User Guide

DR.HDB: Dissecting Resale HDB Pricing by Analysing HDB Public Housing Data

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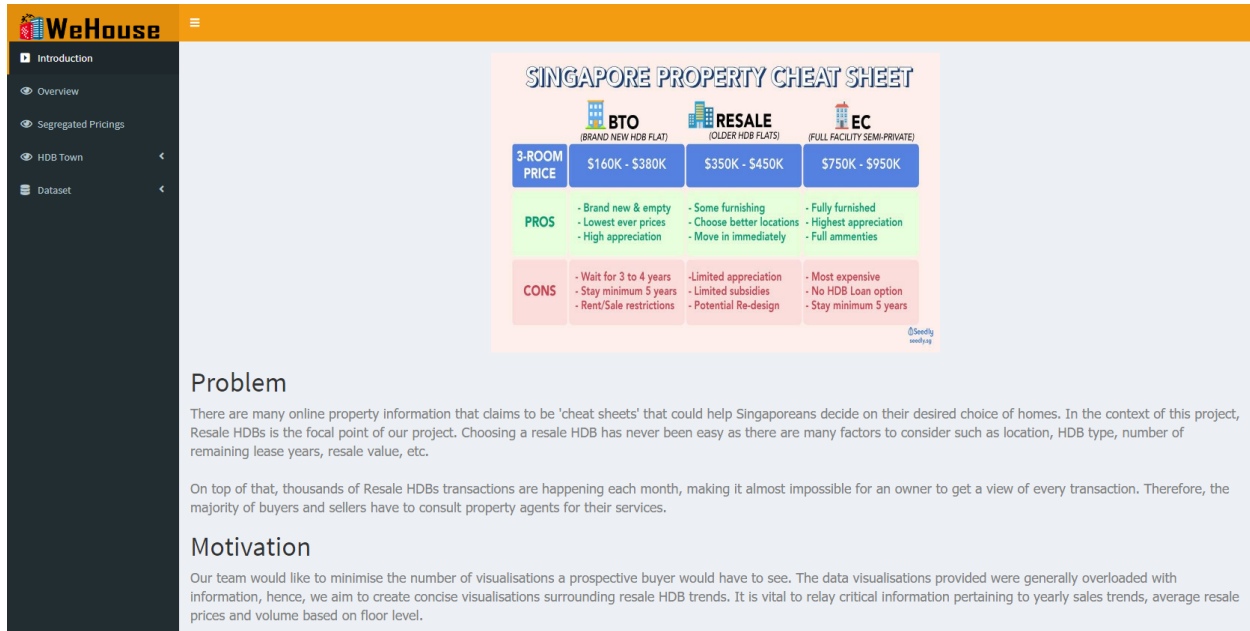
Koh Teck Yun

Content Page

1.Dashboard

1.1 Accessing our Application

To access our application, click the following link: https://wehouse.shinyapps.io/wehouse/. You will be redirected to WeHouse Application. In this page, you will learn more of our problem, motivation and objectives we have of this project.

