### PROJECT REPORT

TOPIC: HOUSE PRICE PREDICTION IN METROPOLITAN IN INDIA

#### INTRODUCTION

### **人OVER VIEW**

:

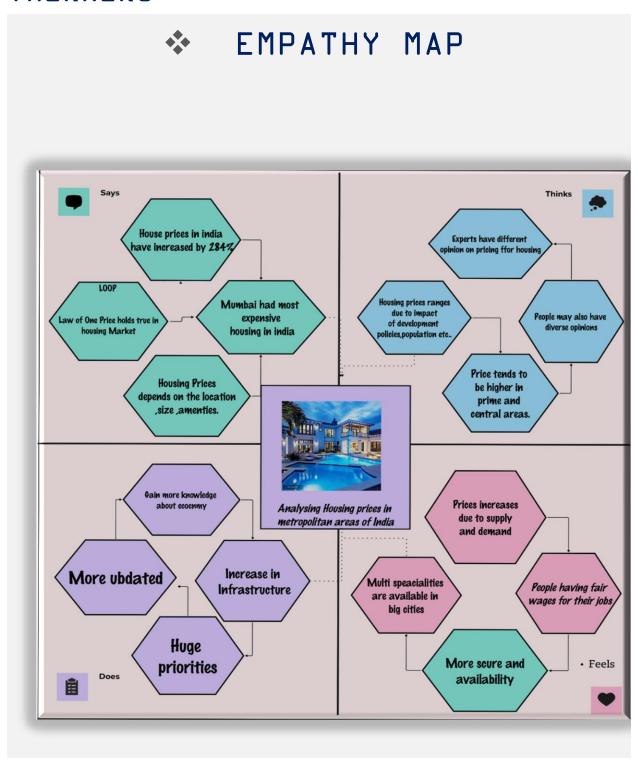
- The project aims to predict house prices using a machine learning model trained on the House Price Prediction dataset.
- The dataset contains 13 features such as location, price, Zoning, LotArea, BldgType, and more.
- The project involves data preprocessing, exploratory data analysis, and model training.
- The model is trained using regression techniques to accurately predict house prices.

You can find more information about this project and the dataset by following the link provided in below

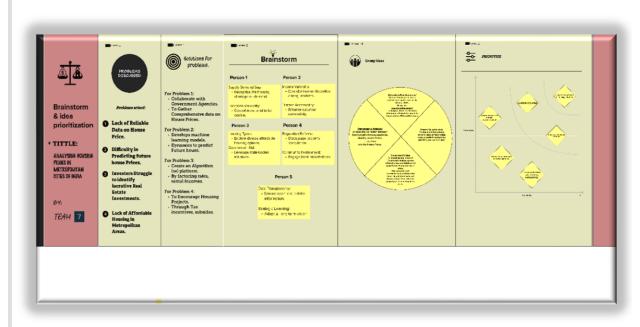
### ▲ PROJECT PURPOSE

- Project aims to develop and evaluate the performance and predictive power of a model trained on The data collected from houses
- ➤ The presentation covers the basics of machine learning and the algorithm used to predict house prices using regression techniques

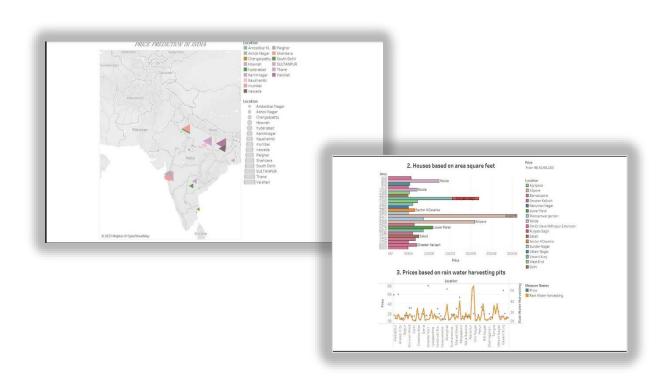
# PROBLEMS DEFINITION AND DESIGN THINKING

