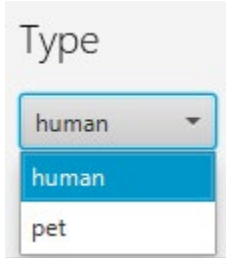


Points to cover

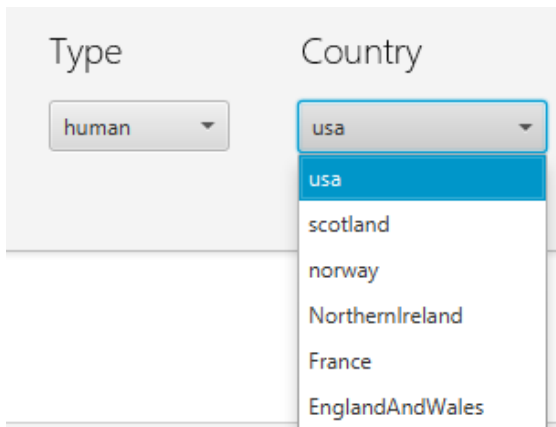
Task 3

- Optimization was performed on task 3 to improve runtime
- You can select the type of dataset you want to access: human/ pet

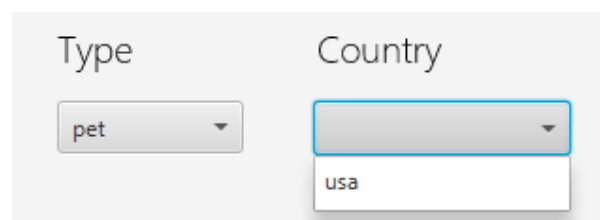


A screenshot of a web interface showing a dropdown menu labeled 'Type'. The menu is open, displaying two options: 'human' (highlighted in blue) and 'pet' (in white).

-
- The country list varies depending on the type of dataset you've selected
-



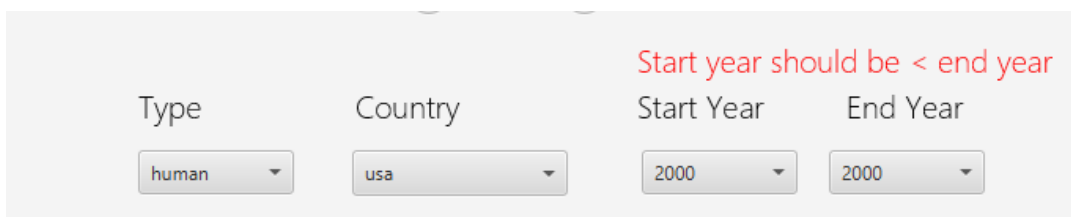
A screenshot of the web interface showing two dropdown menus. The 'Type' menu is set to 'human'. The 'Country' menu is open, showing a list of countries: 'usa' (highlighted), 'scotland', 'norway', 'NorthernIreland', 'France', and 'EnglandAndWales'.



A screenshot of the web interface showing two dropdown menus. The 'Type' menu is set to 'pet'. The 'Country' menu is open, showing a list of countries: 'usa' (highlighted).

- You can then chose the start year and end year of the query: if an invalid year range is entered, an error message will pop up:

Invalid entry



A screenshot of the web interface showing four dropdown menus: 'Type' (set to 'human'), 'Country' (set to 'usa'), 'Start Year' (set to '2000'), and 'End Year' (set to '2000'). A red error message is displayed above the 'Start Year' and 'End Year' menus: 'Start year should be < end year'.

- The system uses Standard competition ranking for the calculations
- You can get more information about this task by hovering of the more info tab

Task 6

- Task 6 follows a similar mechanism as Task 3, you can select the types and countries for you and your mate.
 - o This can be human to human, human to pet or pet to pet.
- Preference list will only support a preference range from -5 to +5 and the ranges will be further restricted depending on the datasets supported years.

The screenshot shows a preference list on the left with values from -5 to 4. The main form has six sections arranged in a 3x2 grid. Each section has dropdowns for 'Type', 'Country', and 'Year of Birth' (or 'Preference'). The first row shows 'human', 'usa', '1941' and 'human', 'scotland', 'Preference'. A red message below the second column says 'Your YOB must be between 1969 and 2019 for you to be able to have a preference'. The second row shows 'human', 'usa', '1969' and 'human', 'scotland', '5'. The third row shows 'human', 'usa', '1970' and 'human', 'scotland', '4'. The 'Preference' dropdowns have values 5, 4, and 5 respectively.

This is to assure that users can only generate reports on supported years.

- Underneath we have the ranking algorithm and rank resolution methods:

The screenshot shows a form with two dropdowns: 'Ranking Algorithm' set to 'scr' and 'Rank Resolver' set to 'ld'. There are 'Generate' and 'More Info' buttons.

- o The ranking algorithm determines the method in which the names are ranked: you can read more about it here [Ranking - Wikipedia](#)
- o Rank resolution methods are the ways in which you can resolve the ranks of names that have not been found:
 - standard that simply sets the rank to the size of the population + 1
 - Levenshtein distance: it finds the most similar name the persons said year and adopts their rank. This is especially good for names with special characters such as "Asbj  rn" a Norwegian name that users unfamiliar with said lexigraphy may not be able to type, instead the user can just type in "AsbjA,rn" and it will most likely match to "Asbj  rn".
- When pressing the generate button, the parm, pasrm and LD algorithm will be performed to calculate your compatibility based on your rankings and the year the two people/ pets are born, and composite will be an average of the 3 scores.
- You can hover over the labels (composite, parm, pasrm, and LD) to get more information (physically do the movements) E.g.

No hover



Mouse over composite



- If more information is desired on the implementation and philosophy of algorithms or options during runtime, you can simply hover over the “more information” text to get more information.
- NOTE:
- The name formatting must be one string with no white characters in-between, if there is it will result in an error message:

Name

format error

- if the name is valid, the leading and trailing white spaces will automatically be removed and the first character will be capitalized and the remaining characters will be lower cased upon clicking generate

before

YOU

Name

After

YOU

Name