

## **Week 9 Homework**

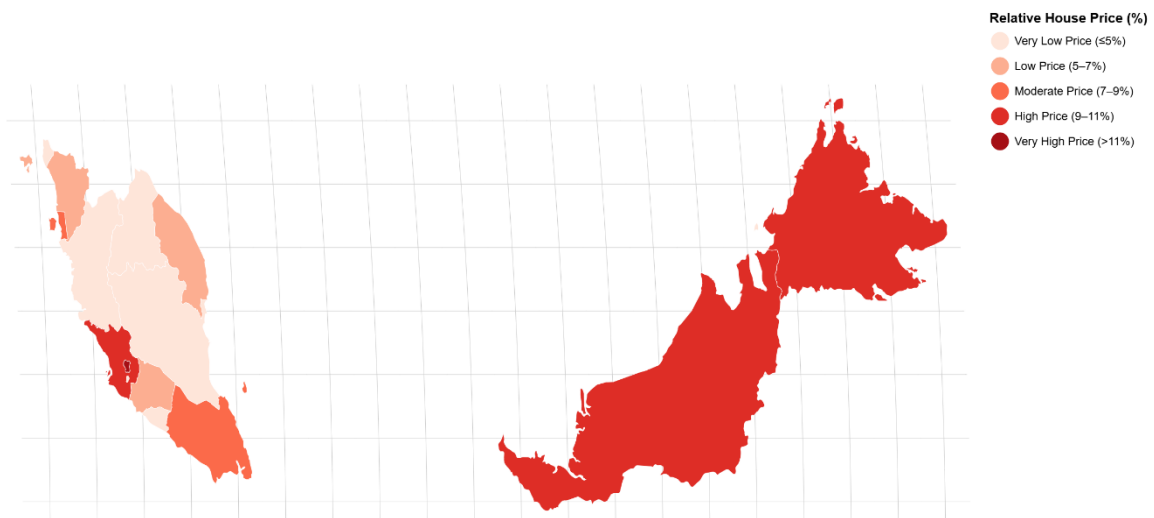
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URL for HTML (Map): [https://gurgobindsingh.github.io/FIT3179\\_Homework9/](https://gurgobindsingh.github.io/FIT3179_Homework9/)

GitHub Link: [https://github.com/GurgobindSingh/FIT3179\\_Homework9.git](https://github.com/GurgobindSingh/FIT3179_Homework9.git)

**Map:**

**Malaysia House Prices by State (% of National Total), 2022**



**Domain:**

The visualisation focuses on house prices across Malaysian states in 2022, showing the relative contribution of each state's house prices to the national total.

### Visualised Dataset:

- Source:
  - National Property Information Centre: <https://napic2.jp-ph.gov.my/en/data-visualization?category=18&id=64>
  - OpenDOSM: [https://open.dosm.gov.my/data-catalogue/hh\\_income\\_state](https://open.dosm.gov.my/data-catalogue/hh_income_state)
- Author of datasets: National Property Information Centre, Department of Statistics Malaysia
- Author of map: Gurgobind Singh
- Attribute Types: State (categorical nominal), Relative House Price % (quantitative)

### Data Transformation:

The house prices were normalized to obtain the Relative House Price (%) for each state. This expresses each state's house price as a percentage of the total house price across all states. The formula used is:

$$\text{Relative House Price (\%)} = \frac{\text{House Price of a State}}{\text{Total House Price of all State}} \times 100$$

### Justification:

A choropleth map was chosen because it effectively communicates relative values per geographic area. Moreover, each state is color-coded based on its percentage contribution to the national total, which allows viewers to quickly identify high-price and low-price regions. A proportional symbol map or dot map was not used because these methods are less effective at representing relative percentages by area and may clutter smaller states.