

Task 1:

The system displays the interface for inputting parameters.

Team T-05: Popular Names

Task Zero Reporting 1 Reporting 2 Reporting 3 Application 1 Application 2 Application 3

Input a year between 1880 to 2019:

Input X for Top X popular names: (Between 1 and 10)

Generate

Console

When user input is not correct:

Team T-05: Popular Names

Task Zero Reporting 1 Reporting 2 Reporting 3 Application 1 Application 2 Application 3

Input a year between 1880 to 2019: @

Input X for Top X popular names: (Between 1 and 10)

Generate

Console

Input is not numeric

Team T-05: Popular Names

Task Zero Reporting 1 Reporting 2 Reporting 3 Application 1 Application 2 Application 3

Input a year between 1880 to 2019: 1000

Input X for Top X popular names: 1 (Between 1 and 10)

Generate

Console

Input is not in range!

If input is correct (1880, 10):

Most Popular Names

Summary (Year of 1880):
John is the most popular name with the number of occurrences of 9655, which represents 0.087% of total male births in 1880.
Mary is the most popular name with the number of occurrences of 7065, which represents 0.078% of total female births in 1880.

View Table View Bar Chart View Pie Chart

Back

Click on “View Table”:

Table Summary

Top 10 Names (male) in 1880

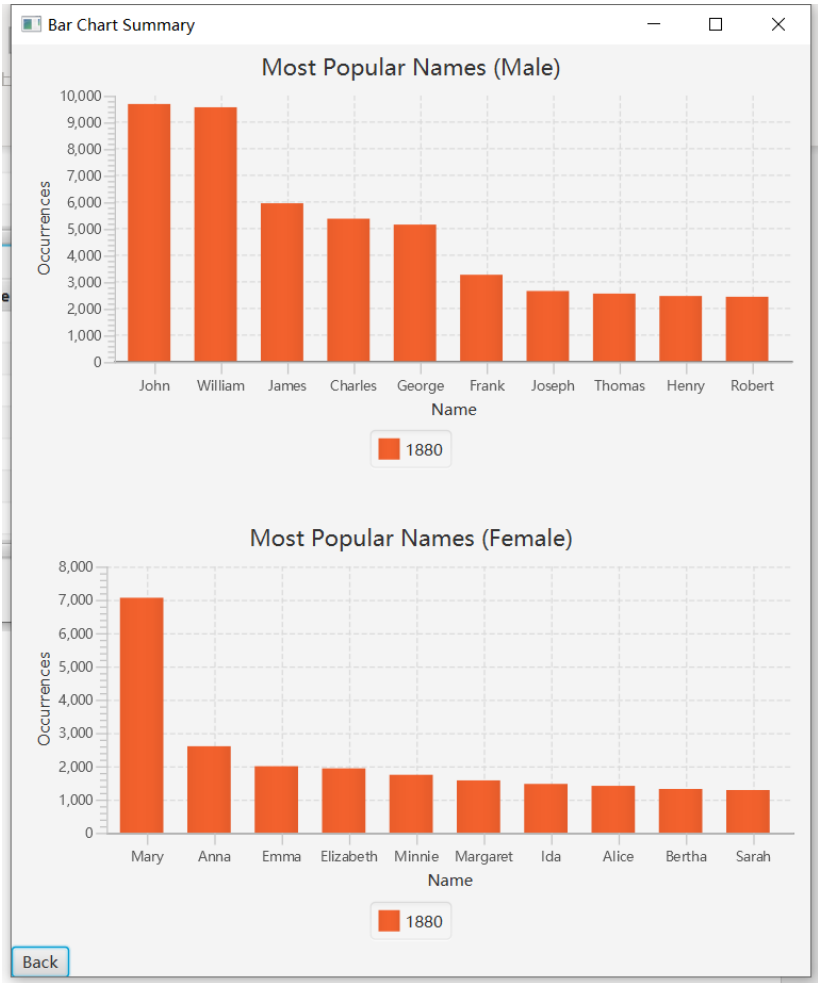
| Name | Occurrences | Percentage |
|---------|-------------|------------|
| John | 9655 | 0.087% |
| William | 9532 | 0.086% |
| James | 5927 | 0.054% |
| Charles | 5348 | 0.048% |
| George | 5126 | 0.046% |
| Frank | 3242 | 0.029% |
| Joseph | 2632 | 0.024% |
| Thomas | 2534 | 0.023% |

