

Universidade de Fortaleza
- UNIFOR

**MBA EM GESTÃO
ANALÍTICA COM
BUSINESS INTELLIGENCE
E BIG DATA**

Banco de Dados NoSQL

Prof. Manoel Ribeiro

Repositório

<https://github.com/antoniomralmeida/NoSQL>

Pré-requisitos da disciplina

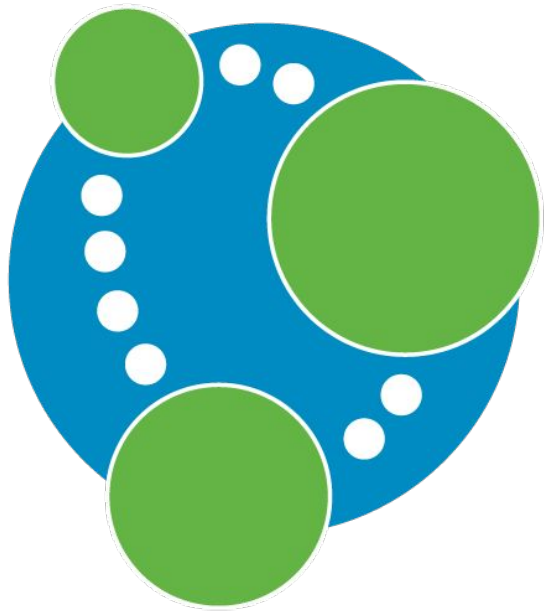
- Pré-requisitos da disciplina
 - Fundamento de Sistemas Distribuídos
 - Bancos de Dados Relacional
 - Linguagem de Programação Java / Python / Javascript
 - Eclipse Maven

Roteiro

- Aula 4
 - Conceitos de Grafos
 - NoSQL Graph Store
 - Conceitos Neo4j
 - Live com Neo4j
 - Programação com Neo4j (Java)
 - Intervalo
 - NoSQL Key Value Store
 - Conceitos Redis
 - Live Redis
 - Programação com Redis(Java)

Contextualização





neo4j

neo4j - Grafo de propriedades

Linguagem Cypher de representação

() - representa um nó

--> representa uma relação

(a)-[c]->(b) Nó "a" possui um relacionamento "c" com nó "b"

