Final Report



1. Introduction

The real estate market is influenced by various factors such as house age, renovation status, number of bedrooms and bathrooms, and overall size. This project aims to analyze housing market trends and visualize key insights using Tableau to better understand how different features impact sale prices.

1.1. Project overviews

The dataset contains Transformed housing data and 21,609 house sale records, including Property features such as Sales price, area, bedrooms, bathrooms, floors and location. There are a total of 31 columns, out of which Sale Price can be supposedly taken as a dependent variable. The other variables are different features, locations and date, etc. regarding the houses. This project, "Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau," aims to explore and analyze housing market trends using the Transformed Housing Data 2 dataset from Kaggle. The objective is to identify key factors influencing house prices, such as location, size, number of bedrooms, bathrooms, floors and basement area.

By leveraging Tableau, the project will create interactive dashboards, story, bar chart, histogram, summary dashboard to visualize patterns, compare regional price variations, and gain insights into how different features impact house sale prices. The analysis will help in making data-driven decisions for buyers, sellers, and real estate professionals.

1.2. Objectives

- Identify key factors influencing house prices.
- Analyze the effect of renovations on property value.
- Explore the distribution of house sales across different price ranges.
- Create interactive Tableau dashboards to present findings effectively.

2. Project Initialization and Planning Phase

2.1. Define Problem Statement

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A first-time homebuyer who wants to make an informed decision	Find a home within my budget that meets my needs	The available market data is difficult to interpret and scattered across multiple sources	There is no centralized, easy-to-use tool that visualizes housing trends based on historical sales data	Confused and overwhelmed, making me hesitant to proceed
PS-2	A real estate investor looking for high-return properties	Identify profitable properties based on price trends and key influencing factors	Existing datasets require extensive manual analysis and lack clear insights	No interactive visualization tool allows me to compare property appreciation trends effectively	Frustrated and uncertain about making investment decisions
PS-3	A real estate agent aiming to assist clients efficiently	Provide accurate and insightful recommend ations based on market data	The data is time-consuming to analyze and spread across various reports	There is no comprehensive tool to aggregate and visualize pricing trends for quick insights	Less efficient, unable to provide quick, data- backed advice to clients

2.2 Empathy Map Canvas

Empathy Map

Think & Feel

- Am I making data drive conclusions?
- Are there any emerging trends?
- Concerned about market fluctuations
- Curious about regional differences

See

- · Charts and graphs in Tableau
- Latest data on sale prices
- Different housing features

Hear

- Discussions with colleagues
- · Market news and reports
- Client feedback

Say & Do

- · Share findings with the team
- Focus on price trends over in
- Compare property attributes

Pain

- Difficult to identify patterns
- Time-consuming analysis
- Data quality concerns

Gain

- Better market understanding
- Informed decision making
- Stronger client presentations

2.3 Brain Storming

Step 1: Team Gathering, Collaboration and Problem Statement

Our team collaborated to identify pressing challenges in the real estate market, particularly in understanding how various property features influence housing sale prices. After exploring themes like housing affordability, real estate investment planning, urban development, and smart property

insights, we narrowed down our focus to uncover actionable insights hidden in housing data. The objective was to visually explore trends using Tableau that would help buyers, sellers, investors, and policy makers understand patterns of sale prices based on features like area, bedrooms, renovation status, condition, location (zipcode groups), and more.

Problem Statement:

4 Compare prices for renovated vs. non-renovated homes Renovation Analysis 5 Group insights by Zipcode Clusters Geographical Comparison 6 Analyze house condition vs. price using dummy variables **Quality-Based Pricing** 7 Add calculated field: TotalAreaSqft **Data Preparation** 8 Binning / Categorization Create SalePriceBin with 100k intervals 9 Use Tableau dashboard to combine insights Dashboard Design

Build a Story in Tableau for narrative Storytelling & Reporting How can housing sale price trends and property characteristics be visualized and analyzed using Tableau to identify patterns, improve buyer/seller decision-making, and uncover insights that support strategic real estate planning?

Team Members:

· Team Leader: Teja paul

• Team Member: Singuluri charishma

• Team Member: seerapu Vishnu vilasini

• Team Member: NDSVSS Arthi

Step 2: Brainstorming, Idea Listing and Grouping

S.No	Idea Description	Category
1	Visualize average sale price by SalePriceBin	Pricing Insights
2 3 S.No	Analyze impact of number of bedrooms on sale price Explore relationship between Total Area and Price (scatter plot) Idea Description	Property Features Size-Based Pricing Category
11	Embed Dashboard in Web Application using Flask Deploymen	t & Integration
12	Add filters for Bedrooms, Condition, Renovation in Dashboard	Interactive Exploration