2.Homepage

2.1 Overview

Click on **Overview tab**
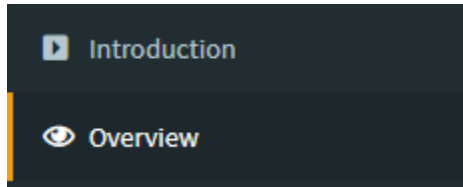
Upon clicking the overview tab, you will be directed to the following display.
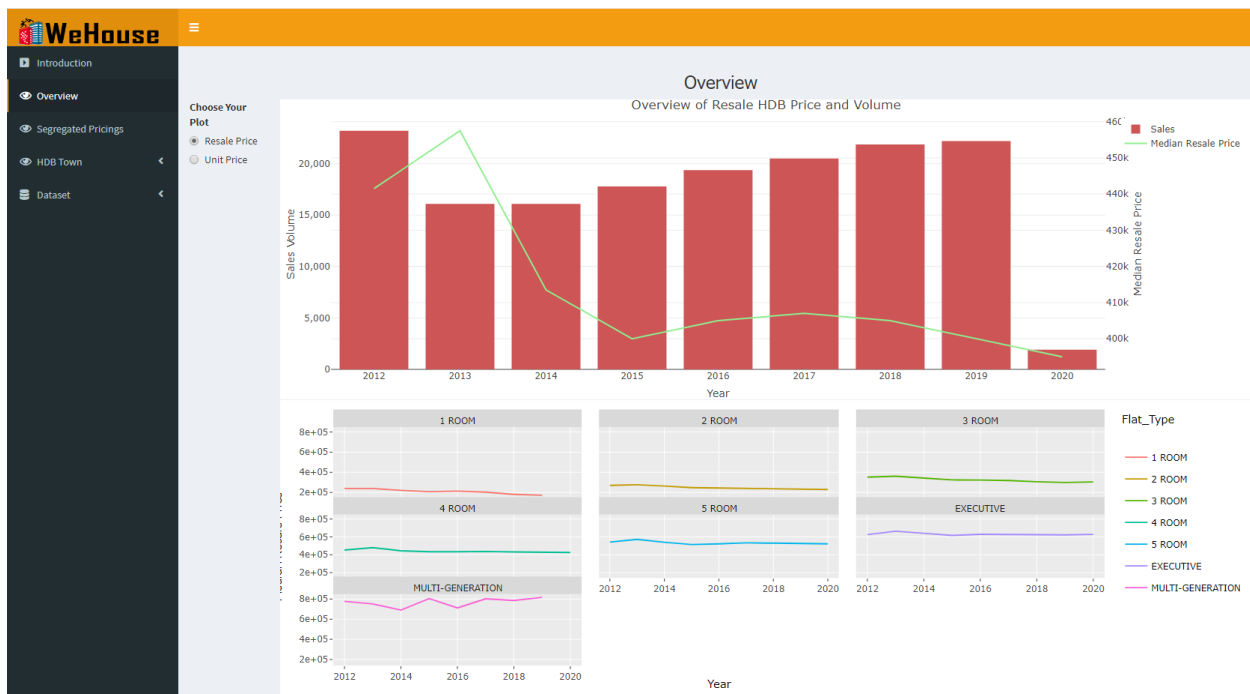
In the Overview Tab, the page will display an overview of the overall trend between Median Resale Prices of Resale HDBs vs the total volume sold throughout 2012 to 2020. At the bottom of the chart, the user can also view a trellis overview of the different HDB Room Types vs its median resale price trend throughout 2012 to 2020. With the trellis graph, the user can see which HDB Room contributed the most to the overall trend and vice versa.

