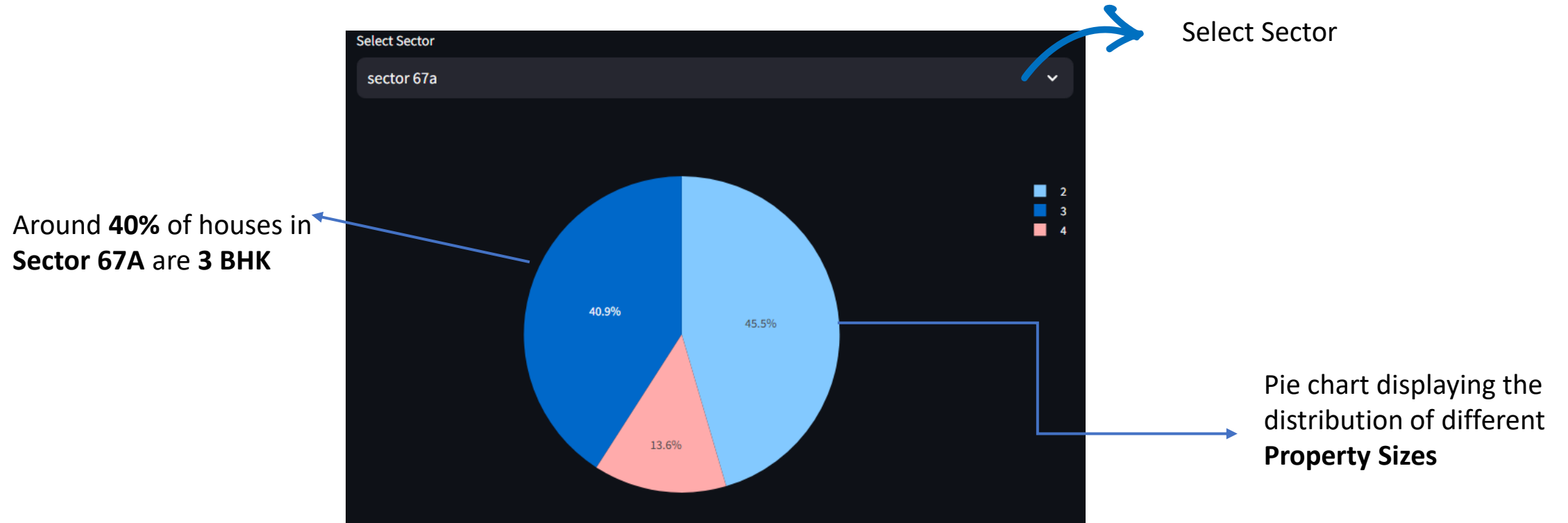
The x-axis shows the **Total Built Up Area**

agePossession=Relatively New
built_up_area=7444
price=15
bedRoom=5

The color bar shows the **number of bedrooms**, with lighter indicating more
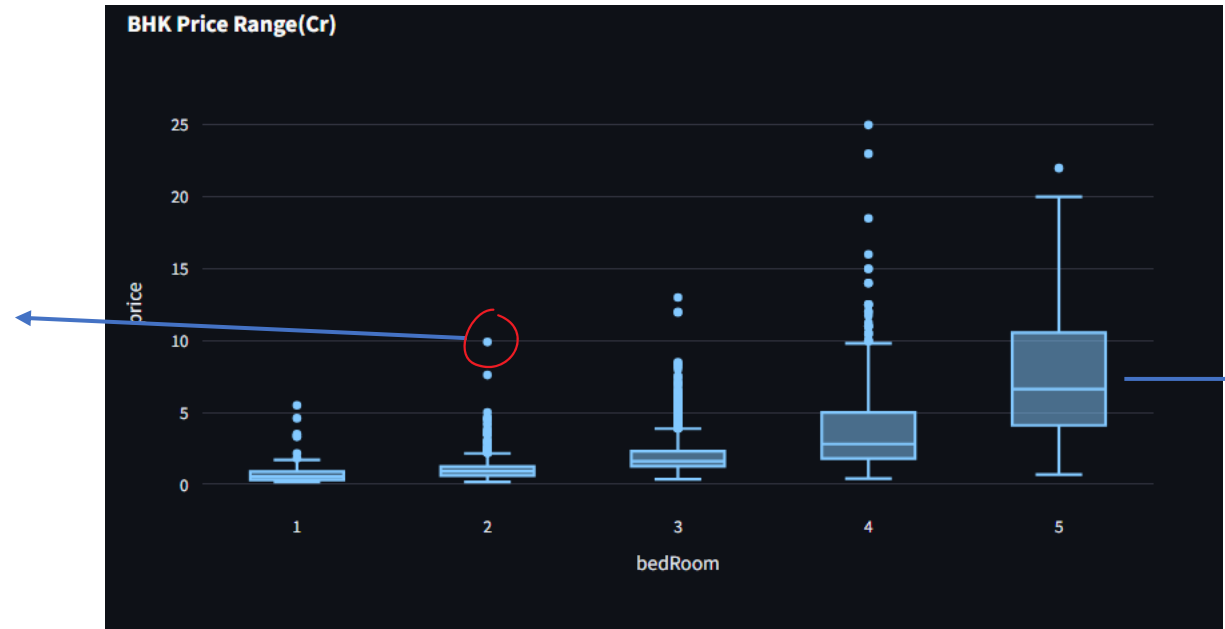
Use this slider to select the **Property Age**

