

# **Data Engineer - Exercise**

Hey there!

We are so excited that you're here and progressing to the exercise round in our recruitment process

## A few things to note before you get started:

- You can use any language you like!
- Don't spend more than 3 hours on the exercise if you reach the 3 hour mark, please stop and present the work you've put together so far
- The most important thing we're looking for is how you've thought about the problem and its' decomposition - be prepared to speak to this in the next interview round
- Most importantly good luck!



### Context

There are many many public data sets available at <a href="https://data.gov.au/search">https://data.gov.au/search</a>. One of those is a register of business names, for which you can see the resource information here: <a href="https://data.gov.au/data/api/1/util/snippet/api\_info.html?">https://data.gov.au/data/api/1/util/snippet/api\_info.html?</a> resource id=55ad4b1c-5eeb-44ea-8b29-d410da431be3

We would like to access this data to provide uplift for our core product, in particular to provide better matching for business names. To see what might be possible, we'd like to do some exploration.

#### **Task**

Write a command line utility that consumes this service. This utility will be used by other staff across the business, who you should assume have some proficiency with a command line, but not necessarily engineers. That is, the tool should somewhat forgiving and present results thoughtfully.

Specifically, the utility should:

- Accept three different parameters of your choosing that allow for some degree of filtering. For example you might provide an eventOccursAt parameter that allows a user to filter by a certain date.
- Visually present data in three different ways of your choosing. For example, there
  might be a parameter that switches between a list, a histogram, or a chart. Be
  creative.
- Accept one final parameter that allows for similarity matching on the BN\_NAME field. Exact matches should be returned first, then in decreasing similarity. You may wish to provide a limit parameter. Consider carefully how these results should be presented to a user of the tool.

#### **Submission**

Please bundle your submission using git. To do this, commit your changes & then run:

git bundle create <your\_name>.bundle --all Then email the bundle file to your Bling contact.