The user can toggle between Resale Price and Unit price as seen by the bottom illustration.
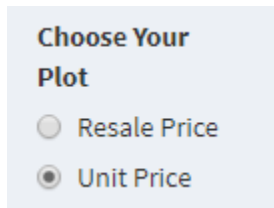
After toggling the unit price, the user would be greeted by the visualisation of Average Unit Price (PSF) vs the total volume sold throughout 2012 to 2020. At the bottom of the chart, the user can also view a trellis overview of the different HDB Room Types vs its Unit Price (PSF) trend throughout 2012 to 2020.
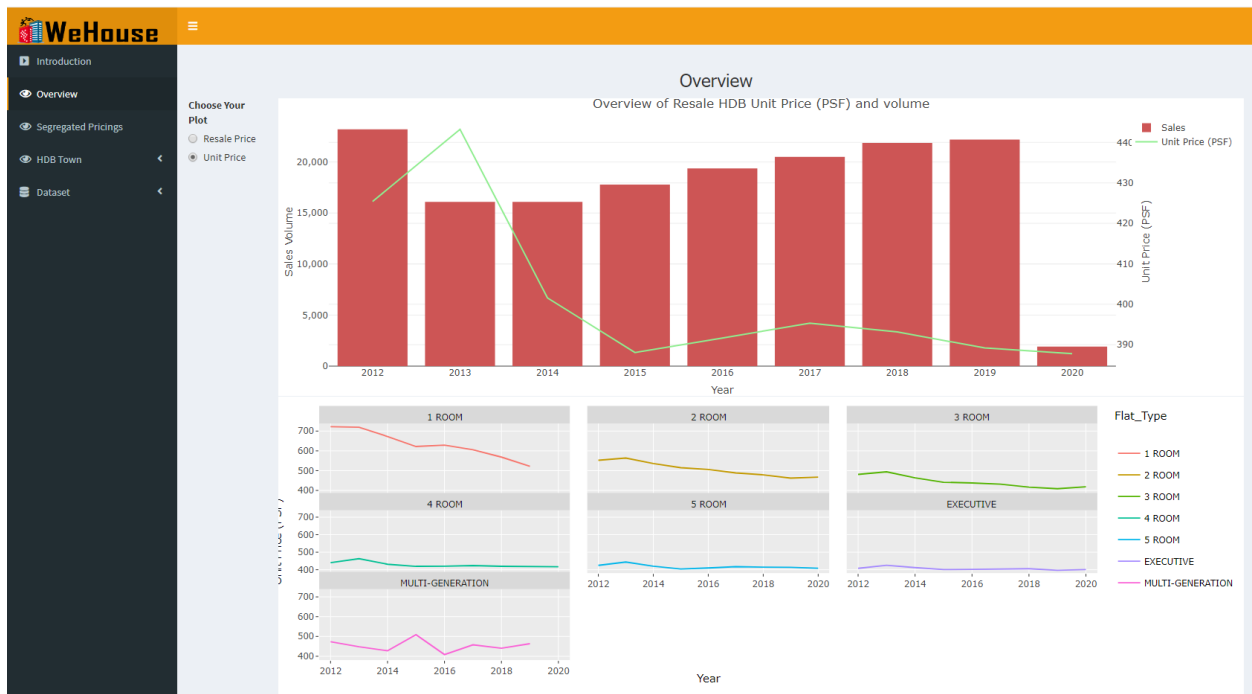
3.Treemap