BHK Distribution

Select Sector

Around **40%** of houses in **Sector 67A** are **3 BHK**

Pie chart displaying the distribution of different **Property Sizes**
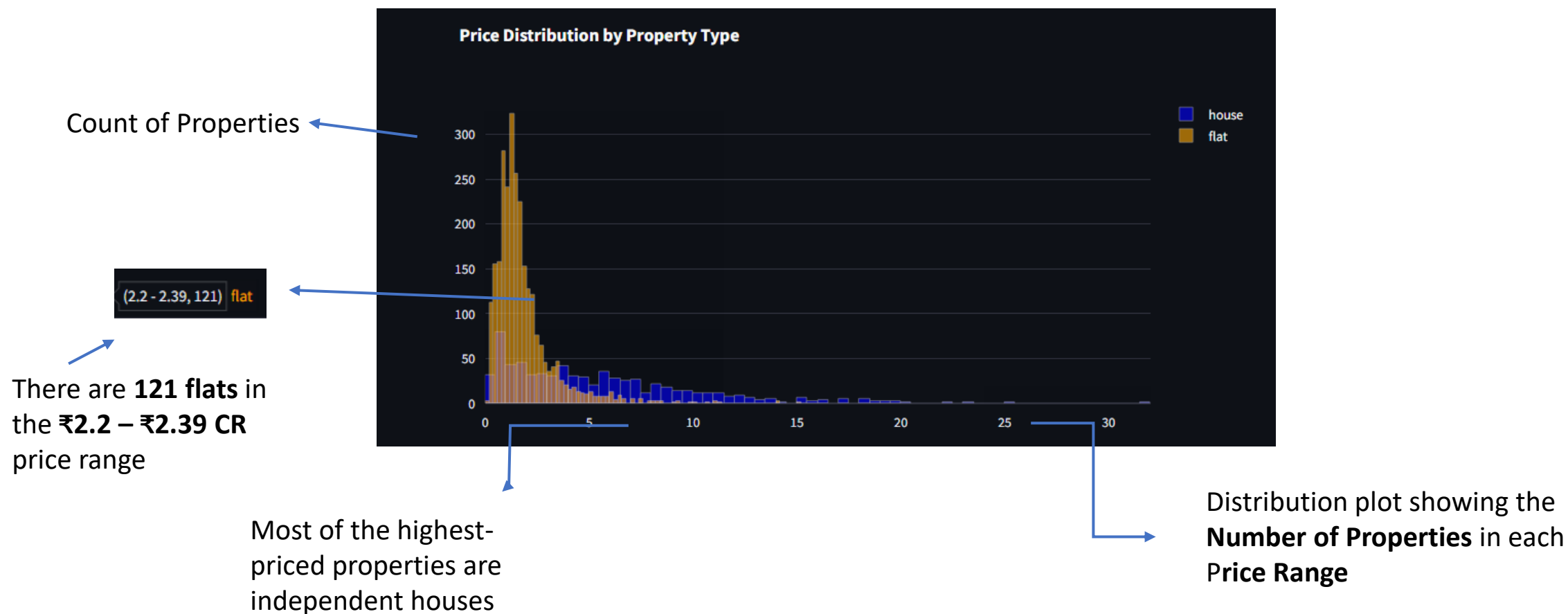
BHK Price Range Comparison

