Determining factors contributing to Resale Flat Prices in Singapore

1.0.   Introduction

Being an island-state, Singapore has finite land to develop infrastructure. Being only 728km^2 in size or 13,673 times smaller than the United States [1], it is no wonder property is a major talking point in the country. The government of Singapore controls the pricing of houses to prevent inflation of house prices and to ensure that an average Singaporean has a roof over his head. The two types of government-controlled properties are Built-to-Order (BTO) flats or resale flats which once were BTO flats, but the owners opt to sell them. Most couple opt for BTO flats but there are some owners who would like to sell their flats or new families looking to move to a new property.

With such demand in property, future resale flat homeowners may be interested in figuring out what determines the prices of their new homes and whether the flat is overvalued or undervalued.

This report aims to develop a model to determine the relationship of prices of resale flats to a myriad of factors. Factors such as the town where the flat resides, distance to the nearest train station, size of the flat, list of venues around the flat and the number of years left in the lease will be considered.

2.0.   Data Description

There are plenty of resources which can be obtained from the web to develop the model described.

1. The coordinates of Mass Rapid Transit (MRT) stations can be found on data world [2], a community-driven repository for data. The dataset includes the station names, latitude and longitude of the stations which will be used to determine the proximity of houses to the stations.

2. The list of prices of resale flats can be found in the Singapore's open data repository data.gov.sg [3]. The dataset includes month of sale of the resale flats, town where flat resides, storey range, size of flat, remaining lease and the resale price of the flat. All these factors will be used to develop the model for the price of resale flat.

3. To obtain the list of amenities around the flat, the Foursquare API will be used.