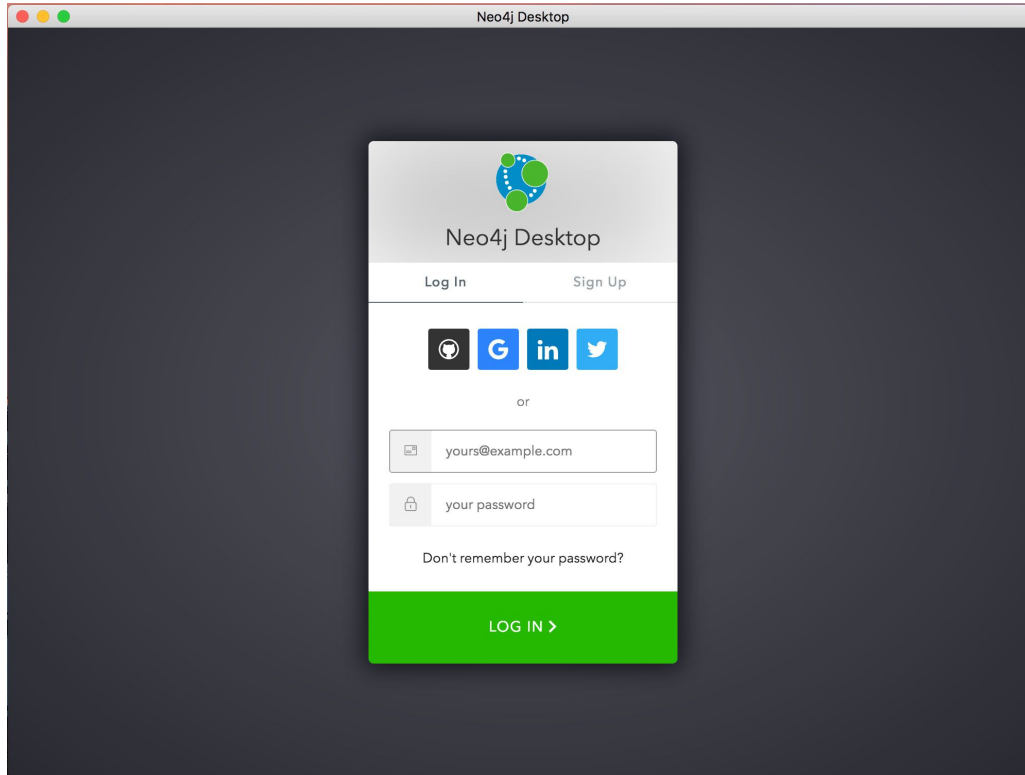
neo4j - Demo

neop4j desktop

<https://neo4j.com/download/>

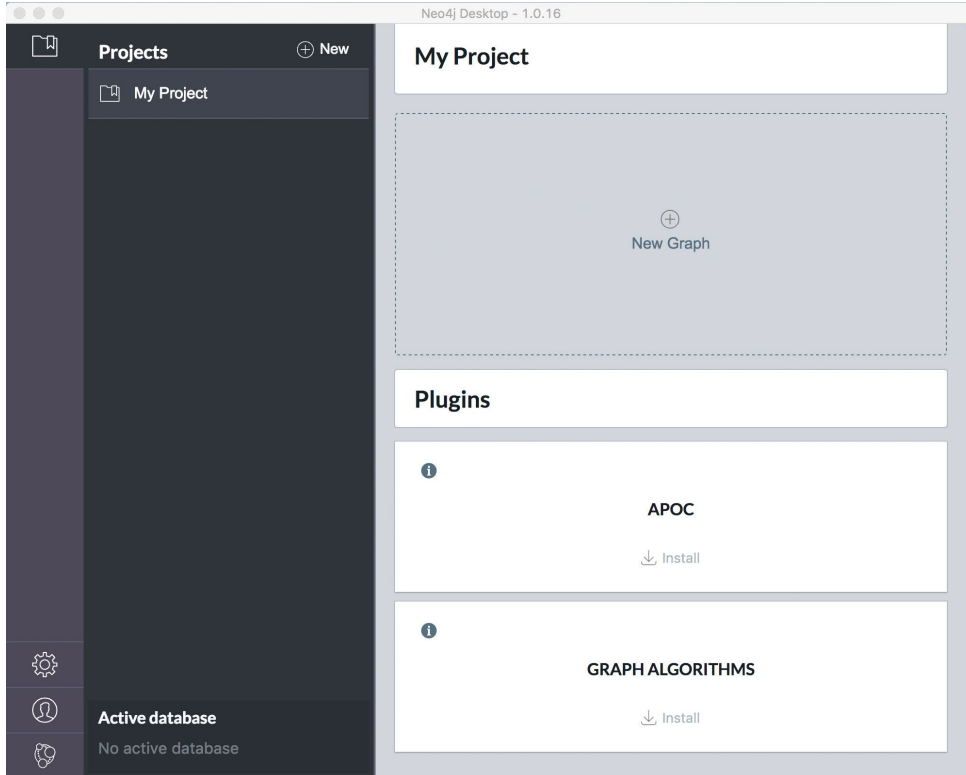
Install custom to c:\nosql\neo4j

neo4j - Authorize the Desktop App



