

Usando APIs RESTful

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RESTful API – Tópicos

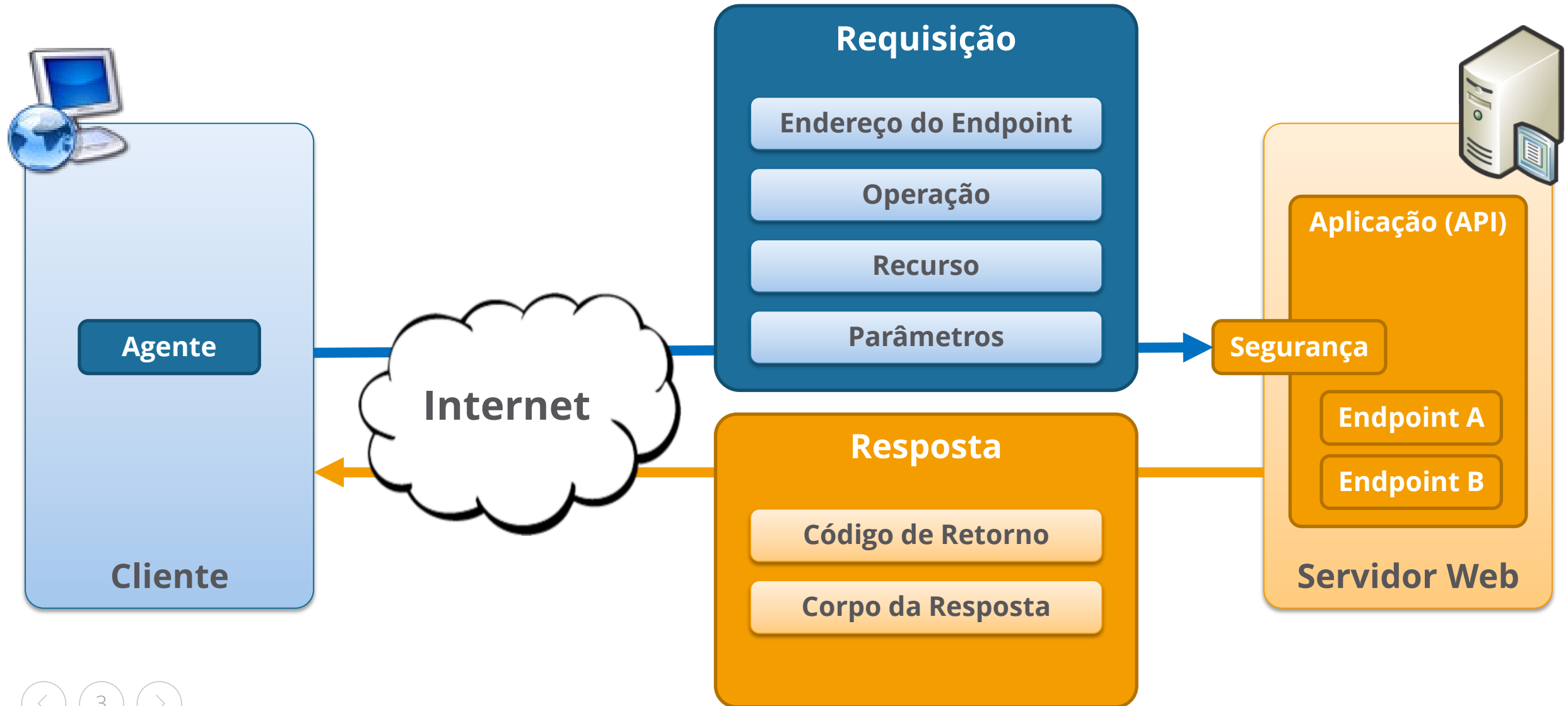
- Elementos de uma API
- Exemplos de APIs
 - News API
 - The Movie DB