Step 3: Idea Prioritization Table

S.No	Idea Description			In	npact Fe	easibilit	y Priorit	ty
1	Visualize average sale price by SalePriceBin High I					High		
2	Analyze impact of number of bedrooms on sale price					Easy	High	
3	Explore TotalArea vs Price (scatter p	olot)	High	Easy	High			
4	Compare prices for renovated vs. non-renovated homes H					Mediu	m	High
5	Group insights by Zipcode Clusters	Medium Medium			Mediu	m		
6	Analyze house condition vs. price	High	Mediu	m	High			
7	Add calculated field: TotalAreaSqft	Mediu	m Easy	High				

- 8 Create SalePriceBin with 100k intervals Medium Easy High
 9 Use Tableau dashboard to combine insights High Easy High
 10 Build a Story in Tableau High Medium High
 11 Embed Dashboard in Web Application High Hard Medium
- 12 Add filters for Bedrooms, Condition, Renovation Medium Easy Medium

 2. Descriptions and analysis

3. Requirement analysis

3.1 Customer Journey map

Customer Journey Map: Housing Market Trends Dashboard

Stage	Touchpoints	Emotions	Pain Points &	Opportunities	User Goals
Awareness	- Sees dashboard via social media, newsletter, Tableau Public - Reads title/summary Actions &	Curious, das Interested re		Use benefit-driven titles, visual thumbnails purpose	clarify

Clicks dashboard

Engaged,

Overwhelmed by Add guided Understand

Consideration - Reads

Cautious

introduction, explores

the dashboard and its where

layout

Uses filters for

location, price,

features

Excited,

Views charts Inquisitive

(bar, scatter, pie,

etc)

Exports visuals

Shares dashboard

Satisfied,

Bookmarks or Confident

downloads insights

Subscribes for

updates

Loyal,

Revisits for new

Empowered

data

Exploration

Leaves feedback

Add example Discover

Filters not intuitive,

charts slow to load queries, improve valuable speed

insights

7

layout, unsure walkthrough,

to start simplify navigation

features

Decision		Limited export options or unclear findings formats	Enable easy download/share, offer export guides	Preserve and share		
Retention 3.2 So	olution Requirement	No update notifications, feedback unacknowledged	Enable email updates, actively respond to feedback	Stay informed and engaged		
Functi FR No.	onal Requirements (FRs) Functional Requirement (Epic) Sub Requirement (S	tory / Sub-Task)			
FR-1	Data Import	Import data from CEnable live databas	SV e integration (MySQI	ـ)		
FR-2 FR-3	Data Cleaning & Transformation Data Visualization	 Handle missing values Add calculated fields like Year, Lockdown Create Tableau worksheets - Build multiple dashboards Enable filtering by region, year View comparative bar charts Analyze pre/post-lockdown trends 				
FR-4	User Interaction					
FR-5	User Access	Role-based views for DeveloperDownload/export or	or Analyst, Policy Ma	ker,		
FR-6	Feedback Loop	- Allow stakeholder	feedback and change i	requests		

- Implement revision cycles

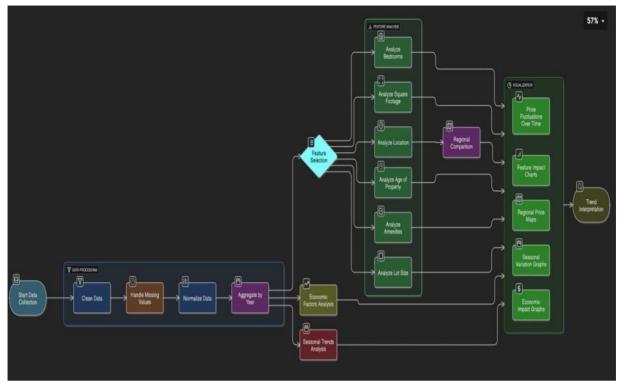
Non-Functional Requirements (NFRs)

NFR	Non-Functional	
No.	Requirement	Description
NFR-1	Usability	Dashboard must be intuitive with clear filters, legends, and guided walkthroughs
NFR-2	Security	Implement role-based access and secure backend/database connectivity
NFR-3	Reliability	System must handle unexpected data formats and maintain high accuracy
NFR-4	Performance	Ensure fast loading and responsive interaction across all dashboard elements
NFR-5	Availability	Dashboard should be accessible across browsers/devices with minimal downtime
NFR-6	Scalability	Should scale for large datasets and support additional
	·	features/modules

3.3 Data Flow Diagram

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

- 1. Data collected from POSOCO in CSV format.
- 2. Cleaned and transformed, with calculated fields like Year and Lockdown.
- 3. Visualizations built in Tableau using multiple worksheets.
- 4. Users review the dashboard and may request changes.
- 5. Final version archived after approval.