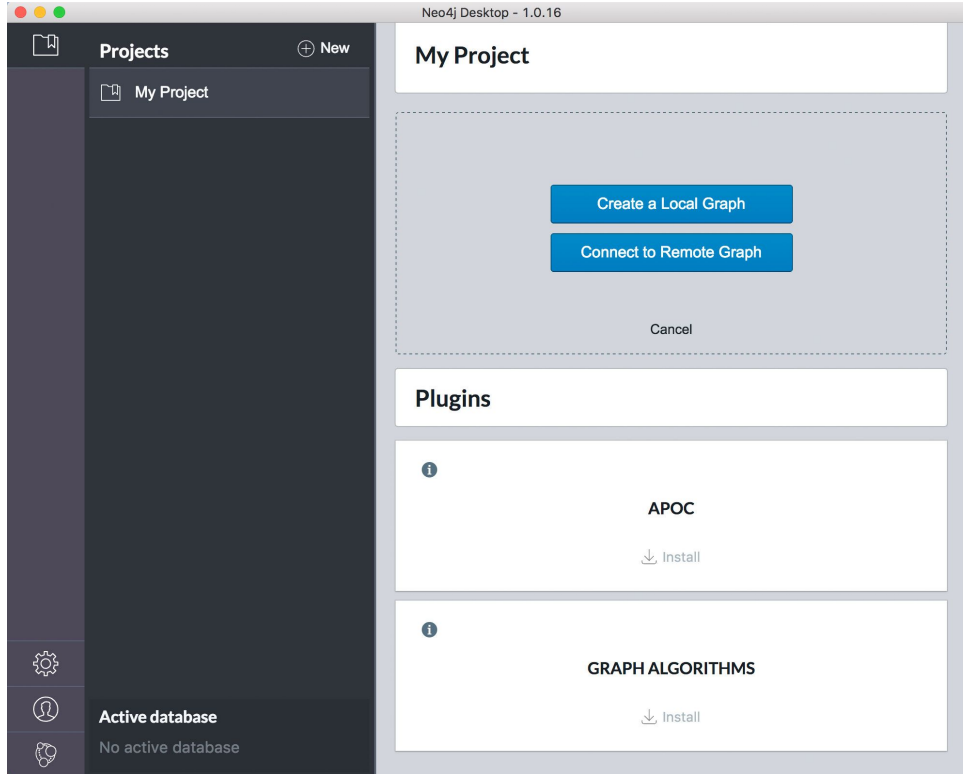
Log in with your Google or social media account, or create a new email-based login.

neo4j - Create and start a Database



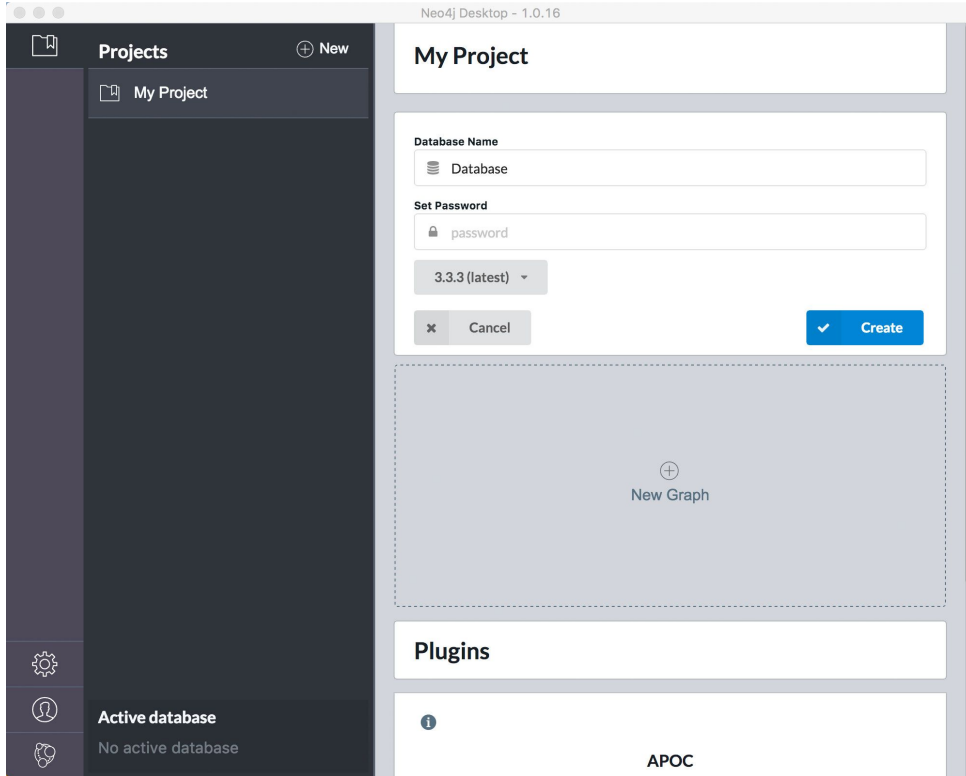
Click the “New Graph” button.

