

COMP 3111: Introduction to Software Engineering

Screenshots of the execution of the application showing sample inputs and outputs of your choice (Data-Reporting Task)

Task1

Team T-42: Popular Names
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Task Zero
Reporting 1
Reporting 2
Reporting 3
Application1
FindPair
Application 3

Generate a brief report in response to the queries on the most popular names registered at birth over a given period.

Top N (N>=1):
 Gender: ☒ Male ☐ Female

Period (1880 - 2019): to

REPORT

Console

Year	Top 1	Top 2	Top 3	Top 4	Top 5	Top 6
2000	Jacob	Michael	Matthew	Joshua	Christopher	Nicholas
2001	Jacob	Michael	Matthew	Joshua	Christopher	Nicholas
2002	Jacob	Michael	Joshua	Matthew	Ethan	Andrew
2003	Jacob	Michael	Joshua	Matthew	Andrew	Ethan
2004	Jacob	Michael	Joshua	Matthew	Ethan	Andrew
2005	Jacob	Michael	Joshua	Matthew	Ethan	Andrew
2006	Jacob	Michael	Joshua	Ethan	Matthew	Daniel

Over the period 2000 to 2006, Jacob for M has hold the top spot most often for a total of 205678 t

Task2

Team T-42: Popular Names

Task Zero

Reporting 1

Reporting 2

Reporting 3

Application1

FindPair

Application 3

Generate a brief report in response to the queries on the popularity of a particular name over a given period.

Name

Mary

Gender:

☐ Male

☒ Female

Period (1880 - 2019):

1941

to

1945

REPORT2

Console

Year	Rank	Count	Percentage
1945	1	59,284	4.535787%
1944	1	62,463	4.706715%
1943	1	66,171	4.743162%
1942	1	63,238	4.682406%
1941	1	58,031	4.804213%

In the year 1945, the number of birth with name Mary is 59,284, which represents 4.535787 percent of total female birth in 1945. The year when the name Mary was most popular is 1943. In that year, the number of births is 66,171, which represents 4.743162 percent of the total female birth in 1943.

Task3

Team T-42: Popular Names

Task Zero

Reporting 1

Reporting 2

Reporting 3

Application1

FindPair

Application 3

Generate a brief report in response to the queries on identifying the names that have maintained a high level of popularity within Top N over a given period.

Gender of Interest: ☒ Male ☐ Female

Period (1880 - 2019) to

Top N (>=1):

REPORT

Console

9 names are found to be maintained at a high level of popularity within Top 10 over the period from

Name	Lowest Rank [in Year]	Higest Rank [in Year]	Gross Trend
James	1 [1940]	1 [1940]	FLAT
Robert	2 [1940]	2 [1940]	FLAT
John	3 [1940]	3 [1940]	FLAT
William	4 [1940]	4 [1940]	FLAT
Richard	5 [1940]	5 [1940]	FLAT
Charles	7 [1942]	6 [1940]	DOWN
David	7 [1940]	6 [1942]	UP
Thomas	8 [1940]	8 [1940]	FLAT
Ronald	10 [1940]	9 [1941]	UP

Screenshots of the execution of the application showing sample inputs and outputs of your choice (Recommendation Task)

Task4

Team T-42: Popular Names

Task Zero

Reporting 1

Reporting 2

Reporting 3

Application1

FindPair

Application 3

Develop and implement an online service using empirical data to help make informed decisions on naming their newborn babies. Sample Scenario of Application: (i) Parents seeking advices on naming their babies; (ii) A couple seeking advices on naming their pets

Dad Name:

David

Mom Name:

Mary

Dad Born Year (1880-2019):

1941

Mom Born Year (1880-2019):

1951

Vintage Year (1880-2019) (Optional):

Leave Vintage Year blank if no preference.

APPLICATION

Console

Recommended name for baby boy according to the NK-T4 Algorithm is Benjamin.
Recommended name for baby girl according to the NK-T4 Algorithm is Emma.