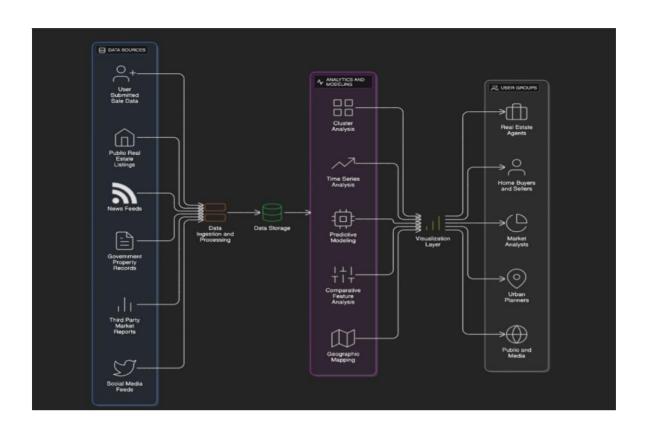
User Stories Table:

	Functional	User					
User Type	Requirement (Epic)	Story Number	User Story / Task	Acceptance Criteria	Priority Release		
	View		As a user, I want to	I can filter and			
Analyst / Policymaker	Electricity	USN-1	view electricity	view charts for Sprin High cific regions 1 region and year. and			
Toneymaker	Trends		years.	enie regions i regi	on and year. and		

As a user, I want to I can view bar

	Analyst	Compara States	HCN	· 2	compare top and	ıd	charts with top N	Medium	Sprint-
	Anaryst	Compare States USN-		-2	bottom electricity- and bottom N 1 states.				
					As a user, I war		I can view		
					As a user, I war	111 10 1	monthly and		Sprint-
	Policy Maker	Forecast	USN	-3	analyze seasona	al	quarterly	High	2
	J	Planning			variations in us	age.	consumption		2
						_	trends.		
							tichas.		
	Energy	View Impact of			As a user, I war compare electri		lockdown chart is		Sprint-
	Consultant	Lockdown	USN	[-4	usaga bafara (and	available for 2	High	
	Consultant	Lockdowii			C	and electi		anci	
	Developer	Connect Data	USN		As a user, I war	nt	Data refreshes		
	-				the dashboard to	o be a	automatically	Sprint-	
								Medium	
				As a	user, I want to				
						I can	download	a .	
			,	expoi	rt dashboard	daabb	ands as I avv	Sprii	nt-
				views		uasno	ooards as Low	3	
Dava	loper Eve	ort Insights LICN		V 10 VV S	<i>3</i> 101	im	ages or PDFs.	J	
	-	ort Insights USN- from MySQL to		prese	ntations.	1111			
		Tableau.	-						

3.4 Technology Stack



4. Project design

4.1 Problem Solution Fit

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why.

Purpose:

- ☐ Solve complex problems in a way that fits the state of your customers.
- ☐ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ☐ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ☐ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ Understand the existing situation in order to improve it for your target group.



4.2 Proposed Solution

Proposed Solution Template

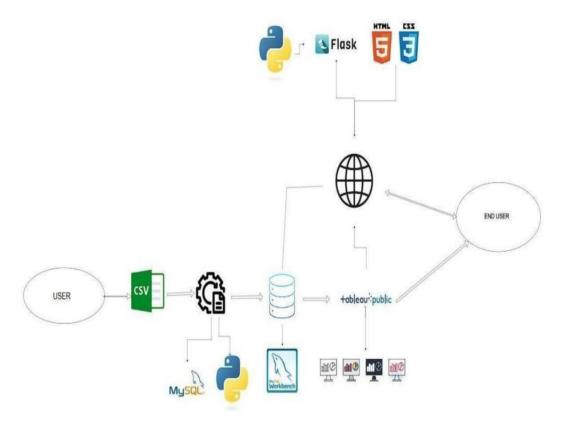
S.No	. Parameter	Description
1	Problem Statement	The real estate market involves vast and complex datasets on housing features and sale prices. These datasets are often underutilized due to lack of effective visualization, making it difficult for buyers, sellers, and analysts to draw insights or forecast trends.
2	Idea / Solution Description	Our solution transforms static housing datasets into interactive, insightful visualizations using Tableau. The project involves cleaning and transforming the data, creating calculated fields and KPIs, and developing a dashboard that highlights key trends, comparisons, and location-based analyses. The solution is deployed via a Flask web app.
3	Novelty / Uniqueness	This project leverages Tableau's powerful visual capabilities to go beyond basic data analytics. By combining calculated fields, condition segmentation, and geographic mapping, the dashboard offers a dynamic exploration of how features like bedrooms, area, renovation, and location influence housing prices.
4	Social Impact / Customer Satisfaction	This solution enables real estate buyers, sellers, agents, and market researchers to make informed decisions. It improves housing transparency, supports better urban planning, and enhances user engagement with clear visuals and actionable insights.
5	Business Model (Revenue Model)	This dashboard can be scaled and offered as a subscription-based SaaS tool to real estate companies, market research firms, or housing consultancies. Advanced forecasting modules, API integrations, and custom dashboards can be monetized as premium features.
6	·	The system is designed to be scalable and adaptable. It can incorporate new datasets (like rental trends or economic indicators), extend to new regions, and integrate with ML models for price predictions, thereby offering long-term growth potential.