3.1 Segregated Pricings

Click on **Segregated Pricings tab**

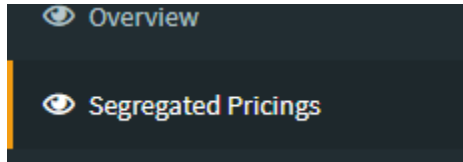In the Segregated Pricings Tab, the page will be displayed by a treemap of the HDB Floor Categories Vs Pricing. The layers of the treemap is following the following layers, Planning Region ➡ HDB Town ➡ Floor Level Categories. The size is depicted by the total sales recorded for each floor categories. With this tree map, the user will be able to understand which floor level category would have the highest resale price vs its area of residence as seen by the illustration below.
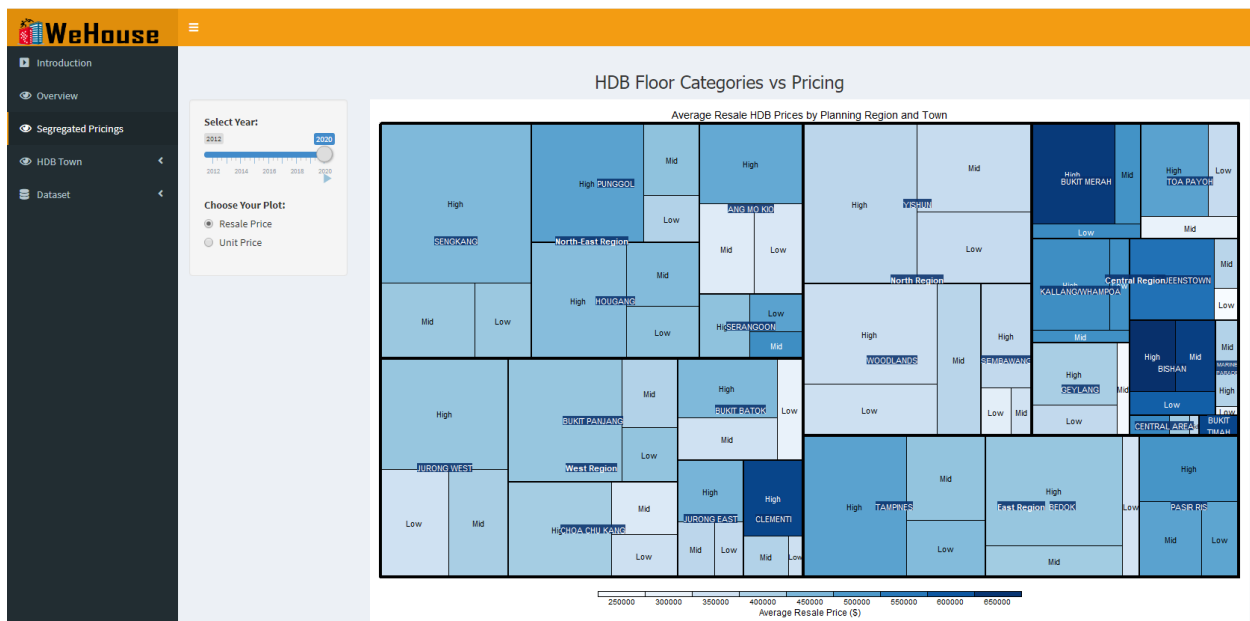
The user can then toggle between Resale Price and Unit Price to switch between visualisation and also select the year he/she wishes to inspect of the pricing level. There is an animated slider included to enable the user to select a specific year to view or view the graph changes over all years by clicking on the play button.
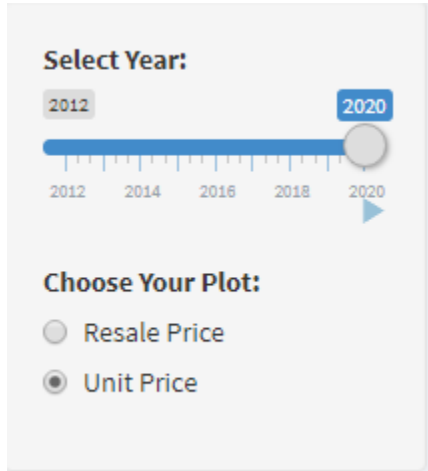
After toggling, the user will be greeted by the following visualisation.
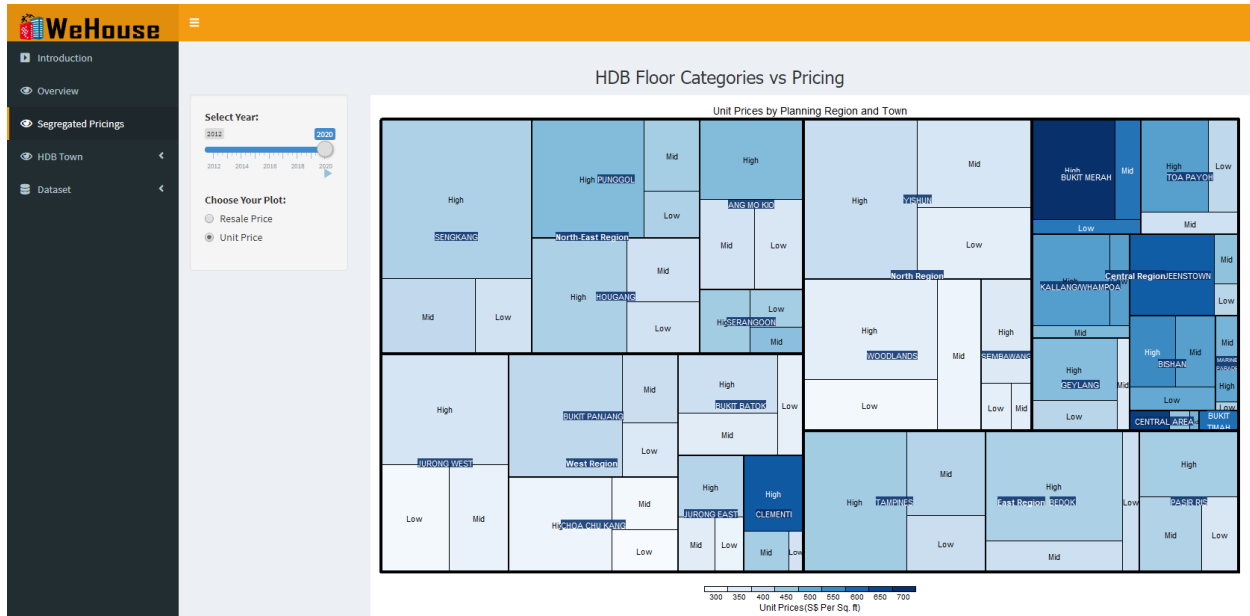
4. HDB Town

