Text Indexing Project

Natural Language Processing and Information Retrieval

Maëva Lecavelier / 마에바 르꺄블리에 – 50191580

Assumption

- Our hypothesis is: « Depending on features of movies, the word distribution is statistically different. »
- I choose two different genres for studying this assumption : horror movies and family movies.

Horror :

- The Hauting Of Hill House
- The Mummy
- Alien III
- Book Of The Dead
- Evil Dead Ii
- Friday The 13th
- The Grudge
- Halloween
- Hannibal
- Insidious
- It

Family:

- American Pie
- Bean
- The Brothers Bloom
- Crazy, Stupid, Love
- Happy Feet
- The Incredibles
- Kung Fu Panda
- The Mask
- The Proposal
- Shrek
- Ted

Programming language

- I choose Python for this project: easier for manipulating files.

How I have proceeded

- Get movies scripts in one file for each genre
- Tokenize the scripts according to blank space and get off of ponctuation
- Make a list of stop words and delete them from the scripts
- Count each words and sort them by frequency
- Get the 40 first terms and get a graph in excel for better results
- Analyze results

Difficu

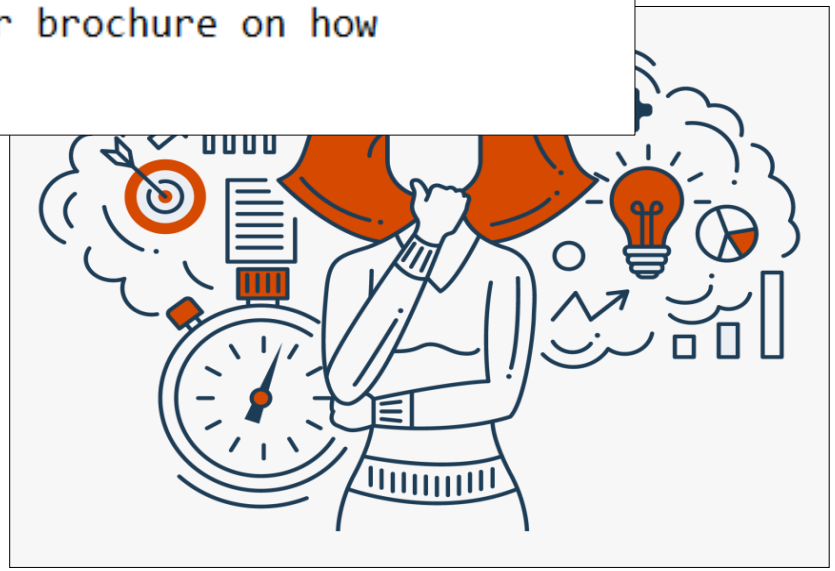
VICKY
You think so?

She tears it open. Pulls out a course catalog, various forms, and a letter which she hands to Kevin.

KEVIN
"Dear Ms. Hughes. We're sorry, but after keeping you on the wait list for the past couple months, we've decided you are now rejected. Enclosed is a 100-page, full-color brochure on how rejected you are."