Top 10 Names (female) in 1880

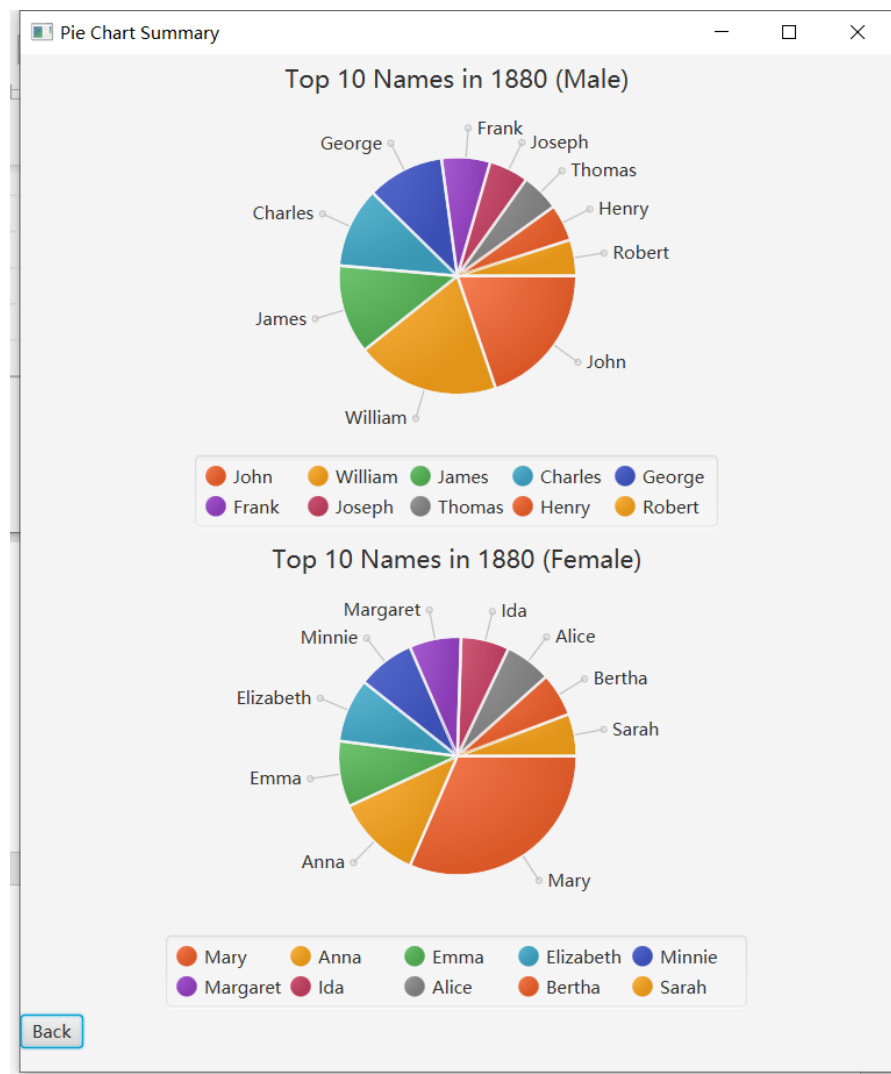
| Name | Occurrences | Percentage |
|-----------|-------------|------------|
| Mary | 7065 | 0.078% |
| Anna | 2604 | 0.029% |
| Emma | 2003 | 0.022% |
| Elizabeth | 1939 | 0.021% |
| Minnie | 1746 | 0.019% |
| Margaret | 1578 | 0.017% |
| Ida | 1472 | 0.016% |

Back

Back and click on “View Bar Chart”:



Back and click on “View Pie Chart”:



Click “Back” twice to go back to the main UI.