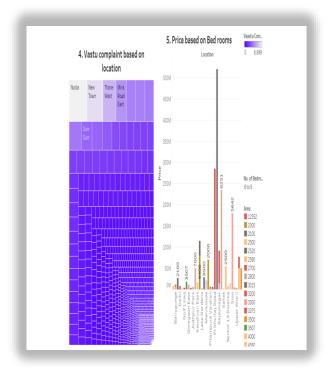


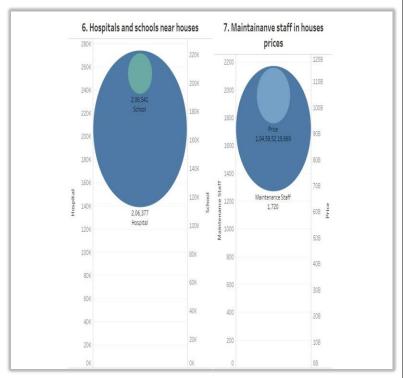
### IDEATION AND BRAINSTORMING MAP

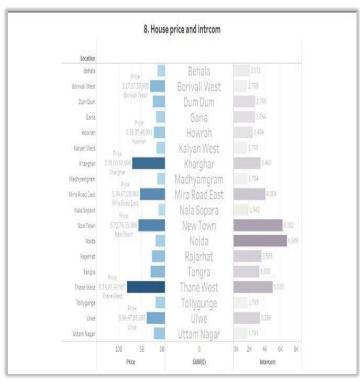


# RESULT DASH BOARD SCREEN SHOTS

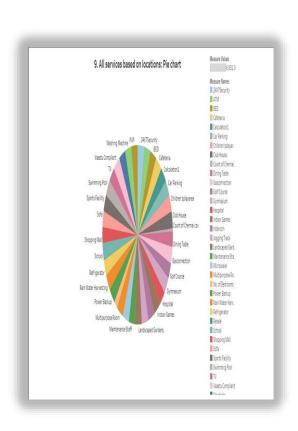






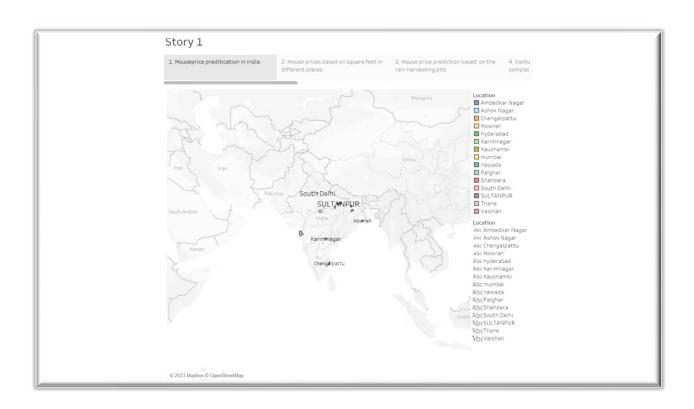


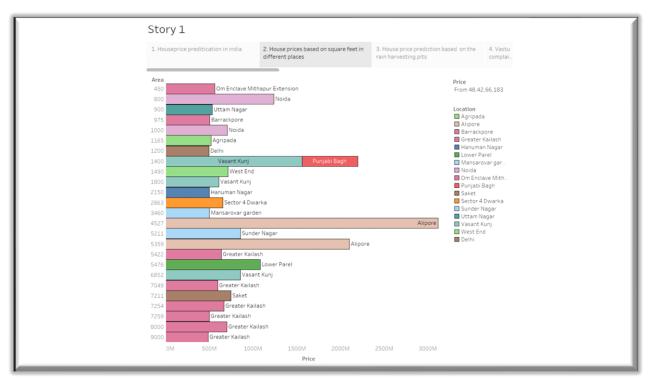


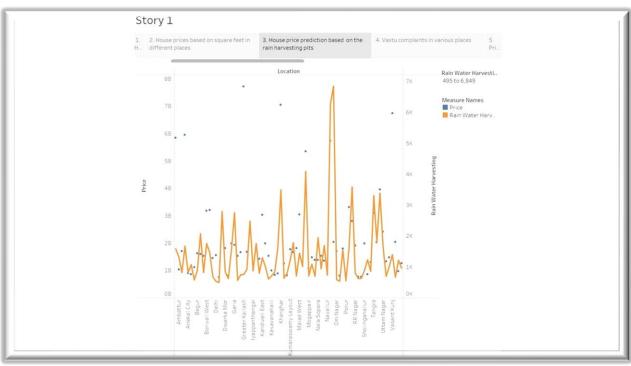


# STURY

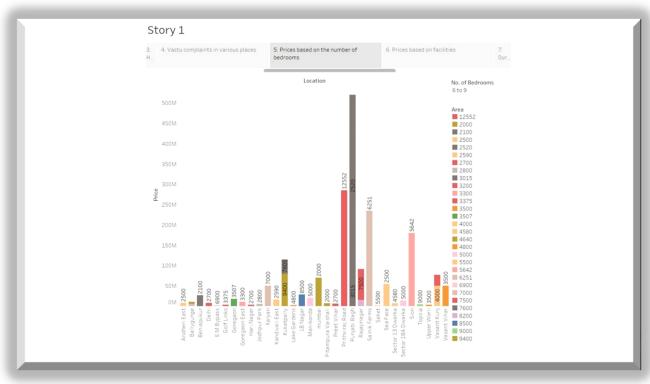
## HOUSE PRICE PREDICTION IN METROPOLITAN CITIES IN INDIA