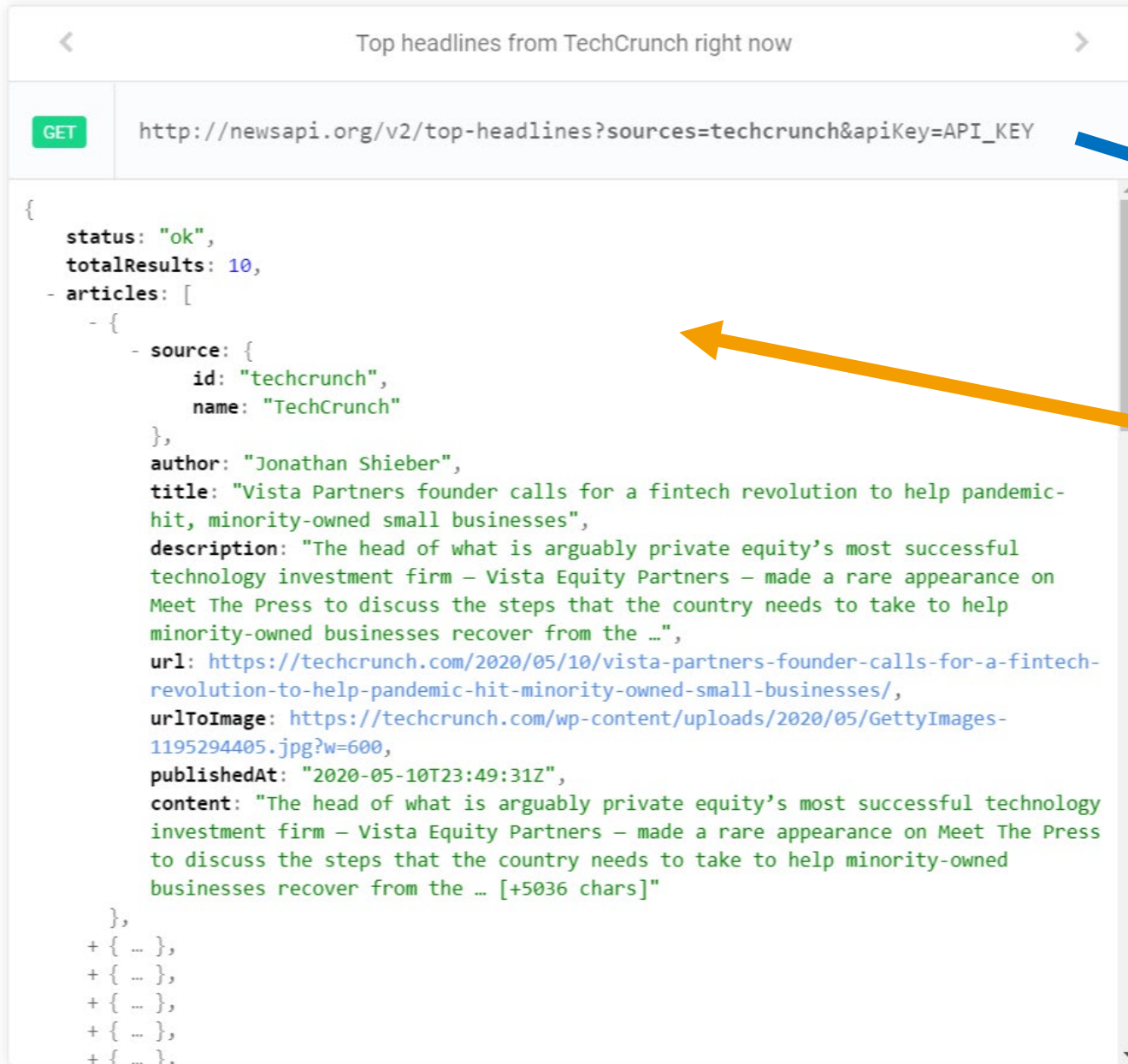
RESTful API

GET PUT POST DELETE

Elementos de uma API



Elementos de uma API



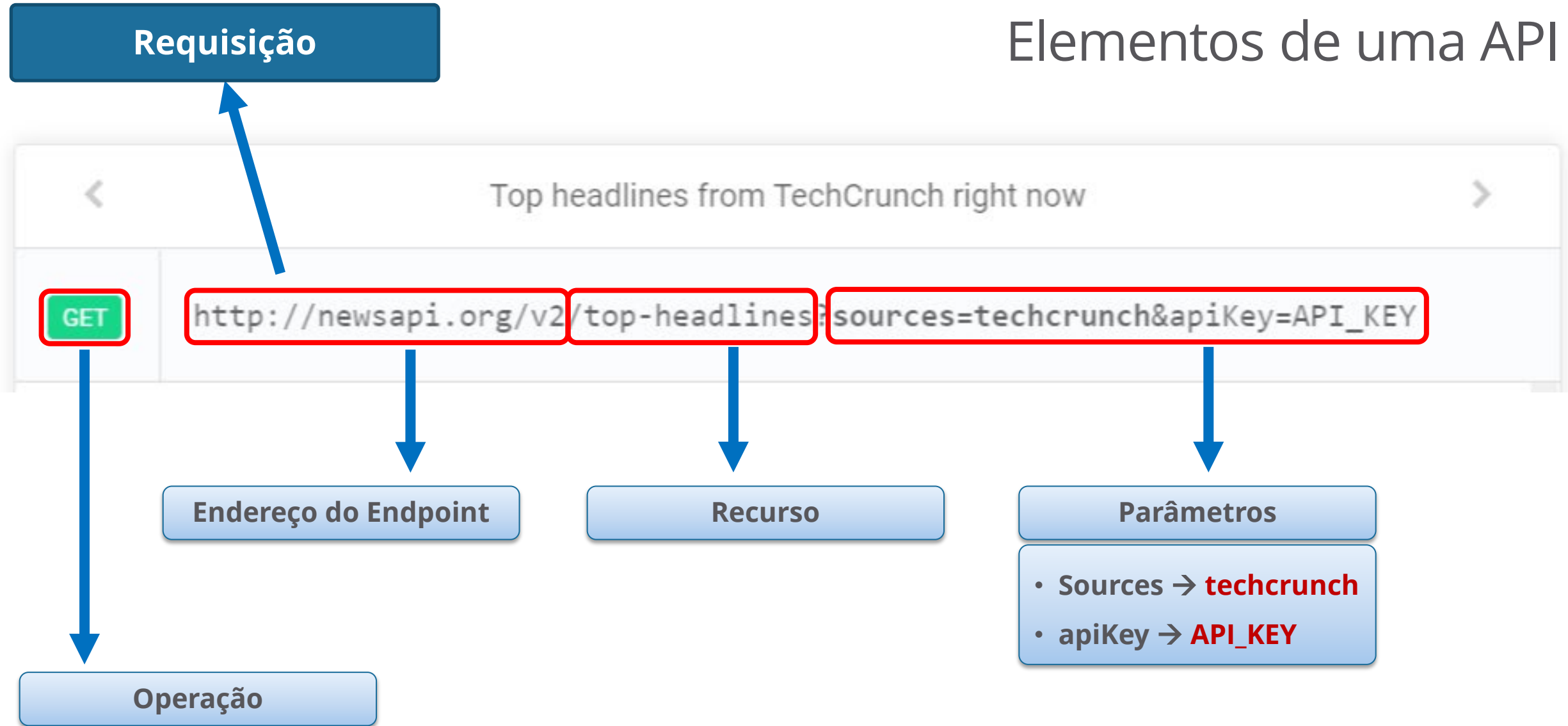
The screenshot shows a web browser window with the title "Top headlines from TechCrunch right now". The address bar displays a GET request to the URL `http://newsapi.org/v2/top-headlines?sources=techcrunch&apiKey=API_KEY`. The main content area shows a JSON response from the API. The response is a JSON object with a `status` of "ok", `totalResults` of 10, and an `articles` array. The first article in the array is highlighted, showing details like `source` (TechCrunch), `author` (Jonathan Shieber), `title`, `description`, `url`, `urlToImage`, `publishedAt`, and `content`.

```
{
  status: "ok",
  totalResults: 10,
  - articles: [
    - {
      - source: {
        id: "techcrunch",
        name: "TechCrunch"
      },
      author: "Jonathan Shieber",
      title: "Vista Partners founder calls for a fintech revolution to help pandemic-
hit, minority-owned small businesses",
      description: "The head of what is arguably private equity's most successful
technology investment firm – Vista Equity Partners – made a rare appearance on
Meet The Press to discuss the steps that the country needs to take to help
minority-owned businesses recover from the ...",
      url: https://techcrunch.com/2020/05/10/vista-partners-founder-calls-for-a-fintech-
revolution-to-help-pandemic-hit-minority-owned-small-businesses/,
      urlToImage: https://techcrunch.com/wp-content/uploads/2020/05/GettyImages-
1195294405.jpg?w=600,
      publishedAt: "2020-05-10T23:49:31Z",
      content: "The head of what is arguably private equity's most successful technology
investment firm – Vista Equity Partners – made a rare appearance on Meet The Press
to discuss the steps that the country needs to take to help minority-owned
businesses recover from the ... [+5036 chars]"
    },
    + { ... },
    + { ... },
    + { ... },
    + { ... },
    + { ... }
  ]
}
```

