

Cuusoo Technical Assessment

The purpose of this task is to assess how you approach a data engineering problem.

Keep in mind that this assessment has been deliberately designed the way it is. It has been kept simple but as close as possible to real world situations. So use your judgement, knowledge and instincts on best practices to complete this assessment to the best of your abilities.

Time and effort

Whilst there is no time limit, we expect this should take between 2-4 hours to complete from a coding perspective. If you find yourself spending more time you may want to revisit your approach or ask for clarification.

Task

You will have been provided with a collection of JSON files, each of which contains the hourly weather data for an Australian city over a period of 24 hours.

Using the provided JSON dataset build a data pipeline that:

1. **Reads** the data contained within the JSON files.
2. **Transforms and loads** the data to produce the following **two outputs** containing:
 - a. The **average** temperature for each city.
 - b. The **top three** most common “weather text” for each city.
3. **Save** the **two results** you produce in CSV format.

Develop your pipeline as if you would expect new data every day, for an unknown number of cities.

Requirements:

- For this task you can choose from any coding language (e.g. Java, Python, JavaScript, Kotlin, Go or C#, etc.) and whatever tools you are most comfortable with
- Feel free to use
- Code must be stored in your own **public** Git repository. Please send **A link to the public Git repository** to emergingcareers@mantelgroup.com.au 24 hours prior to your interview
- **Include a README file in your Git repository.** This README should contain a list of the tool(s) and language(s) used in your solution, as well as a ‘how to run your solution’ section.

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- **Output files are to be included in your final submission within your public Git repository.**

Some good to knows

- Please keep in mind that you will be asked questions on why you approached this assessment with the tools and methods you choose.

Closing Remarks

- Come prepared to talk about your solution - Practice talking through your solution
- Be prepared to talk about potential changes to your code and how this might impact your code.
- Double check the requirements section before submitting
- Choose tools & a language that you feel most comfortable and confident using