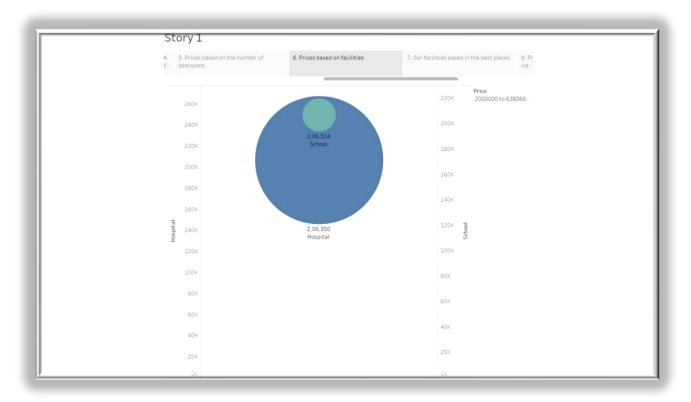






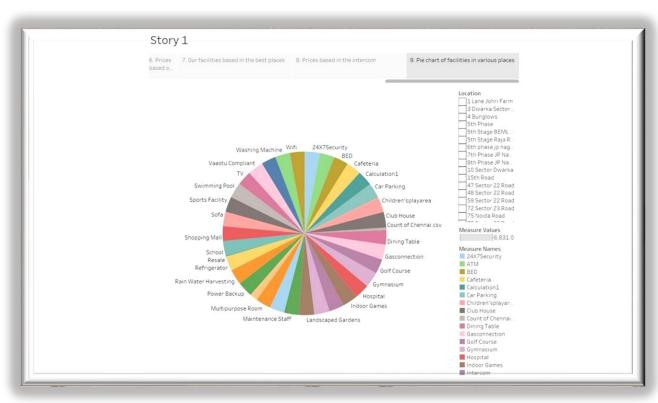












### ADVANTAGES AND DISADVANTAGES

House price prediction is a complex topic that has both advantages and disadvantages.

One of the main advantages of house price prediction is that it can help buyers and sellers make informed decisions about the real estate market. By predicting future prices, buyers can make better decisions about when to buy, while sellers can decide when to sell their property for maximum profit. However, there are also some disadvantages to house price prediction. One of the main disadvantages is that it can be difficult to predict future prices accurately. This is because there are many factors that can affect the real estate market, such as economic conditions, interest rates, and government policies. Additionally, some people may arque that house price prediction can lead to speculation and instability in the market. Overall, while house price prediction can be a useful tool for buyers and sellers, it is important to be aware of its limitations and potential drawbacks.

### APPLICATIONS

- House price prediction has several applications in the real estate market. One of the most common applications is to help buyers and sellers make informed decisions about the market.
  - By predicting future prices, buyers can make better decisions about when to buy, while sellers can decide when to sell their property for maximum profit.
  - Additionally, house price prediction can be used by real estate agents to provide more accurate pricing estimates for their clients.

- Furthermore, house price prediction can be used by banks and other financial institutions to assess the risk of lending money for mortgages. However, it is important to note that house price prediction is not always accurate and can be affected by many factors such as economic conditions, interest rates, and government policies.
- Therefore, it is important to use house price prediction as a tool in conjunction with other market research and analysis.

#### CONCLUSION

The project used machine learning techniques to build and evaluate different models for house price prediction. The project also explored the advantages and disadvantages of house price prediction and its applications in the real estate market. The project recommended some possible ways to improve the house price prediction; such as using a larger and more diverse dataset; using more complex and relevant features; and using dynamic models that can update and learn from new data. The project also recommended using house price prediction as a tool in conjunction with other market research and analysis.

### FUTURE SCOPE

Improved accuracy: With the advancements in machine learning algorithms and data collection techniques, the accuracy of house price prediction models is expected to improve significantly in the future .

- Real-time prediction: Real-time house price prediction can be used to provide up-to-date information about the market trends and help buyers and sellers make informed decisions.
- Personalization: House price prediction models can be personalized to suit the specific needs and preferences of individual buyers and sellers.
- Integration with other technologies: House price prediction can be integrated with other technologies such as virtual reality, augmented reality, and blockchain to provide a more immersive and secure real estate experience.
- Global reach: House price prediction can be used to predict prices in different regions and countries, making it easier for buyers and sellers to make cross-border transaction.
- However, it is important to note that house price prediction is not a foolproof method and can be affected by many factors such as economic conditions, interest rates, and government policies