neo4j - Create and start a Database



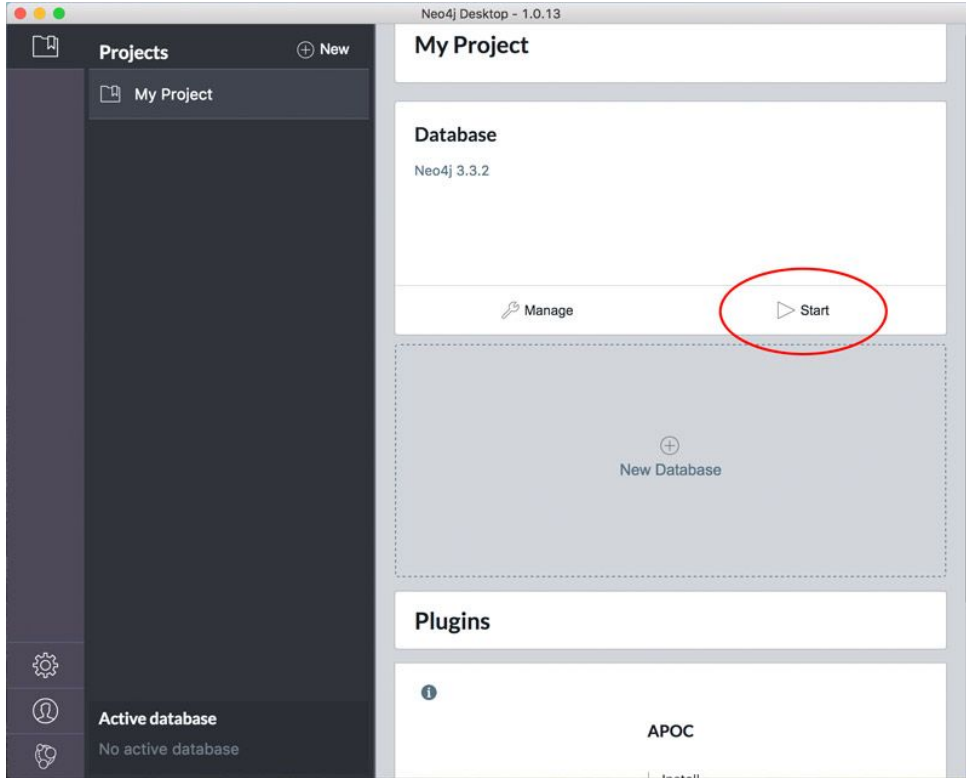
This will turn into two blue buttons. Click the one labeled, "Create a Local Graph."

neo4j - Create and start a Database



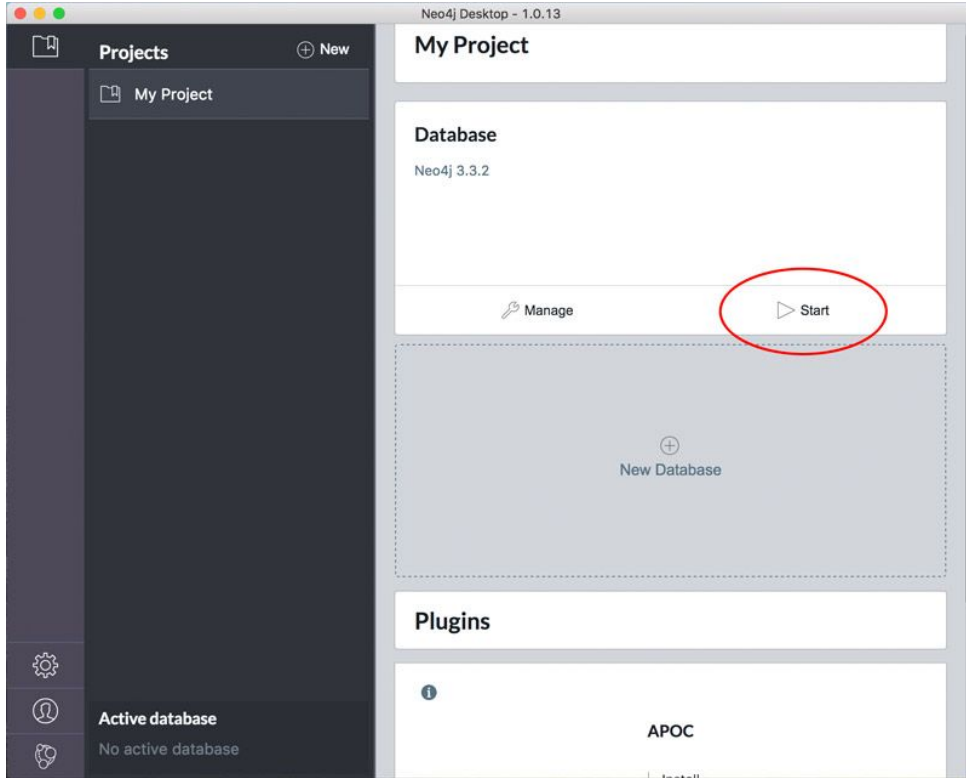
Then, click the blue button labeled “Create.”