Requisição

Resposta

Elementos de uma API



Elementos de uma API

```
Top headlines from TechCrunch right now

GET http://newsapi.org/v2/top-headlines?sources=techcrunch&apiKey=API_KEY

{
  status: "ok",
  totalResults: 10,
  - articles: [
    - {
      - source: {
        id: "techcrunch",
        name: "TechCrunch"
      },
      author: "Jonathan Shieber",
      title: "Vista Partners founder calls for a fintech revolution to help pandemic-hit, minority-owned small businesses",
      description: "The head of what is arguably private equity's most successful technology investment firm – Vista Equity Partners – made a rare appearance on Meet The Press to discuss the steps that the country needs to take to help minority-owned businesses recover from the ...",
      url: https://techcrunch.com/2020/05/10/vista-partners-founder-calls-for-a-fintech-revolution-to-help-pandemic-hit-minority-owned-small-businesses/,
      urlToImage: https://techcrunch.com/wp-content/uploads/2020/05/GettyImages-1195294405.jpg?w=600,
      publishedAt: "2020-05-10T23:49:31Z",
      content: "The head of what is arguably private equity's most successful technology investment firm – Vista Equity Partners – made a rare appearance on Meet The Press to discuss the steps that the country needs to take to help minority-owned businesses recover from the ... [+5036 chars]"
    },
    + { ... },
    + { ... },
    + { ... },
    + { ... },
    + { ... }
  ]
}
```

Requisição

Resposta

Elementos de uma API

```
{
  status: "ok",
  totalResults: 10,
  articles: [
    - {
      - source: {
        id: "techcrunch",
        name: "TechCrunch"
      },
      author: "Jonathan Shieber",
      title: "Vista Partners founder calls for a fintech revolution to help pandemic-hit, minority-owned small businesses",
      description: "The head of what is arguably private equity's most successful technology investment firm – Vista Equity Partners – made a rare appearance on Meet The Press to discuss the steps that the country needs to take to help minority-owned businesses recover from the ...",
      url: https://techcrunch.com/2020/05/10/vista-partners-founder-calls-for-a-fintech-revolution-to-help-pandemic-hit-minority-owned-small-businesses/,
      urlToImage: https://techcrunch.com/wp-content/uploads/2020/05/GettyImages-1195294405.jpg?w=600,
      publishedAt: "2020-05-10T23:49:31Z",
      content: "The head of what is arguably private equity's most successful technology investment firm – Vista Equity Partners – made a rare appearance on Meet The Press to discuss the steps that the country needs to take to help minority-owned businesses recover from the ... [+5036 chars]"
    },
    + { ... },
    + { ... },
    + { ... },
    + { ... },
    + { ... }
  ]
}
```

Resposta

Código de Retorno

Corpo da Resposta

- Formato → **JSON**
- Estrutura
 - ❑ status
 - ❑ totalResults
 - ❑ Articles (array)

Exemplo de API – News API

- **Site:** <https://newsapi.org/>
- **Objetivo:** Prover notícias gerais a partir de 50.000 fontes diferentes
- **Endpoint**
 - **URL Base:** <https://newsapi.org/v2>
- **Segurança**
 - Feita por meio de uma chave obtida através do site da API (APIKey)
 - A chave pode ser enviada via:
 - Parâmetro de Query String: **apiKey**,
 - Cabeçalho **X-API-Key** ou
 - Cabeçalho **Authorization (bearer)**

Exemplo de API – News API

- **Recursos:**

- **Top Headlines** – Principais notícias de um país, categoria ou fonte
 - **Caminho:** top-headlines
 - **Parâmetros de QueryString:** country | category | sources | q (query) | pageSize | page | apiKey
 - **Formato da Resposta:** JSON (status | totalResults | array de articles)
- **Everything** – Todo tipo de notícias de diversas fontes
 - **Caminho:** /everything
 - **Parâmetros de QueryString:** q (query) | qinTitle | sources | domains | from | to | language | sortBy | pageSize | page | apiKey
 - **Formato de Resposta:** JSON (status | totalResults | array de articles)
- **Sources** – Lista das fontes disponíveis para o endpoint Top Headlines
 - **Caminho:** /sources
 - **Parâmetros de QueryString:** category | language | country | apiKey
 - **Formato da Resposta:** JSON (status | array de sources)

Exemplo de API – The Movie DB

- **Site:** <https://www.themoviedb.org/>
- **Objetivo:** Fornecer informações sobre filmes, shows de TV e artistas
- **Endpoint**
 - **URL Base:** <https://api.themoviedb.org/3>
 - **URL para imagens:**
 - <https://image.tmdb.org/t/p/w500> - Para imagens de 500 pixels de largura
- **Segurança**
 - Feita por meio de uma chave obtida através do site da API (APIKey)
 - A chave pode ser enviada via:
 - Parâmetro de Query String: **api_key**
- **Recursos:** **movie** | **list** | **tv** | **reviews** | **people** | **credits**

Obrigado!