Coding assignment

As FRISS' core business is to fight fraud, you are going to help us by building a component that identifies if someone is using different names to trick the system into believing they are different people!

For that, we want you to create 2 endpoints:

- Receives and stores a person
- Calculates the probability that 2 persons are the same physical person.

A person is represented by the following attributes:

- First name
- Last name
- Date of birth (can be unknown)
- Identification number (can be unknown)

The matching logic should work in the following way:

- If the Identification number matches then 100%
- Otherwise:
    - If the last name is the same +40%
    - If the first name is the same +20%
        - If the first name is similar +15% (see examples)
    - If the date of birth matches + 40%
    - If the dates of birth are known and not the same, there is no match

Similar first names examples:

- Andrew and A. (initials)
- Andrew and Andew (typo)
- Andrew and Andy (diminutive)

Matching Examples:

Person 1	Person 2	Matching result
Andrew Craw 1985-02-20 Identification number unknown	Andrew Craw Identification number unknown	60%
Andrew Craw 1985-02-20 Identification number unknown	Petty Smith 1985-02-20 Identification number unknown	40%
Andrew Craw 1985-02-20 Identification number unknown	A. Craw 1985-02-20 Identification number unknown	95%
Andrew Craw 1985-02-20 Identification number 931212312	Petty Smith 1985-02-20 Identification number 931212312	100%

Here are some other points: Logging, Documentation, Security, Request caching, Matching rules are configurable, UI for matching rule configuration. They are in order of importance to us! As you are applying to a more senior level, we will expect you to deliver more on these other points. Good luck and fight fraud!