Programação na Internet

Turma i52d

Aula 29
Commanding Databases through HTTP REST API

Why ElasticSearch?

Characteristics:

- Records in JSON format (e.g. MongoDB)
- Provides an HTTP API follows the REST principles (e.g. Couch DB)

Use case in the Book Node.js 8 the right way, Chap 6.

Only 1% of ElasticSearch

ElasticSearch and NoSQL is not the goal of Web Programming course.

We are not teaching about this topic, we are only using it.

ElasticSearch

- *schema-free*
- RESTful
- NoSQL

Better Book Bundle Builder – b4

1. Books catalog - Project Gutenberg => **index /books**
2. Bundles => index/bundles

Exemplo:

```json
{
    "name": "light reading",
    "books": [{
        "id": "pg132",
        "title": "The Art of War"
    },{
        "id": "pg2680",
        "title": "Meditations",
    },{
        "id": "pg6456",
        "title": "Public Opinion"
    }]
}
```
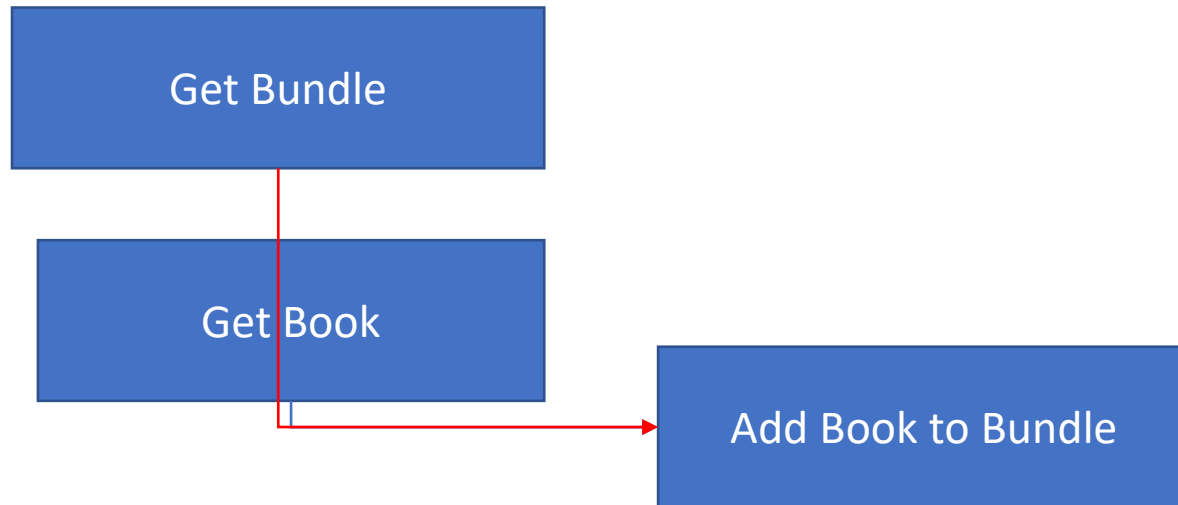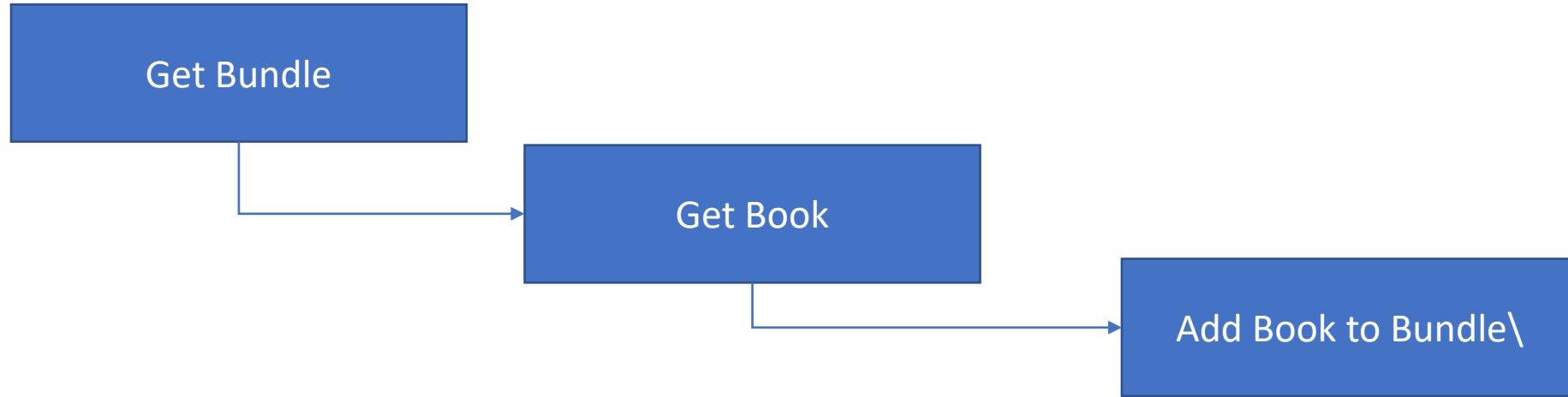
Module bundles

```
{
    "name": "light reading",
    "books": [{
        "id": "pg132",
        "title": "The Art of War"
    },{
        "id": "pg2680",
        "title": "Meditations",
    },{
        "id": "pg6456",
        "title": "Public Opinion"
    }]
}
```

- create(name, cb)

- delete(id, cb)

- get(id, cb)

- addBook(id, pgId, cb) => 3 pedidos HTTP:
  - GET /localhost:9200/bundles/_doc/<id>
  - GET /localhost:9200/books/_doc/<pgid>
  - PUT /localhost:9200/bundles/_doc/<id> including the new book

Sequential <versus> Concurrent

async

parallel(tasks, callback)

Run the `tasks` array of functions in parallel. If any of the functions pass an error to its callback, the main `callback` is immediately called with the value of the error. Once the `tasks` have completed, the results are passed to the final `callback` as an array.