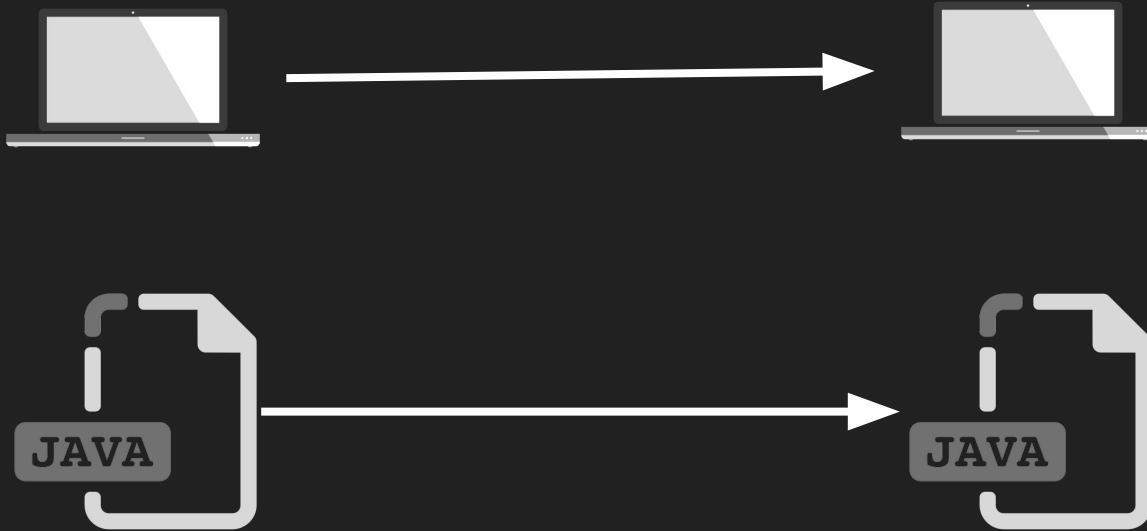# Construindo APIs Web com Spring Boot

Willian Oizumi

O que é uma API Web?

API = *Application Programming Interface*

Tipos de APIs Web

- **RPC (Remote Procedure Call)**

- **REST (Representational State Transfer)**

- GraphQL

- SOAP

- etc.

API ARCHITECTURAL STYLES

	RPC	SOAP	REST	GraphQL
Organized in terms of	local procedure calling	enveloped message structure	compliance with six architectural constraints	schema & type system
Format	JSON, XML, Protobuf, Thrift, FlatBuffers	XML only	XML, JSON, HTML, plain text,	JSON
Learning curve	Easy	Difficult	Easy	Medium
Community	Large	Small	Large	Growing
Use cases	Command and action-oriented APIs; internal high performance communication in massive micro-services systems	Payment gateways, identity management CRM solutions financial and telecommunication services, legacy system support	Public APIs simple resource-driven apps	Mobile APIs, complex systems, micro-services

altexsoft
software r&d engineering

Fonte: https://www.altexsoft.com/blog/soap-vs-rest-vs-graphql-vs-rpc/

O que Vamos Estudar?

1. Criação de APIs básicas com Spring Boot

2. Restrições da arquitetura REST

3. Características básicas do Protocolo HTTP

4. Implementando uma API RESTFul com Spring Boot

Softwares Necessários

- Java 11+ (JRE + JDK)
- Navegador (Firefox, Chrome, Edge, etc.)
- IDE (Eclipse, IntelliJ, VSCode, etc.)
- Cliente para requisições (Postman, curl, etc.)

Links Úteis

Java

https://jdk.java.net/java-se-ri/11

Spring Initializer

https://start.spring.io/

GitHub

https://github.com/wnoizumi/

Implementando nossa primeira API