



Project Proposal (DS102 & DS104)

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Agenda



1. Dataset

Chosen Dataset & Dataset's Description

Sample of Chosen Dataset

Challenges Faced from the Dataset



2. Goals

Questions

Dataset – Chosen Dataset & Description

Chosen Dataset?

- Singapore's HDB Resale flat price from year Jan 2017 till Aug 2022

Size of Dataset:

- Number of Rows: 134,296
- No. of Columns: 11
- Total No. of Entries: 1,477,256

Datatypes found:

- Object
- Float64
- Int64



Dataset – Planned Dataset & Description

Records found in dataset:

1. *Year & Month*
2. *Town Area*
3. *Flat type*
4. *Unit details*
 - *Block Number*
 - *Street Name*
 - *Storey Range*
 - *Flat Model*
5. *Lease Commerce Date*
6. *Remaining Lease*
7. *Resale Price*



Source : <https://data.gov.sg/dataset/resale-flat-prices>

Dataset – Sample of Chosen Dataset

	month	town	flat_type	block	street_name	storey_range	floor_area_sqm	flat_model	lease_commerce_date	remaining_lease	resale_price
0	2017-01	ANG MO KIO	2 ROOM	406	ANG MO KIO AVE 10	10 TO 12	44.0	Improved	1979	61 years 04 months	232000.0
1	2017-01	ANG MO KIO	3 ROOM	108	ANG MO KIO AVE 4	01 TO 03	67.0	New Generation	1978	60 years 07 months	250000.0
2	2017-01	ANG MO KIO	3 ROOM	602	ANG MO KIO AVE 5	01 TO 03	67.0	New Generation	1980	62 years 05 months	262000.0
3	2017-01	ANG MO KIO	3 ROOM	465	ANG MO KIO AVE 10	04 TO 06	68.0	New Generation	1980	62 years 01 month	265000.0
4	2017-01	ANG MO KIO	3 ROOM	601	ANG MO KIO AVE 5	01 TO 03	67.0	New Generation	1980	62 years 05 months	265000.0
5	2017-01	ANG MO KIO	3 ROOM	150	ANG MO KIO AVE 5	01 TO 03	68.0	New Generation	1981	63 years	275000.0
6	2017-01	ANG MO KIO	3 ROOM	447	ANG MO KIO AVE 10	04 TO 06	68.0	New Generation	1979	61 years 06 months	280000.0
7	2017-01	ANG MO KIO	3 ROOM	218	ANG MO KIO AVE 1	04 TO 06	67.0	New Generation	1976	58 years 04 months	285000.0
8	2017-01	ANG MO KIO	3 ROOM	447	ANG MO KIO AVE 10	04 TO 06	68.0	New Generation	1979	61 years 06 months	285000.0
9	2017-01	ANG MO KIO	3 ROOM	571	ANG MO KIO AVE 3	01 TO 03	67.0	New Generation	1979	61 years 04 months	285000.0
10	2017-01	ANG MO KIO	3 ROOM	534	ANG MO KIO AVE 10	01 TO 03	68.0	New Generation	1980	62 years 01 month	288500.0
11	2017-01	ANG MO KIO	3 ROOM	233	ANG MO KIO AVE 3	10 TO 12	67.0	New Generation	1977	59 years 08 months	295000.0
12	2017-01	ANG MO KIO	3 ROOM	235	ANG MO KIO AVE 3	04 TO 06	67.0	New Generation	1977	59 years 08 months	295000.0
13	2017-01	ANG MO KIO	3 ROOM	219	ANG MO KIO AVE 1	07 TO 09	67.0	New Generation	1977	59 years 06 months	297000.0
14	2017-01	ANG MO KIO	3 ROOM	536	ANG MO KIO AVE 10	07 TO 09	68.0	New Generation	1980	62 years 01 month	298000.0
15	2017-01	ANG MO KIO	3 ROOM	230	ANG MO KIO AVE 3	04 TO 06	67.0	New Generation	1978	60 years	298000.0
16	2017-01	ANG MO KIO	3 ROOM	570	ANG MO KIO AVE 3	10 TO 12	67.0	New Generation	1979	61 years 04 months	300000.0
17	2017-01	ANG MO KIO	3 ROOM	624	ANG MO KIO AVE 4	04 TO 06	68.0	New Generation	1980	62 years 08 months	301000.0
18	2017-01	ANG MO KIO	3 ROOM	441	ANG MO KIO AVE 10	07 TO 09	67.0	New Generation	1979	61 years	306000.0
19	2017-01	ANG MO KIO	3 ROOM	625	ANG MO KIO AVE 9	04 TO 06	68.0	New Generation	1980	62 years 08 months	312000.0
20	2017-01	ANG MO KIO	3 ROOM	119	ANG MO KIO AVE 3	07 TO 09	67.0	New Generation	1978	60 years 10 months	312000.0
21	2017-01	ANG MO KIO	3 ROOM	255	ANG MO KIO AVE 4	04 TO 06	73.0	New Generation	1977	59 years 06 months	321000.0
22	2017-01	ANG MO KIO	3 ROOM	432	ANG MO KIO AVE 10	10 TO 12	67.0	New Generation	1979	61 years	325000.0
23	2017-01	ANG MO KIO	3 ROOM	211	ANG MO KIO AVE 3	01 TO 03	67.0	New Generation	1977	59 years 03 months	325000.0
24	2017-01	ANG MO KIO	3 ROOM	584	ANG MO KIO AVE 3	04 TO 06	67.0	New Generation	1979	61 years 05 months	328000.0