Task 4:

Algorithm 1:

The system displays the interface for inputting parameters.

Most Popular Names

Task Zero Reporting 1 Reporting 2 Reporting 3 Application1 Application 2 Application 3

Algorithm 1 Algorithm 2

Algorithm 1: Recommend the most popular names

Enter Mom's Year of Birth: (Between 1880 to 2019)

Enter Dad's Year of Birth: (Between 1880 to 2019)

Generate

Console

Two cases if the user input is incorrect:

Most Popular Names

Task Zero Reporting 1 Reporting 2 Reporting 3 Application1 Application 2 Application 3

Algorithm 1 Algorithm 2

Algorithm 1: Recommend the most popular names

Enter Mom's Year of Birth: (Between 1880 to 2019) @@

Enter Dad's Year of Birth: (Between 1880 to 2019)

Generate

Console

Input is not numeric

Most Popular Names

Task Zero Reporting 1 Reporting 2 Reporting 3 Application1 Application 2 Application 3

Algorithm 1 Algorithm 2

Algorithm 1: Recommend the most popular names

Enter Mom's Year of Birth: (Between 1880 to 2019) 1000

Enter Dad's Year of Birth: (Between 1880 to 2019) 1000

Generate

Console

Input is not in range!

Click “generate” and results are shown for both boy and girl.

Name Recommendation

Boy

Girl

The recommended boy's name: John

John is the most popular name with the number of occurrences of 9655, which represents 1.000% of total male births in dad's year of birth, 1880.

Back

Name Recommendation

Boy

Girl

The recommended girl's name: Mary

Mary is the most popular name with the number of occurrences of 7065, which represents 1.000% of total female births in mom's year of birth, 1880.

Back

Algorithm 2:
The system displays the interface for inputting parameters.

Name Recommendation

Task Zero

Reporting 1

Reporting 2

Reporting 3

Application1

Application 2

Application 3

Algorithm 1

Algorithm 2

Algorithm 2: Want a special name?

Enter Mom's Year of Birth: (Between 1880 to 2019)

Enter Dad's Year of Birth: (Between 1880 to 2019)

Enter Mom's Name:

Enter Dad's Name:

Generate

Console

Apart from the two validity checks same as above, we add a third test: the name fields should be pure letters.

Name Recommendation

Task Zero

Reporting 1

Reporting 2

Reporting 3

Application1

Application 2

Application 3

Algorithm 1

Algorithm 2

Algorithm 2: Want a special name?

Enter Mom's Year of Birth: (Between 1880 to 2019)

1880

Enter Dad's Year of Birth: (Between 1880 to 2019)

1880

Enter Mom's Name:

@@

Enter Dad's Name:

Generate

Console

If you're not Elon Musk, please consider getting a full-alphabet name.

Click on “generate”, the results for boy and girl are displayed.

Name Recommendation

Boy

Girl

The recommended boy's name: Lyman

Lyman is the most appropriate name found by the algorithm with the number of occurrences of 31, which represents 0.000% of total male births in dad's year of birth, 1880.
The sum of all characters in the dad's name Solar is 513.
The sum of all characters in name Lyman is 513, which is the closest to that of the dad's name with difference 0.

Back

Name Recommendation

Boy

Girl

The recommended girl's name: Nora

Nora is the most appropriate name found by the algorithm with the number of occurrences of 471, which represents 0.005% of total female births in mom's year of birth, 1880.
The sum of all characters in the mom's name Luna is 400.
The sum of all characters in name Nora is 400, which is the closest to that of the mom's name with difference 0.

Back