4.3 Solution Architecture

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

• The architecture separates data preprocessing, storage, visualization, and UI layers—making it easy to maintain, scale, and enhance.

- Cleaned data from MySQL is visualized using Tableau dashboards, offering region-wise, yearwise, and seasonal insights with filtering capabilities.
- Dashboards are embedded into a Flask-based web interface, allowing end users to interact with visual data through a user-friendly portal.
- The solution supports future extensions like forecasting models and can be deployed locally or on cloud platforms like Heroku or AWS.



5. Project planning & scheduling

5.1 Project Planning

Sprint	Epic	User Story No.	User Story / Task	Point	s Priority	Assigned To
Sprint-			As a user, I can upload housing data			
	Data Setup	USN-1		3 in	High	N D SVSS arthi
1			CSV format			
Sprint-			As a developer, I can clean and		High	Teja paul
	Data Cleaning	USN-2		4		
1			preprocess housing data in Tableau			
Sprint-			As a user, I can create calculated		Medium	N D SVSS arthi
	Field Creation	USN-3	2 fields like TotalAreaSq	ıft		
1						

Sprint-	Price Binning	USN-4	As a user, I can create SalePriceBin 2 for grouping house	es	Medium	Singuluri charishma
Sprint-2	Data Visualization	USN-5	As a user, I can create sheets with 5 charts: price vs feature	es	High	Singuluri charishma
Sprint-2	Dashboard Creation	USN-6	As a user, I can build an interactive Tableau Dashboard with filters	3	High	N D SVSS arthi
Sprint-2	Dashboard Styling	USN-7	As a user, I can style the dashboard	2 for	Medium	Teja paul Teja paul
Sprint-	Storytelling	USN-8	better readability and navigation As a user, I can create a Tableau Story showing insights step by step	2	Medium	Seerapu Vishnu vilasini N D SVSS arthi
Sprint-	Flask Integration	USN-9 3	As a developer, I can embed Tableau dashboard into a Flask web	4 app	_	Seerapu Vishnu vilasini
3 Embe	ed Testing US	N-10	As a user, I can test and review the pr 2 embedded dashboard UI	rint-	Medium	Teja paul
Sprint-	Documentation	USN-11		3	High	N D SVSS arthi
4 Sprint-		USN-12		2	Medium	
_	Preparation Bug Fixing /	USN-13		2	Medium	Singuluri charishma N D SVSS arthi
4	Final QA		system and fix visual/logic bugs			

Project Tracker, Velocity & Burndown Chart

Sprin Total Story Poin DuratioStart Date End Date Points CompleteRelease Da

Sprint 11	4 Days 11 June 20214 June 20211	14 June 202
Sprint 10	4 Days 15 June 20218 June 20210	18 June 202
Sprint 7	4 Days 19 June 20222 June 2027	22 June 202
Sprint 7	4 Days 23 June 20226 June 2027	26 June 202

Velocity Calculation

Total Points Completed: 11 + 10 + 7 + 7 = 35

Total Duration: 4 + 4 + 4 + 4 = 16 days

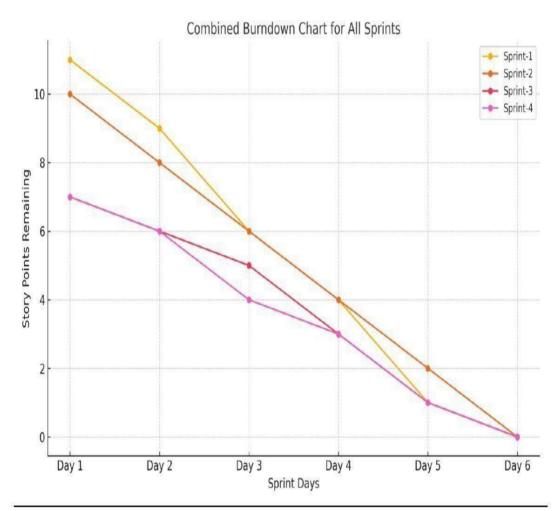
 $Average\ Velocity = Total\ Points\ Completed\ /\ Total\ Days = 35\ /\ 16 = 2.19\ points/day$

Burndown Chart Insight

- Initial Total Story Points: 35
- Sprint-wise burn (Remaining Points):

