

Use Case ID:	9		
Use Case Name:	Generate Neighbourhood Housing Insights		
Created By:	Augustine	Last Updated By:	Augustine
Date Created:	29/1/2023	Date Last Updated:	29/1/2023

Actor:	- (triggered by system event)
Description:	A dependency of 'Generate Search Data' to generate charts to provide additional data insights of the user-selected town
Preconditions:	Use case triggered when the system generates the search data
Postconditions:	Data insights are populated on the details page
Priority:	Very High (core functionality)
Frequency of Use:	1 (per form submitted)
Flow of Events:	<ol style="list-style-type: none"> <li>1. Calls backend API to return the most valued flat features in the neighbourhood</li> <li>2. Plot a bar chart to show the most valued flat features</li> <li>3. Calls backend API to return the average housing transactions prices for the past 10 years for the neighbourhood and Singapore</li> <li>4. Plot a line chart to show the average housing transactions prices of the neighbourhood vs Singapore across the past ten years</li> <li>5. For buyers, call the backend API to return the key features of the estate (average distance from flat to MRT, most common transacted flat type, average tenure left during transaction, average resale flat size) and the most valued streets in the neighbourhood.</li> <li>6. For sellers, call backend API to return the top 5 most recent transactions in the town with the street name, house type, tenure, and price. Also call the backend API to return the average flat size, tenure left and proximity to MRT for the average transaction.</li> </ol>
Alternative Flows:	<p>AF1: No transactions in the provided postal code</p> <ol style="list-style-type: none"> <li>1. Widen the radius to be 5km of the provided postal code and conduct search again</li> </ol> <p>AF2: No transactions in the provided town</p> <ol style="list-style-type: none"> <li>1. Search within the provided housing district</li> </ol>
Exceptions:	Backend API return error: Display "Internal Server Error. Please try again later"
Includes:	-
Special Requirements:	-
Assumptions:	The town or postal code, and flat type provided are valid
Notes and Issues:	-