neo4j - Create and start a Database



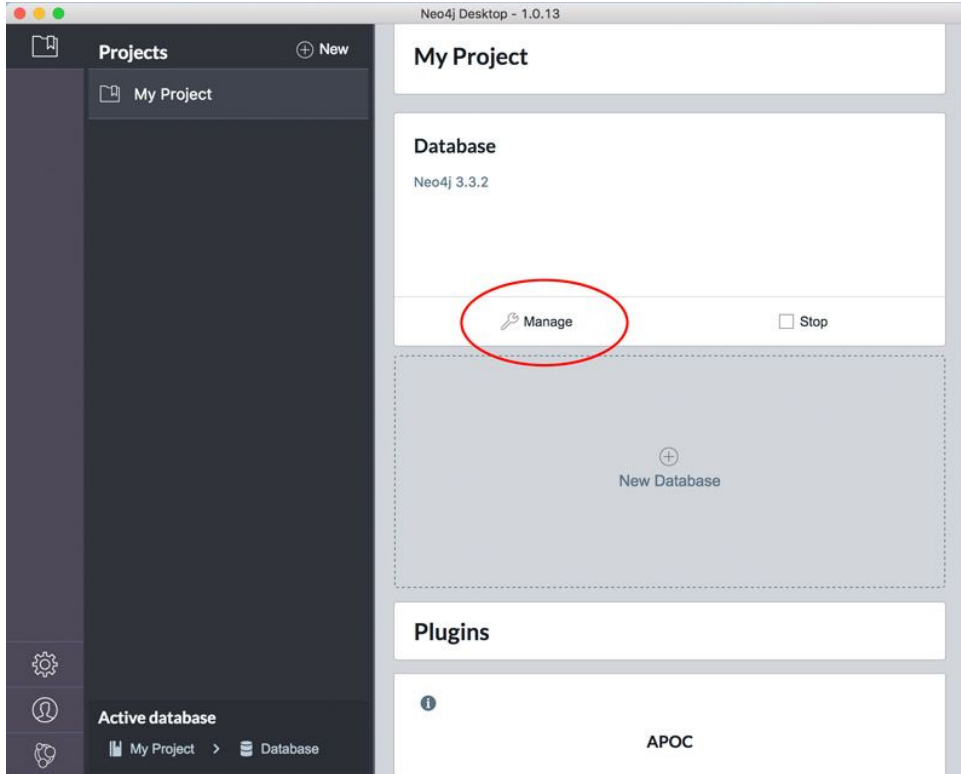
The “Create” button will soon be replaced by a “Start” button. Click it.

