

Aula 4 - Exercicios

December 8, 2016

1 Aula 4 - Exercícios

2 Exercício

2.0.1 Faça uma pesquisa simples na coleção Vocabulary pelo termo “feliz” no campo text e diga:

In [2]: %%**bash**

```
mongo

use nosqlclass

db.Vocabulary.find({"text":"feliz",}).explain({"executionStats":1})
```

MongoDB shell version: 3.2.10

connecting to: test

switched to db nosqlclass

```
{
  "queryPlanner" : {
    "plannerVersion" : 1,
    "namespace" : "nosqlclass.Vocabulary",
    "indexFilterSet" : false,
    "parsedQuery" : {
      "text" : {
        "$eq" : "feliz"
      }
    },
    "winningPlan" : {
      "stage" : "COLLSCAN",
      "filter" : {
        "text" : {
          "$eq" : "feliz"
        }
      }
    },
    "direction" : "forward"
  },
  "rejectedPlans" : [ ]
}
```

```

    },
    "executionStats" : {
        "executionSuccess" : true,
        "nReturned" : 1,
        "executionTimeMillis" : 148,
        "totalKeysExamined" : 0,
        "totalDocsExamined" : 291214,
        "executionStages" : {
            "stage" : "COLLSCAN",
            "filter" : {
                "text" : {
                    "$eq" : "feliz"
                }
            },
            "nReturned" : 1,
            "executionTimeMillisEstimate" : 120,
            "works" : 291216,
            "advanced" : 1,
            "needTime" : 291214,
            "needYield" : 0,
            "saveState" : 2275,
            "restoreState" : 2275,
            "isEOF" : 1,
            "invalidates" : 0,
            "direction" : "forward",
            "docsExamined" : 291214
        },
        "allPlansExecution" : [ ]
    },
    "serverInfo" : {
        "host" : "UbuntuMate",
        "port" : 27017,
        "version" : "3.2.10",
        "gitVersion" : "79d9b3ab5ce20f51c272b4411202710a082d0317"
    },
    "ok" : 1
}
bye

```

2.0.2 A) Número de documentos que foi escaneado:

2.0.3 "totalDocsExamined" : 291214

2.0.4 B) Tempo que levou para fazer a consulta

2.0.5 "executionTimeMillis" : 148

2.0.6 C) Crie um índice simples no campo text

In [3]: %%**bash**

```
mongo

use nosqlclass

db.Vocabulary.createIndex({"text":1})
```

```
MongoDB shell version: 3.2.10
connecting to: test
switched to db nosqlclass
{
  "createdCollectionAutomatically" : false,
  "numIndexesBefore" : 1,
  "numIndexesAfter" : 2,
  "ok" : 1
}
bye
```

In [4]: %%**bash**

```
mongo

use nosqlclass

db.Vocabulary.find({"text":"feliz",}).explain({"executionStats":1})
```

```
MongoDB shell version: 3.2.10
connecting to: test
switched to db nosqlclass
{
  "queryPlanner" : {
    "plannerVersion" : 1,
    "namespace" : "nosqlclass.Vocabulary",
    "indexFilterSet" : false,
    "parsedQuery" : {
      "text" : {
        "$eq" : "feliz"
      }
    },
  },
}
```

```

"winningPlan" : {
  "stage" : "FETCH",
  "inputStage" : {
    "stage" : "IXSCAN",
    "keyPattern" : {
      "text" : 1
    },
    "indexName" : "text_1",
    "isMultiKey" : false,
    "isUnique" : false,
    "isSparse" : false,
    "isPartial" : false,
    "indexVersion" : 1,
    "direction" : "forward",
    "indexBounds" : {
      "text" : [
        ["feliz\","feliz\"]
      ]
    }
  }
},
"rejectedPlans" : [ ]
},
"executionStats" : {
  "executionSuccess" : true,
  "nReturned" : 1,
  "executionTimeMillis" : 0,
  "totalKeysExamined" : 1,
  "totalDocsExamined" : 1,
  "executionStages" : {
    "stage" : "FETCH",
    "nReturned" : 1,
    "executionTimeMillisEstimate" : 0,
    "works" : 2,
    "advanced" : 1,
    "needTime" : 0,
    "needYield" : 0,
    "saveState" : 0,
    "restoreState" : 0,
    "isEOF" : 1,
    "invalidates" : 0,
    "docsExamined" : 1,
    "alreadyHasObj" : 0,
    "inputStage" : {
      "stage" : "IXSCAN",
      "nReturned" : 1,
      "executionTimeMillisEstimate" : 0,
      "works" : 2,

```

```

        "advanced" : 1,
        "needTime" : 0,
        "needYield" : 0,
        "saveState" : 0,
        "restoreState" : 0,
        "isEOF" : 1,
        "invalidates" : 0,
        "keyPattern" : {
            "text" : 1
        },
        "indexName" : "text_1",
        "isMultiKey" : false,
        "isUnique" : false,
        "isSparse" : false,
        "isPartial" : false,
        "indexVersion" : 1,
        "direction" : "forward",
        "indexBounds" : {
            "text" : [
                ["feliz\\", "feliz\\"]
            ]
        },
        "keysExamined" : 1,
        "dupsTested" : 0,
        "dupsDropped" : 0,
        "seenInvalidated" : 0
    },
    "allPlansExecution" : [ ]
},
"serverInfo" : {
    "host" : "UbuntuMate",
    "port" : 27017,
    "version" : "3.2.10",
    "gitVersion" : "79d9b3ab5ce20f51c272b4411202710a082d0317"
},
"ok" : 1
}
bye

```

2.0.7 D) Número de documentos que foi escaneado

2.0.8 "docsExamined" : 1

2.0.9 E) Tempo que levou para fazer a consulta

2.0.10 executionTimeMillis" : 0

In []: