## About the APIs:

- 1) /data/areas
  - a. Enables users to easily find their location
  - b. Accepts various parameters such as city, suburb or post code
  - c. Returned value is 'Success', 'Failure' or 'Invalid'
- 2) /data/explore
  - a. Provides various types of filters for users
  - b. Grouped by median price and num sold
  - c. Select by time range (years)
  - d. Area grouped by suburb, council and post code
  - e. Group by property type, no. of bedrooms, no. of baths, no. of car spaces, distance to CBD bucket, land size bucket and building area bucket
  - f. Can repeat (e) with secondary group by
- 3) /data/model
  - a. Select suburb
  - b. Property type (house, townhouse, unit)
  - c. Select number of bedrooms
  - d. Option of number of bathrooms
  - e. Pick car spaces
  - f. Set price
  - g. Set land size
  - h. decide year built
- 4) /data/sales-listing
  - a. Select suburb, property type, no. of bedrooms, no. of bathrooms and car spaces
  - b. Returns list of properties with all values

actor1 (real estate agent/student/researcher/property buyer/property seller):

- a) Filter properties based on wide range of filters
- b) Visualize the status of diff properties based on the filters
- c) Predict price of properties based on requirements (bedrooms, etc.)
- d) Research on price trends of 2016, 2017 and 2018.
- e) Predict future pricing trends to estimate change in land costs in Australia.
- f) Check market price of data before quoting price to real estate agent
- g) Verifying the worth of a property before purchasing.

## actor2 (admin user/developers:

- a) Developers can register with the API
- b) Scrape data and model networks to yield optimal performance
- c) Admin monitors tokens and developers accessing the user authentication.
- d) With use of endpoints developers can create their own prediction systems