neo4j - Create and start a Database



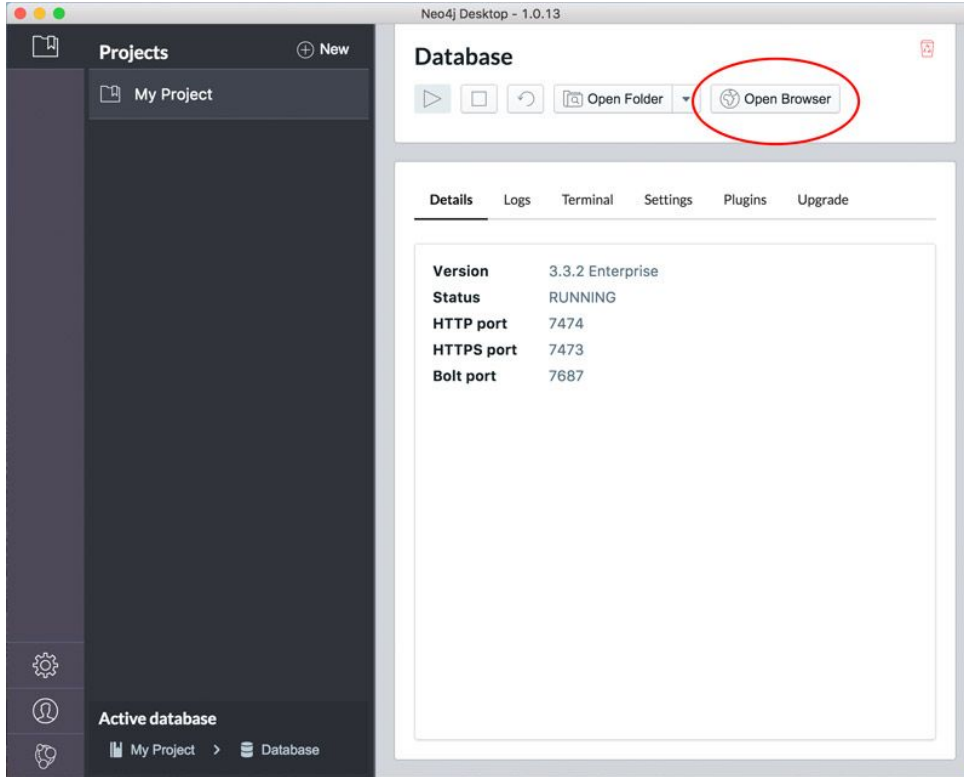
The “Create” button will soon be replaced by a “Start” button. Click it.

neo4j - Create and start a Database



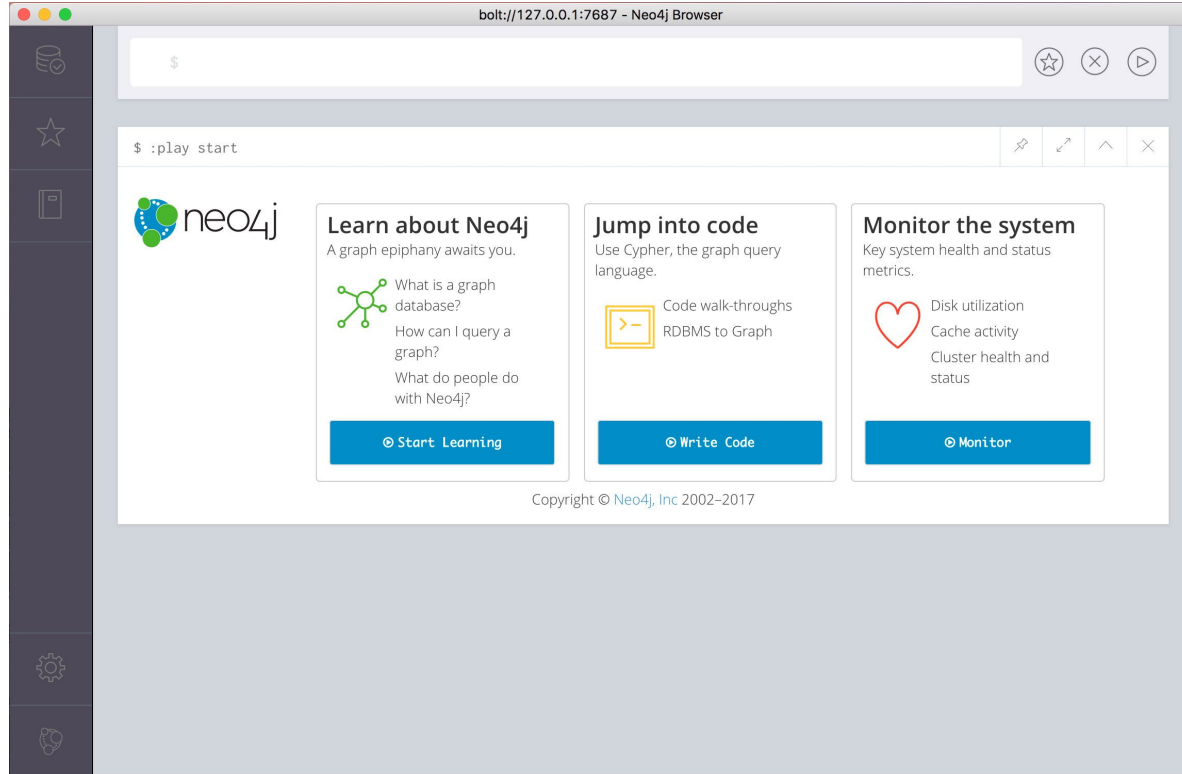
Once the database has started, click the “Manage” button.