4.1 Geofacet

Click on **HDB Town tab** ➡ **Geofacet**
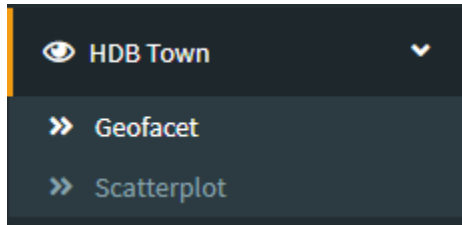
In the Geofacet tab, the page will display a geofacet map of the different HDB towns in Singapore and the median unit price in each of the HDB town. Users will be able to understand the general distribution of the unit prices throughout Singapore and be able to decide on which places are generally better to make purchases of their resale HDB with the following visualisation.

The user will then be able to toggle with the following filters to filter between Low, Medium and High to view the trend in different aspects of the floor category. There is an animated slider included to enable the user to select a specific year to view or view the graph changes over all years by clicking on the play button.
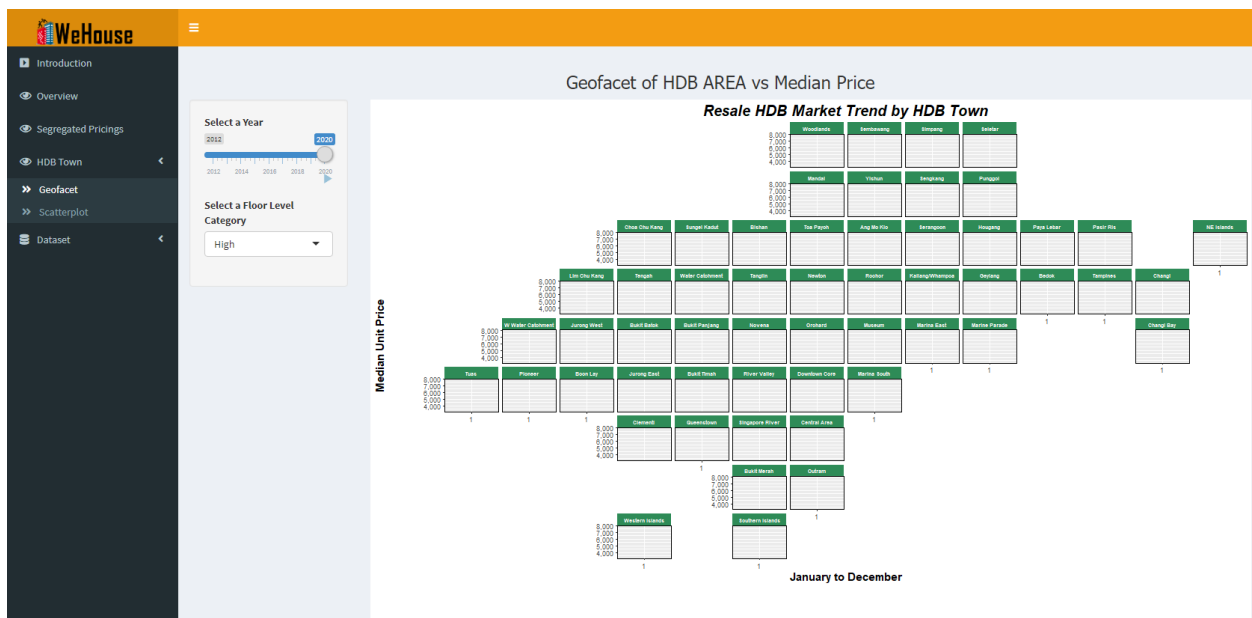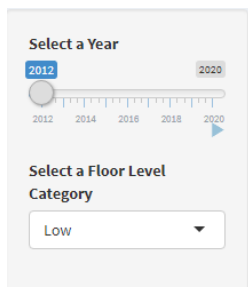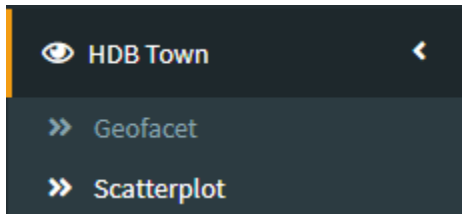
4.2 Scatter Plot

