Background: New Zealand is a small country with roughly 5 million. Auckland, the biggest city in New Zealand, has relatively small number of businesses compared to big city like London, Hong Kong and New York. One of the most prosperous businesses in Auckland is real estate. Two big real estate agent companies in Auckland are Barfoot&Thompson and Ray White.

Customer Pain (what problem are we going to solve): In post pandemic environment, New Zealand reserve bank interest rate spikes. The housing market in Auckland is in downturn. And the supply of the house is greater than the demand of the house. Out of many opportunities, investor need to find out which house are potentially good investment opportunities.

Solution: we, as data engineer, need to scrape data from barefoot&Tompson, Ray White, Trade me website. And scrape the data of all the available house in the market, the data should include location, CV (capital value), land area…. And so on.

A screenshot of a web page

Description automatically generated

We can store these data in a json file and pass the json file to chatgpt api(langchain module). Create a chatbot. customers can provide a strategy (e.g. house in Epsom, 500 m2+land area, cv around 1 million), and the chatbot will provides all the matched houses. Also, the chatbot can answer some general, just like answers provided on ChatGPT websites.