Specifications

Implementation of Bloom's filter in 3 forms (array, ArrayList, LinkedList).

Benchmarking and comparison of item search times.

Error rate benchmarking (false positives).

Benchmark report in Markdown.

Final rendering

```
***** EXECUTION TIME *****

----- Array -----

(k = 3 | m = 100000 | n = 1000)
330600 nanoseconds

----- ArrayList -----

(k = 3 | m = 100000 | n = 1000)
418300 nanoseconds

----- LinkedList -----

(k = 3 | m = 100000 | n = 1000)
40687000 nanoseconds
```

```
***** ERROR RATE *****

m = 100000 | n = 1000 | k = 1
 Error rate : 1.05 %
 Theorical error rate : 0.9950166250831893 %
m = 100000 | n = 5000 | k = 1
 Error rate : 4.843999999999999 %
 Theorical error rate : 4.877057549928598 %
m = 100000 | n = 10000 | k = 1
 Error rate : 9.123000000000001 %
 Theorical error rate : 9.51625819640405 %
```
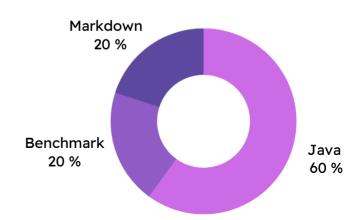
Execution time   *Error rate analysis*

Bloom filter

Methodes and technologies

NetBeans   **Java**   **Markdown**

Skills

Markdown
20 %

Benchmark
20 %

Java
60 %

THÉRON Evan