Click on **HDB Town tab** ➡ **Scatterplot**

In the Scatterplot tab, the page will display the scatter plot correlation between Resale Price Vs Remaining Lease Years. A boxplot is shown to show the min, max, median and the two quartiles of each measure which are Resale Price and Remaining Lease Years. With this page, the users will be able to know the correlation between the resale price and the remaining lease years of between 2012-2020 of all HDB towns and all Flat Types.
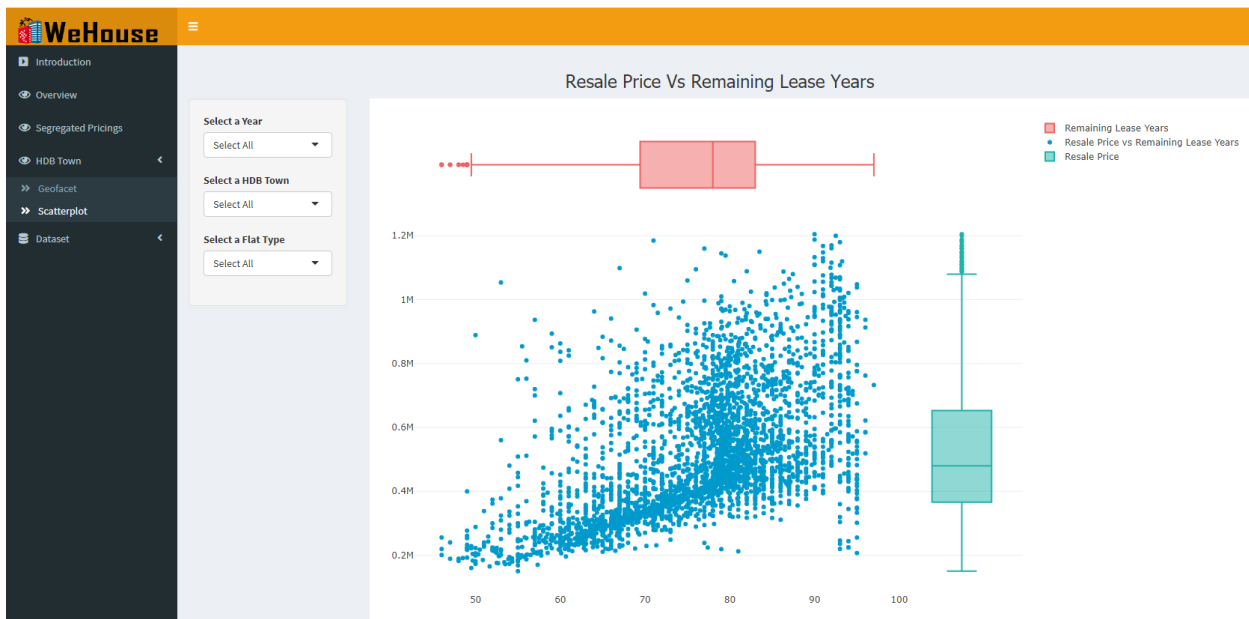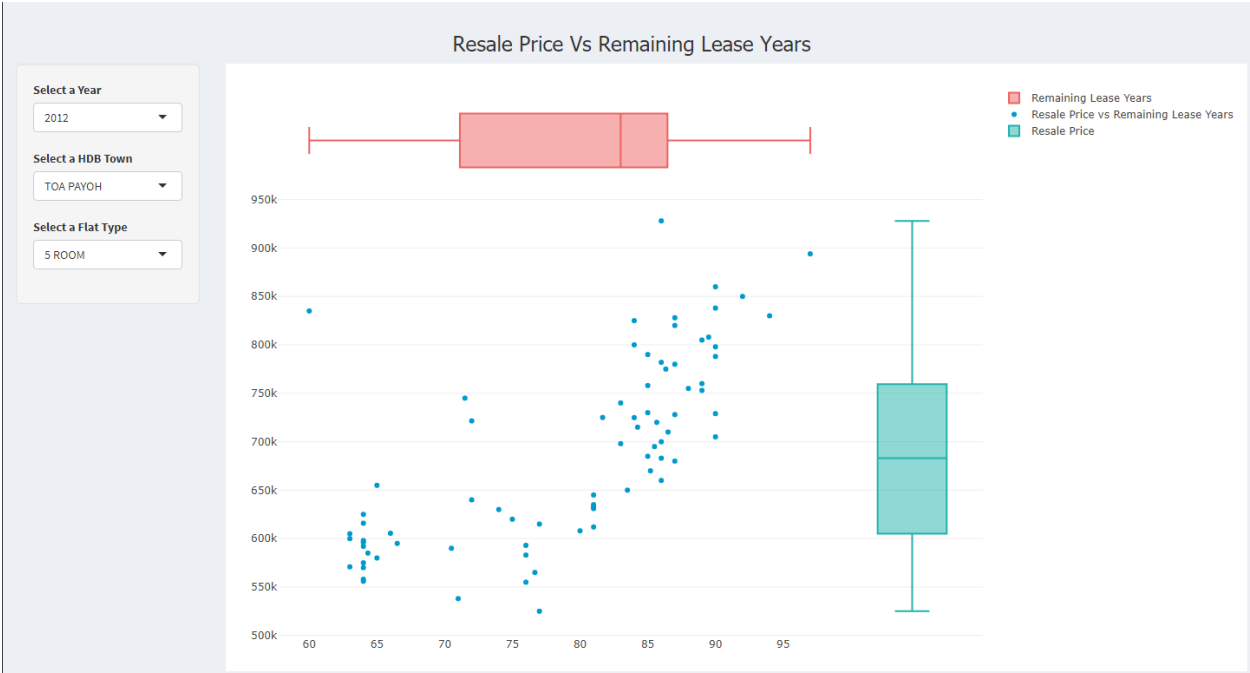
The user will then be able to toggle between Years, HDB Town type and flat type to understand better the resale price vs remaining lease year trend within what they require. As seen by the below filter, the user will be able to generate the following visualisation.

END

THANK YOU