Task5

Team T-42: Popular Names

Task Zero

Reporting 1

Reporting 2

Reporting 3

Application1

FindPair

Application 3

This is an online service using empirical data to help make informed decisions on predicting names for compatible pairs. Let come to predict your future soulmate!!!

iName

Sean

iGenderMate:

☒ Male

☐ Female

iGender:

☒ Male

☐ Female

iPreference:

☒ Younger

☐ Older

iYOB:

1941

Find Pair

Console

The recommended names for compatible pairs is Cleophus.

Task6

Team T-42: Popular Names

Task Zero

Reporting 1

Reporting 2

Reporting 3

Application1

FindPair

Application 3

Prediction Score For Compatible Pairs

Enter the following data of you and another person to get a prediction score of love matching!

Your Name:

Your Crush Name:

Your Year of Birth:

Your Crush Gender: ☐ Male ☒ Female

Your Gender: ☐ Male ☒ Female

Preference: (Do you prefer a younger or older soulmate?)

☒ Younger ☐ Older

Submit

Console

You score 46% for love matching!
(0%: Not Compatible; 100%: Perfect Match)

Report on the unit testing for the implemented tasks (100% pass)

Package comp3111.popnames

all > comp3111.popnames

116	0	0	3m4.81s	100% successful
tests	failures	ignored	duration	











Classes

Class	Tests	Failures	Ignored	Duration	Success rate
AnalyzeNamesTest	11	0	0	0.109s	100%
JavaFXTest	68	0	0	1m58.98s	100%
Task2Test	16	0	0	25.435s	100%
Task5Test	21	0	0	40.286s	100%

Report on the coverage test (>65% branch coverage)

PopNames3111 > comp3111.popnames

comp3111.popnames

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
Controller		91%		92%	17	119	23	329	3	17	0	1
AnalyzeNames		54%		88%	3	24	25	72	1	7	0	1
MyApplication		0%		n/a	3	3	11	11	3	3	1	1
Task5		91%		90%	3	25	2	48	0	3	0	1
Task2and5_Checker		98%		100%	1	24	1	49	1	9	0	1
Task2		100%		100%	0	20	0	61	0	8	0	1
Total	346 of 2,920	88%	24 of 336	92%	27	215	62	570	8	47	1	6

Documentation on the implemented tasks using Javadoc

The screenshot shows a web browser window with the address bar displaying the file path: `C:/Users/user/git/comp3111_2020fall_t42/build/docs/javadoc/comp3111/popnames/package-summary.html`. The browser tab is titled "comp3111.popnames (PopName...)".

The Javadoc page has a navigation bar at the top with links: **PACKAGE**, CLASS, TREE, DEPRECATED, INDEX, and HELP. A search bar on the right contains the text "SEARCH: Search".

The main content area is titled "Package comp3111.popnames". Below this, there is a section labeled "Class Summary" which contains a table with two columns: "Class" and "Description".

Class	Description
AnalyzeNames	
Controller	
MyApplication	The entry point of the entire program.
Task2	
Task2and5_Checker	
Task5	

At the bottom of the page, there is another navigation bar with links: **PACKAGE**, CLASS, TREE, DEPRECATED, INDEX, and HELP.

Specification

Task4:

If the vintage year is not chosen, it should remain empty. NKT4 Algorithm follows the given one.(Rank equals 1 if the name is not ranked in the given year of birth.

Task 2:

If the name does not always exist over the period,for the corresponding years, the system shows the Rank as “Nil”, Count as 0, Percentage as 0.

Task 5:

NKT5 Algorithm is modified as if the year is 2019 and if the preference is younger will send an error message as the dataset is up to 2019, we cannot predict the younger soulmate.And if the year is 1880 and if the prefer is older will send error message as dataset is down to 1880, we cannot predict the older soulmate.

Task 3:

(y1 == y2) is considered an invalid set of input because there is no meaningful trend to study if the user only provides a period of one year.

Task 6:

The NKT6 algorithm is modified. The original one would give negative results if oRank is much less than oRankMate. Therefore, the denominator in the equation of calculating oScore is changed from oRank to max(oRank, oRankMate).