 After Sprint-1: 24 ∘

 After Sprint-2: 14 ∘ After Sprint-3: 7 ∘ After Sprint-4:
 0



6. Functional and performance testing

6.1 Performance Testing

S.No	Parameter	Screenshot / Values

1.	Data Rendered	The dataset used contains housing sales data with fields such as Sale Price, Number of Bedrooms, Bathrooms, Flat Area, Lot Area,	
		Basement Area, House Age, Condition, Renovation Status, Zipcode Group, and others. The data was provided in .csv format and include derived and transformed columns suitable for advanced analytics and visualizations in Tableau.	
2.	Data Preprocessin	Before importing the data into Tableau, preprocessing was done usin	
		Python (Pandas). The following steps were performed:	
		Removed null or missing values.	
		 Renamed columns for clarity (e.g., "No of Bedrooms" → 	
		"Bedrooms").	
		Created calculated fields like "TotalAreaSqft" (sum of flat, lo	
		and	
		basement areas).	
		Generated dummy variables for house conditions and	
		renovation status.	
		 Transformed categorical fields to improve Tableau usability. The final cleaned dataset was stored and imported into Tableau for visualization. 	

3.	Utilization	Multiple filters were implemented in Tableau to improve interactivity and	
	of Filters	user exploration. These include:	
		Number of Bedrooms	
		Number of Bathrooms	
		House Condition	
		Renovation Status (Yes/No)	
		Zipcode Group	
		Sale Price Bins	
		These filters allow users to drill down and compare trends across different property types and regions.	
		_	

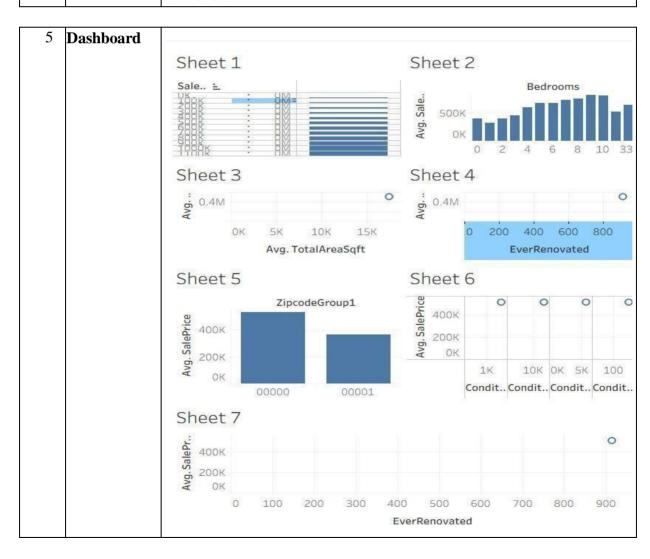
4 Calculated Fields Used

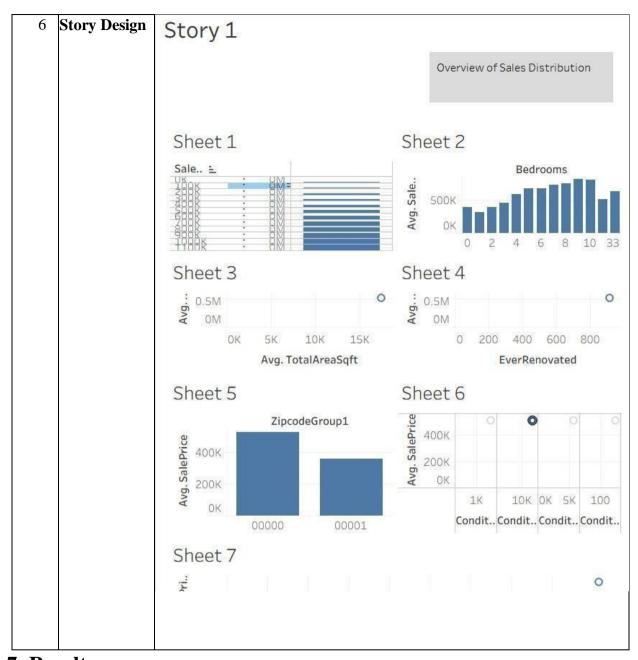
Several calculated fields were created in Tableau to enhance analysis and interactivity:

- TotalAreaSqft → [FlatAreaSqft] + [LotAreaSqft] + [BasementAreaSqft]
- SalePriceBin → Binning Sale Price into ₹100,000 intervals
- Condition_Excellent, Condition_Good, etc. → Dummy fields (0/1
- Ever_Renovated_Yes → Dummy field to identify renovated home
- AvgPrice → AVG([SalePrice]) for grouped insights
- HouseAge → Difference between year built and sale date if available

(or derived field if pre-calculated)

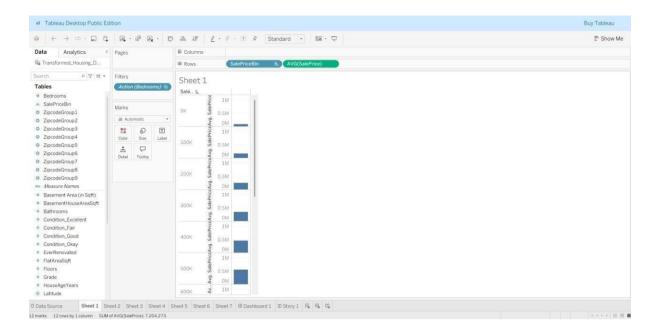
These fields enable comparisons across pricing, condition, and space utilization.

