

Exercises

Select only ONE of the following two exercises to work on
Feel free to use any tool you are comfortable working with.

As a result of the test, we are expecting:

- A worked solution in code (optional)
- A document or a 10 min presentation with
 - Research resources that you used to approach the problem
 - What is the solution that you are proposing?
 - What are your conclusions on your solution?
 - Is there a better way to resolve the exercise if you were to have more time to work on it?

Exercise 1: Language classification

Characters used in a language have a direct correlation with the language itself.

Design a solution that will allow a user to provide a document and identify (classify) the language it was written on.

The languages that this tool should identify are: Spanish, English, Italian, German, French, Portuguese, and Danish.

You can use the following documents as a sample or test data for your solution:

https://es.wikipedia.org/wiki/Divina_comedia

https://it.wikipedia.org/wiki/Divina_Commedia

https://en.wikipedia.org/wiki/Divine_Comedy

https://de.wikipedia.org/wiki/Göttliche_Komödie

https://fr.wikipedia.org/wiki/Divine_Comédie

https://pt.wikipedia.org/wiki/Divina_Comédia

https://nl.wikipedia.org/wiki/De_goddelijke_komedie

Exercise 2: Categorizing music

Music has a deep history of recordings; also, there are ways we can split music into different categories.

Trying to classify the entire music data is a big challenge, so let's focus just on Jazz music.

Here you will find the best 100 jazz albums: <http://www.scaruffi.com/jazz/best100.html>, using <https://www.discogs.com> API you should be able to determine the style of jazz of each one.

So your goal will be to classify and group the albums in 25 grouping categories.