25	2017-01	ANG MO KIO	3 ROOM	118	ANG MO KIO AVE 4	07 TO 09	74.0	New Generation	1978	60 years 04 months	330000.0
26	2017-01	ANG MO KIO	3 ROOM	333	ANG MO KIO AVE 1	07 TO 09	68.0	New Generation	1981	63 years	330000.0
27	2017-01	ANG MO KIO	3 ROOM	256	ANG MO KIO AVE 4	10 TO 12	73.0	New Generation	1977	59 years 06 months	335000.0
28	2017-01	ANG MO KIO	3 ROOM	330	ANG MO KIO AVE 1	07 TO 09	68.0	New Generation	1981	63 years	338000.0
29	2017-01	ANG MO KIO	3 ROOM	557	ANG MO KIO AVE 10	10 TO 12	82.0	New Generation	1980	62 years	366000.0
30	2017-01	ANG MO KIO	3 ROOM	302	ANG MO KIO AVE 3	10 TO 12	73.0	New Generation	1978	60 years 03 months	373000.0
31	2017-01	ANG MO KIO	3 ROOM	575	ANG MO KIO AVE 10	07 TO 09	82.0	New Generation	1980	62 years	375000.0
32	2017-01	ANG MO KIO	3 ROOM	509	ANG MO KIO AVE 8	01 TO 03	81.0	New Generation	1980	62 years 05 months	390000.0
33	2017-01	ANG MO KIO	4 ROOM	472	ANG MO KIO AVE 10	10 TO 12	92.0	New Generation	1979	61 years 06 months	400000.0
34	2017-01	ANG MO KIO	4 ROOM	475	ANG MO KIO AVE 10	07 TO 09	91.0	New Generation	1979	61 years 06 months	400000.0
35	2017-01	ANG MO KIO	4 ROOM	629	ANG MO KIO AVE 4	01 TO 03	94.0	New Generation	1981	63 years 09 months	403000.0
36	2017-01	ANG MO KIO	4 ROOM	546	ANG MO KIO AVE 10	01 TO 03	92.0	New Generation	1981	63 years	410000.0
37	2017-01	ANG MO KIO	4 ROOM	131	ANG MO KIO AVE 3	01 TO 03	98.0	New Generation	1979	61 years 01 month	425888.0
38	2017-01	ANG MO KIO	4 ROOM	254	ANG MO KIO AVE 4	04 TO 06	97.0	New Generation	1977	59 years 06 months	430000.0
39	2017-01	ANG MO KIO	4 ROOM	470	ANG MO KIO AVE 10	04 TO 06	92.0	New Generation	1979	61 years 10 months	435000.0
40	2017-01	ANG MO KIO	4 ROOM	601	ANG MO KIO AVE 5	04 TO 06	91.0	New Generation	1980	62 years 05 months	435000.0
41	2017-01	ANG MO KIO	4 ROOM	463	ANG MO KIO AVE 10	04 TO 06	92.0	New Generation	1980	62 years 01 month	440000.0
42	2017-01	ANG MO KIO	4 ROOM	207	ANG MO KIO AVE 1	04 TO 06	97.0	New Generation	1976	58 years 06 months	460000.0
43	2017-01	ANG MO KIO	4 ROOM	304	ANG MO KIO AVE 1	10 TO 12	97.0	New Generation	1977	59 years 04 months	518000.0
44	2017-01	ANG MO KIO	4 ROOM	646	ANG MO KIO AVE 6	10 TO 12	99.0	New Generation	1980	62 years 11 months	518000.0
45	2017-01	ANG MO KIO	4 ROOM	328	ANG MO KIO AVE 3	10 TO 12	98.0	New Generation	1978	60 years 08 months	560000.0
46	2017-01	ANG MO KIO	4 ROOM	588C	ANG MO KIO ST 52	13 TO 15	90.0	DBSS	2011	93 years 08 months	688000.0
47	2017-01	ANG MO KIO	4 ROOM	588D	ANG MO KIO ST 52	19 TO 21	91.0	DBSS	2011	93 years 07 months	730000.0
48	2017-01	ANG MO KIO	4 ROOM	588D	ANG MO KIO ST 52	22 TO 24	91.0	DBSS	2011	93 years 07 months	756000.0
49	2017-01	ANG MO KIO	5 ROOM	101	ANG MO KIO AVE 3	01 TO 03	117.0	Standard	1978	60 years 01 month	500000.0

Dataset – Challenges Faced from the Dataset

Challenges:

1. Data Readability

- There are certain abbreviation in the dataset that I do not understand. (For e.g. The different abbreviation for flat models)
- Under “flat models”, there are 21 different HDB models.
- How does certain column like “remaining lease” affect the HDB resale price?

2. Data Accuracy

- As we do not have the seller’s buying price of the flat, we may not be able to get an accurate conclusion.

3. Data Types

- Column ‘remaining lease’ is in the object datatype; thus, I’ll need to convert it to a suitable datatype during analysis.



Goals – Questions

Questions:

1. The difference of HDB resale price between pre-covid (2017-2019) & post covid (2020-2022)
2. The mean resale price by location (done)
3. The details of the top resale price
4. The details of the least resale price
5. The highest HDB resale transaction for each year.
6. Which area is the most profitable?
7. Is the resale price between 4 rooms and 5 rooms significant?
8. Which flat type is popular when it comes to resale?





Thank
you for
listening!
