Bloom filter App class diagram

benchMark

RunnerBenchmarks

+ main(args []) : void

BenchTest

~array = BloomFilterArray.fillArray(3, 1000, 0.1, 0, 100): BloomFilterArray
~arrayList = BloomFilterArrayList.fillArray(3, 1000, 0.1, 0, 100): BloomFilterArrayList
~linkedList = BloomFilterLinkedList.fillArray(3, 1000, 0.1, 0, 100): BloomFilterLinkedList

+presentArray(): boolean
+presentArrayList(): boolean
+presentLinkedList(): boolean

«use»

bloomfilter

bloomFilter::BloomFilter

~k: int
~m: int
~n: double

+BloomFilter(int, int, double)
+hashfunction(Object, int): int
+addElement(Object): void
+isPresent(Object): boolean
+getN(): double
+getM(): int

«use»

errorRate

Error

+Error()
+errorRate(BloomFilter b): double

«use»

RunError

+main(String[] args): void

BloomFilterArray

-array: boolean[]

+BloomFilterArray(int, int, double)
+getArray(): boolean[]
+initArray(int): void
+addElement(Object): void
+isPresent(Object): boolean
+fillArray(int, int, double, int, int): BloomFilterArray

BloomFilterArrayList

-arrayList: ArrayList<Boolean>

+BloomFilterArrayList(int, int, double)
+getArray(): ArrayList<Boolean>
+initArrayList(int): void
+addElement(Object): void
+isPresent(Object): boolean
+fillArray(int, int, double, int, int): BloomFilterArrayList

BloomFilterLinkedList

-linkedList: LinkedList<Boolean>

+BloomFilterLinkedList(int, int, double)
+getArray(): LinkedList<Boolean>
+initLinkedList(int): void
+addElement(Object): void
+isPresent(Object): boolean
+fillArray(int, int, double, int, int): BloomFilterLinkedList