ting

ds list



Results - files

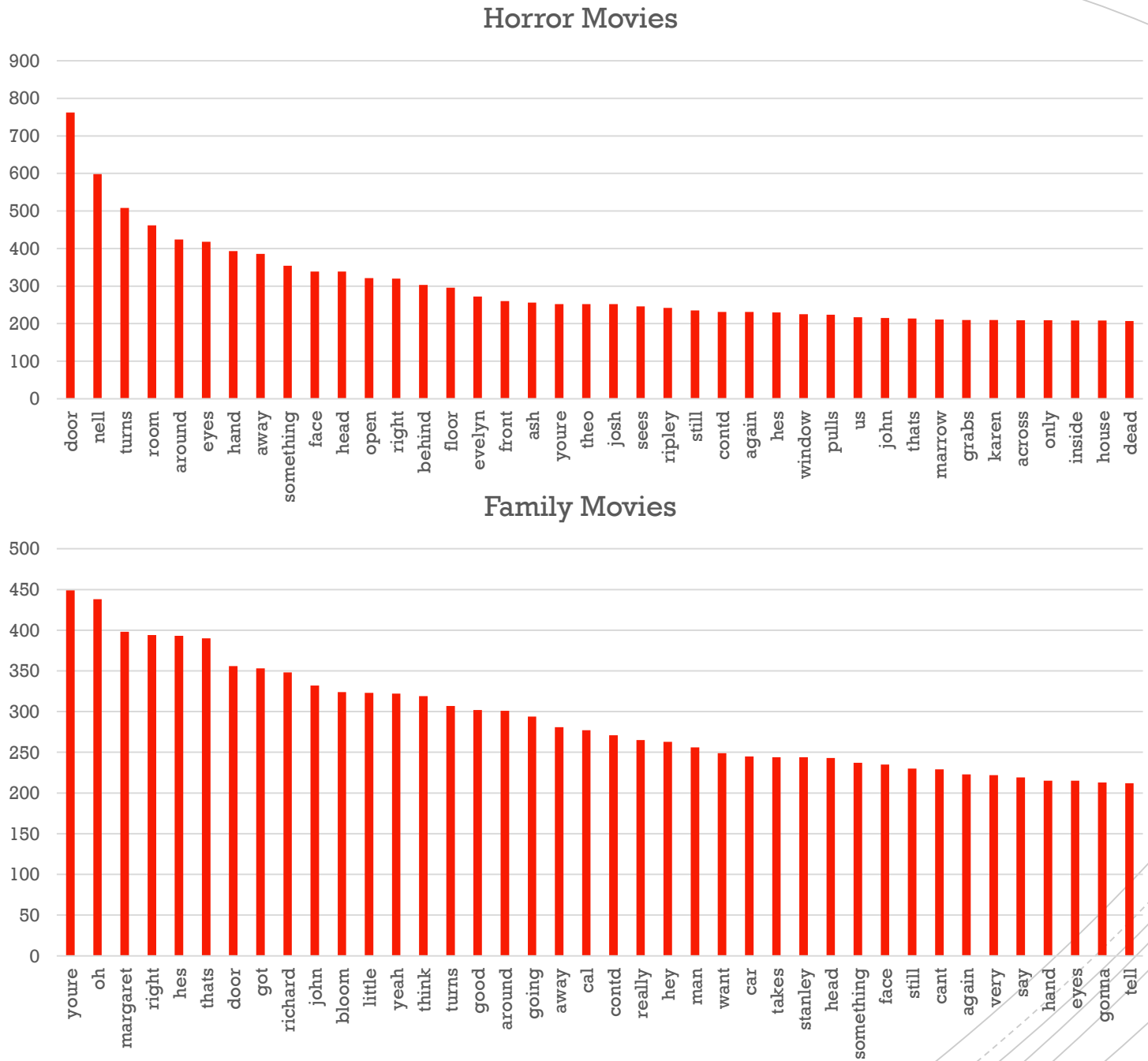
result.txt

```
762:door
598:nell
508:turns
462:room
424:around
418:eyes
393:hand
386:away
354:something
339:face
339:head
321:open
320:right
303:behind
296:floor
272:evelyn
260:front
256:ash
252:youre
252:theo
252:josh
246:sees
242:ripley
235:still
231:contd
231:again
230:hes
225:window
224:pulls
217:us
215:john
214:thats
211:marrow
210:grabs
```

result.txt

```
449:youre
438:oh
398:margaret
394:right
393:hes
390:thats
356:door
353:got
348:richard
332:john
324:bloom
323:little
322:yeah
319:think
307:turns
302:good
301:around
294:going
281:away
277:cal
271:contd
265:really
263:hey
256:man
249:want
245:car
244:takes
244:stanley
243:head
237:something
235:face
230:still
229:cant
223:again
```

Result - graph



Results - Interpretation

Horror Movies	
762	door
598	nell
508	turns
462	room
424	around
418	eyes
393	hand
386	away
354	something
339	face
339	head
321	open
320	right
303	behind
296	floor
272	evelyn
260	front
256	ash
252	youre
252	theo
252	josh
246	sees
242	ripley
235	still
231	contd
231	again
230	hes
225	window
224	pulls
217	us
215	john
214	thats
211	marrow
210	grabs
210	karen
209	across
209	only
208	inside
208	house
207	dead

Family Movies	
449	youre
438	oh
398	margaret
394	right
393	hes
390	thats
356	door
353	got
348	richard
332	john
324	bloom
323	little
322	yeah
319	think
307	turns
302	good
301	around
294	going
281	away
277	cal
271	contd
265	really
263	hey
256	man
249	want
245	car
244	takes
244	stanley
243	head
237	something
235	face
230	still
229	cant
223	again
222	very
219	say
215	hand
215	eyes
213	gonna
212	tell

Sources

- https://www.guru99.com/reading-and-writing-files-in-python.html
- https://www.tutorialspoint.com/python/string_replace.html
- https://www.programiz.com/python-programming/methods/list/index
- https://snakify.org/fr/lessons/dictionaries_dicts/
- https://www.codespeedy.com/sorting-associative-array-in-python/
- https://www.programiz.com/python-programming/regex
- https://www.rypeapp.com/most-common-english-words/