

Exercise 3: Interactive Visualisation

Dataset Description

The Melbourne Housing Snapshot data is a dataset that contains information about houses and apartments in Melbourne, Australia. It was compiled by Kaggle user Anthoninodf and includes data from January to December 2016. *[Note. the dataset is available on Black Board]*

The dataset contains the following features:

1. **Suburb**: The suburb where the property is located
2. **Address**: The street address of the property
3. **Rooms**: The number of rooms in the property (e.g. 2 bedrooms, 3 bedrooms, etc.)
4. **Price**: The price of the property in Australian dollars
5. **Method**: The method of sale (e.g. S - property sold, SP - property sold prior, PI - property passed in, PN - sold prior not disclosed, SN - sold not disclosed, VB - vendor bid, W - withdrawn prior to auction, SA - sold after auction, SS - sold after auction price not disclosed)
6. **Type**: The type of property (e.g. h - house, u - unit, t - townhouse)
7. **SellerG**: The real estate agency or agent selling the property
8. **Date**: The date of sale
9. **Distance**: The distance in kilometers from the property to Melbourne's central business district
10. **Regionname**: The name of the region where the property is located (e.g. Northern Metropolitan, Western Metropolitan, etc.)
11. **Propertycount**: The number of properties that exist in the suburb
12. **Bedroom2**: The number of bedrooms in the property (secondary to the Rooms feature)
13. **Bathroom**: The number of bathrooms in the property
14. **Car**: The number of car spaces available in the property
15. **Landsize**: The total land size of the property in square meters
16. **BuildingArea**: The total building area of the property in square meters
17. **YearBuilt**: The year the property was built
18. **CouncilArea**: The name of the local government area where the property is located

These features provide a comprehensive snapshot of the Melbourne housing market in 2016, including information about the types of properties available, their prices, and their locations. This dataset can be used for a variety of analysis and modeling tasks, such as predicting the price of a property based on its features, identifying trends in the housing market over time, or understanding how different factors (such as distance to the city center or local government regulations) affect property prices.

Tasks.

Task 1. Use the given dataset and compare static scatter plot and interactive scatter plot. Which type of plot you perceived a better way of visualisation and why? Report your experience.

Task 2. Use the given dataset and compare static box plot with interactive box plot, Which one you find, a better way of visualisation, give reasons. *[you can use interaction visualisation features like colours, text displaying, and zooming for the plot]*.

Task 3. Use the given dataset and compare static and interactive histogram for visualisation. Which plot would be more effective in conveying your message from the dataset. *[note. You can use a variety of interactive visualisation features like zooming, text display, colours and more]*

Task 4. Determine what the dataset is telling you? Interpret it in your own words by observing the different interactive plots [150 words].

Task 5. Evaluate the tasks above and describe your learning experience in the interactive visualization exercise (350 words).