This shows that the priciest 2 BHK in the selected sector was around **₹10Cr**

Box plot showing **Price Ranges** for each **Property Size**

Price Distribution by Property Type

Count of Properties

(2.2 - 2.39, 121) flat

There are **121 flats** in the **₹2.2 – ₹2.39 CR** price range

Most of the highest-priced properties are independent houses

Distribution plot showing the **Number of Properties** in each **P**rice Range

Price Range Prediction

Helps buyers estimate the price range of properties based on their needs

Gurgaon Real Estate Price Predictor

Enter you inputs

Property Type

flat

Sector

sector 103

Average Price change for sector 103 is: ₹-4114

Number of bedrooms

1.0

Average Price increase Per bedrooms: ₹ 106961

Number of bathrooms

1.0

Number of Balconies

0

Property Age

Moderately Old

Built Up Area

1100

Select Property Type, Location and Amenities

Price change compared to the average price across **Gurgaon**

Uses **Random Forest Regressor** with **90%+ accuracy**, trained on **3000+** properties

The model predicts the property price within a **90% prediction interval**

Predict

The flat's price falls within the range of approximately 0.62 Crores to 1.06 Crores.

Similar Society Recommendation

Recommends Society Based on the Selected Location and Recommend Apartments in the selected Society

Multiple apartments are recommended for the selected society

Select Location and Radius

Location

Aarvy Hospital

Radius in Kms

30

Search

Ireo Victory Valley : 2.5 Kms

Bestech Park View Grand Spa : 3.2 Kms

Emaar MGF Emerald Floors Premier : 3.9 Kms

International City by SOBHA Phase 2 : 8.8 Kms

Recommend Apartments

Select an Apartment

Choose an option

Ireo Victory Valley

Bestech Park View Grand Spa

Emaar MGF Emerald Floors Premier

International City by SOBHA Phase 2

Select a **landmark** and **radius** to recommend nearby societies

This option **autofills** with the previously recommended societies

Recommend Apartments
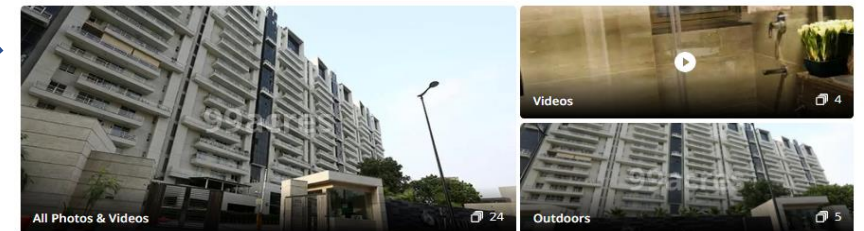
Select an Apartment

Bestech Park View Grand Spa

Recommend

Recommended Apartments:

La Lagune : Link

Whiteland The Aspen : Link

Videos | 4

All Photos & Videos | 24

Outdoors | 5

Home > Projects in Gurgaon > Golf Course Road > Sector 54 Gurgaon > La Lagune

La Lagune ♡
Sector 54, Gurgaon

View Number

RERA Status ⓘ | No Brokerage | 3D Floor Plans Available | +50 Top Facilities

CONSTRUCTION STATUS

Ready To Move
Since Sep, 2013

Select a **link** to visit the buy page on 99acres or Magic Bricks for **more information**

Project Summary

- This Streamlit-based dashboard, built with Python (using Pandas, Numpy, and Plotly), streamlines the property search process for buyers in Gurgaon.

- The project demonstrates my ability to apply data analysis, machine learning, and data visualization techniques to solve real-world problems.

- It showcases my skills in leveraging data-driven insights to improve decision-making, which I am eager to bring to a data analyst role