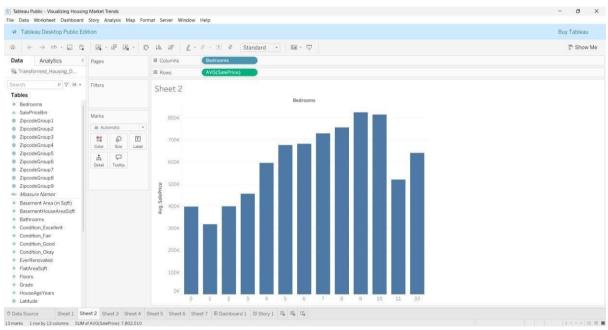




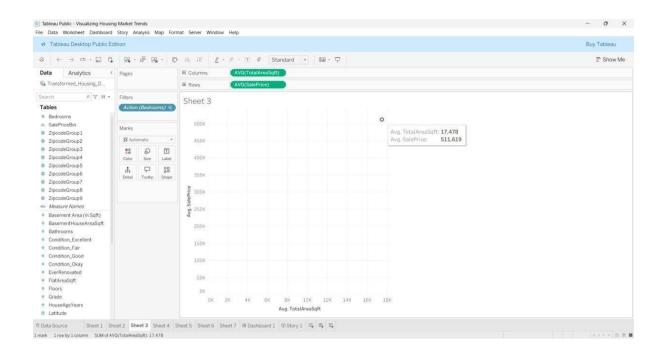
7. Results

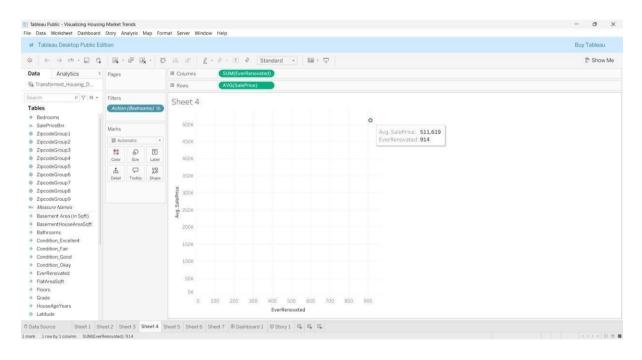
7.1 Output Screenshots



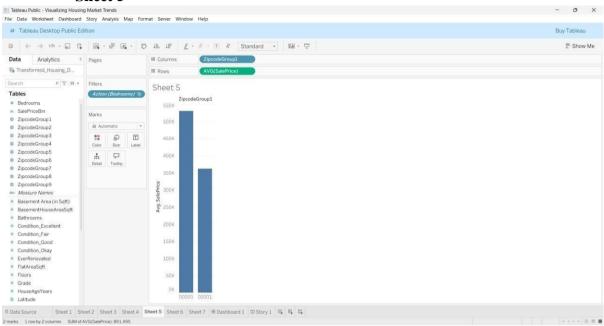


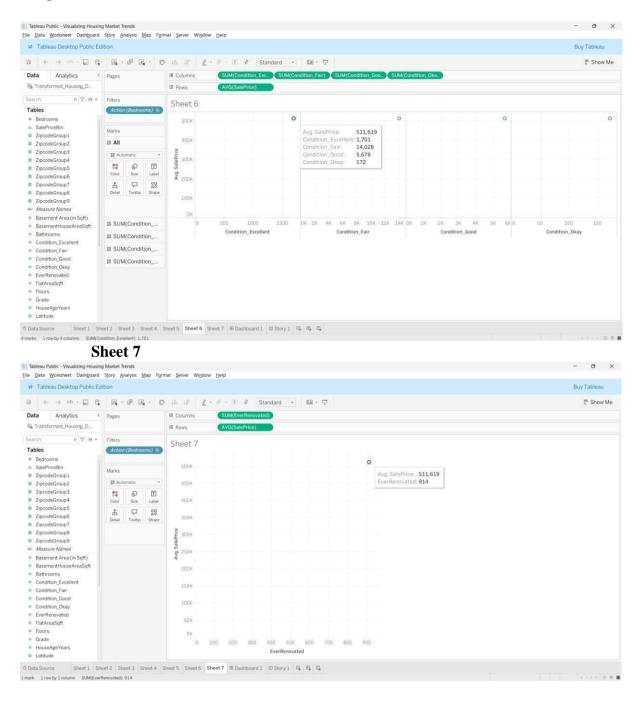
Sheet 3



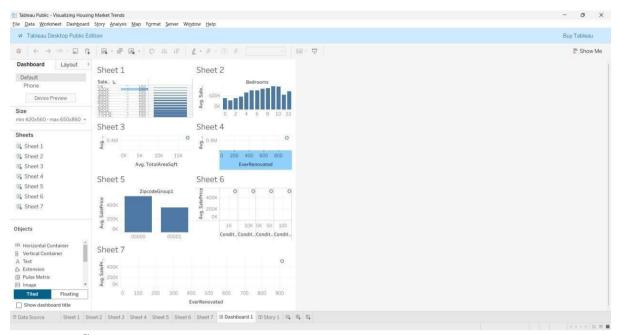


Sheet 5





Output of Dashboard



Story



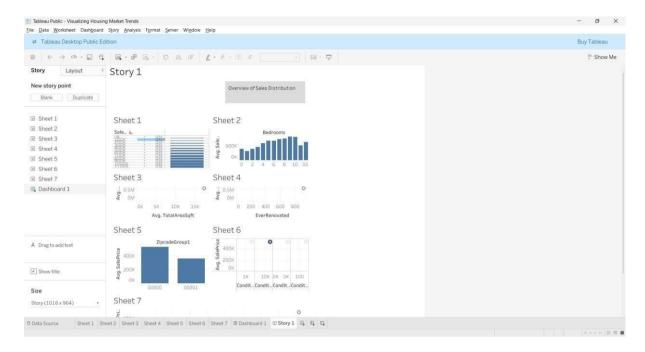
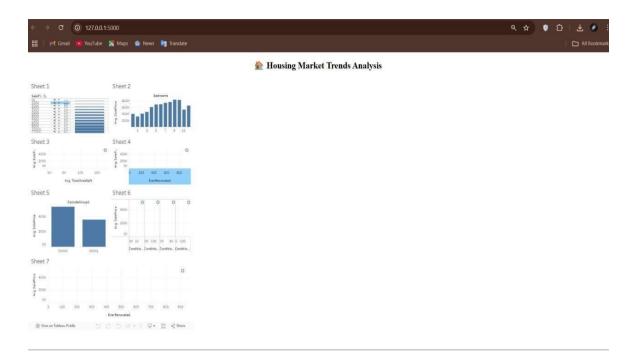


Tableau public link

https://public.tableau.com/views/VisualizingHousingMarketTrends 17508278225630/St ory1?:language=en-

US&publish=yes&:sid=&:redirect=auth&:display count=n&:origin=viz share link

Output



8. Advantages & disadvantages

Advantages:

1. Interactive Analysis:

The Tableau dashboard allows users to explore data with filters (e.g., bedrooms, renovation status, price bins), enhancing understanding through dynamic interactions.

2. Informed Decision-Making:

Buyers, sellers, agents, and investors can make data-driven decisions by identifying which features (e.g., area, renovations, number of floors) impact property value.

3. Data Storytelling:

The Tableau Story feature presents insights in a sequential, digestible narrative—great for business reports or stakeholder presentations.

4. Geographic Visualization:

Zipcode grouping allows regional comparison of price trends and property types, revealing market opportunities and local disparities.

5. Calculated Metrics & KPIs:

Metrics like Average Sale Price and Total Area improve business clarity and enable fast comparisons across categories.

6. Web Accessibility:

Embedding the dashboard into a Flask web app increases accessibility—users can view it from any browser without needing Tableau Desktop.

7. Modular & Scalable Design:

The project structure supports additional data (e.g., rental prices, future years), making it expandable to other regions or market conditions.

8. Minimal Coding Required:

Most of the visualizations are created using Tableau's drag-and-drop interface—making it ideal for analysts without deep programming expertise.

Disadvantages:

1. Static Dataset Limitation:

The analysis depends on a preloaded CSV file; it doesn't support real-time updates unless integrated with live databases or APIs.

2. Tool Dependency:

The system relies on Tableau Public, which has limitations like no row-level security and requires dashboards to be public. **3. Learning Curve for Tableau:**

While Tableau is user-friendly, new users may need time to understand calculated fields, filters, and advanced charting options.

4. Limited Predictive Power:

This is a descriptive and visual analytics project—it does not use machine learning or predictive modeling to forecast housing prices.

5. Browser Compatibility:

Older browsers or low-resolution screens may not render complex dashboards optimally, especially if not designed responsively.

6. Manual Data Preprocessing:

Initial data cleaning, renaming, and transformation were done manually using Python or within Tableau, which might be error-prone at scale.

9. Conclusion:

The project "Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau" successfully demonstrates how complex real estate data can be transformed into meaningful, interactive visual insights. By leveraging Tableau's powerful visualization capabilities, we have made it easier for buyers, sellers, investors, and analysts to understand the key factors influencing house prices. Our dashboard enables quick comparisons based on features like number of bedrooms, renovations, house age, and geographic location. The integration with Flask provides a seamless web interface, enhancing accessibility and usability. Overall, this project bridges the gap between raw housing data and strategic real estate decision-making, allowing users to gain actionable insights with minimal technical expertise.