neo4j - Create and start a Database



Click on the “Open Browser” button that will appear in the Database Management area. The browser will open in a new window, as shown below.

neo4j - Browser



neo4j - Live!

```
create (:Aluno {id:"João"});
```

```
create (:Professor {id:"Manoel"});
```

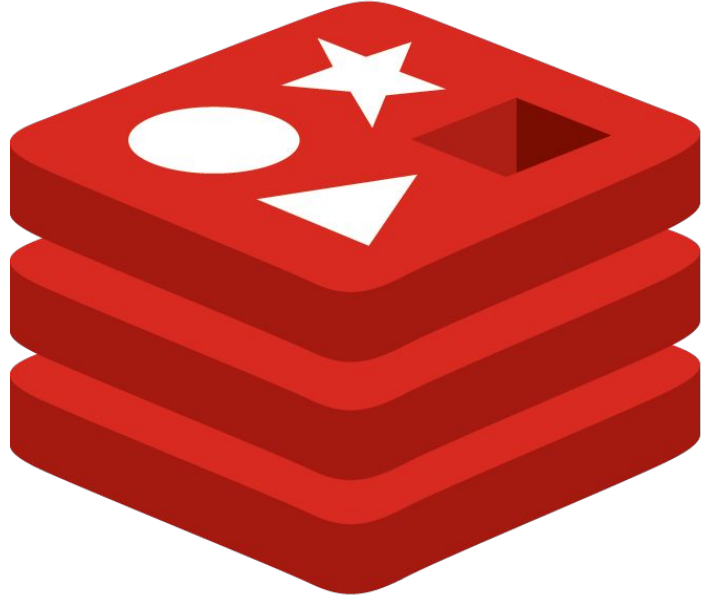
```
match (a) return a;
```

```
match (p:Professor)
```

```
match (a:Aluno)
```

```
CREATE (p)-[:Ensina]->(a);
```

```
match (a) return a;
```



redis

REmote **D**ictionary **S**erver

Instalação do Redis - Windows

- Baixar
 - <https://github.com/rgl/redis/downloads>
- Instalar
 - redis-2.4.6-setup-64-bit.exe
 - c:\nosql\redis

Instalação do Cassandra - Windows

- `cd \nosql\redis`
- Subir o servidor

> **start redis-server.exe**

```
[7928] 02 Jul 16:19:21 # Warning: no config file specified, using the default config. In order to  
specify a config file use 'redis-server /path/to/redis.conf'
```

```
[7928] 02 Jul 16:19:21 * Server started, Redis version 2.4.6
```

```
[7928] 02 Jul 16:19:21 # Open data file dump.rdb: No such file or directory
```

```
[7928] 02 Jul 16:19:21 * The server is now ready to accept connections on port 6379
```

- **Subir a interface shell**
 - > **redis-cli**
- **Live!**
 - **redis > ping**
 - PONG

Fim