10. Future scope:

1. Live Data Integration:

Future versions can integrate live property listings or transaction data via APIs or real-time databases to provide up-to-date market insights.

2. Machine Learning Forecasting:

Incorporating regression models or time-series forecasting can help predict future housing prices based on historical trends and features.

3. Rental Market Visualization:

Extend the dashboard to include rental data analysis, enabling a broader comparison between buying vs. renting decisions.

4. Mobile Optimization:

Responsive design enhancements can be implemented to ensure the dashboard performs well across tablets and smartphones. **5. Advanced User Access Control:**

By using Tableau Server or Tableau Online, dashboards can be secured with role-based access for different stakeholders.

6. Location Intelligence Enhancements:

Integration of geospatial data, satellite maps, or demographic overlays can improve location-based insights (e.g., school zones, crime rates).

7. Recommendation Engine:

Develop a recommendation system to suggest optimal property types using user-input filters.

11. Appendix

Source Code:

index.html

```
<!-- templates/index.html -->
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Housing Market Dashboard</title>
</head>
<body>
  <h1 style="text-align: center;"> ^; Housing Market Trends Analysis</h1>
  <div class='tableauPlaceholder' id='viz1750827980701' style='position: relative'>
    <noscript>
       <a href='#'>
         <img alt='Dashboard 1'
src='https://public.tableau.com/static/images/Vi/VisualizingHousingMarketTrends_175082
78 225630/Dashboard1/1 rss.png' style='border: none' /> </a>
    </noscript>
     <object class='tableauViz' style='display:none;'>
       <param name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F' />
       <param name='embed_code_version' value='3' />
       <param name='site_root' value=" />
       <param name='name'</pre>
value='VisualizingHousingMarketTrends_17508278225630/Dashboard1'/>
       <param name='tabs' value='no' />
       <param name='toolbar' value='yes' />
       <param name='static_image'</pre>
value='https://public.tableau.com/static/images/Vi/VisualizingHousingMarketTrends_17508
2 78225630/Dashboard1/1.png'/>
       <param name='animate_transition' value='yes' />
       <param name='display_static_image' value='yes' />
       <param name='display_spinner' value='yes' />
```

```
<param name='display overlay' value='yes' />
       <param name='display count' value='yes' />
       <param name='language' value='en-US' />
       <param name='filter' value='publish=yes' />
     </object>
  </div>
  <script type='text/javascript'> var divElement =
     document.getElementById('viz1750827980701'); var vizElement =
     divElement.getElementsByTagName('object')[0]; if
     (divElement.offsetWidth > 800) {
       vizElement.style.minWidth = '420px';
       vizElement.style.maxWidth = '650px'; vizElement.style.width =
       '100%'; vizElement.style.minHeight = '587px';
       vizElement.style.maxHeight = '887px'; vizElement.style.height =
       (divElement.offsetWidth * 0.75) + 'px';
                   if
                         (divElement.offsetWidth
     }
          else
                                                            500)
                                                                      {
       vizElement.style.minWidth
                                                               '420px';
       vizElement.style.maxWidth = '650px'; vizElement.style.width =
       '100%';
                     vizElement.style.minHeight
                                                               '587px';
       vizElement.style.maxHeight = '887px'; vizElement.style.height =
       (divElement.offsetWidth * 0.75) + 'px';
     } else { vizElement.style.width =
       '100%'; vizElement.style.height =
       '1527px';
     }
                  scriptElement
                                          document.createElement('script');
          var
                                    =
  scriptElement.src = 'https://public.tableau.com/javascripts/api/viz_v1.js';
  vizElement.parentNode.insertBefore(scriptElement,
                                                              vizElement);
  </script>
</body>
</html>
app.py
from flask import Flask, render_template
app = Flask(name)
```

@app.route('/')
<pre>def home():</pre>
return render_template('index.html')
<pre>if _name== '_main_': app.run(debug=True)</pre>

Project Structure

$housing_dashboard/$	
—— app.py	# Flask server that renders the homepage
Ltemplates/	
index.html	# Web page embedding the Tableau dashboard

Dataset Link

https://docs.google.com/spreadsheets/d/1blBKrwunCQaiccy5sLP6mG4TsanJkO0C/edit?usp=drive_link&ouid=117818466889783119367&rtpof=true&sd=true

Project Demo Video Link

 $\underline{https://drive.google.com/file/d/11K52njE_QNJyFBY05SuHwp_lasRsPVPv/view?usp=drive_link}$

GitHub Repository Link

charishmasinguluri/Visualising-Housing-market-trends-: Visualising housing market trends: