

HTML II: Ampliando o conhecimento

Entendendo HTML Semântico + Acessibilidade

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Entendendo HTML Semântico + Acessibilidade

Diogo Medeiros Mainardes

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twitch.tv/dimmbrr

Sobre Mim

- Mais de 20 anos como programador
- Conhecimento prático em diversos projetos
- Experiência em gestão de pessoas e treinamentos
- Investidor
- Cozinhar para mim é uma terapia
- Lives na Twitch. Para novidades, me adicionem no Instagram

@diogomainardes.dev

linkedin.com/in/diogomainardes

twitch.tv/dimmbrr

Percurso

- HTML Semântico
- Melhorias nas versões do HTML
- Acessibilidade
- Web Scraping
- `<main>`, `<header>`, `<footer>`
- `<nav>`, `<section>`, `<aside>`
- `<article>`, `<blockquote>`, `<q>`
- `<figure>`, `<figcaption>`, `<picture>`
- Resenha: o que é SEO?

Objetivo Geral

Virar expert em semântica no HTML. Saber mais sobre a importância da acessibilidade no HTML. Conhecer as novas tags estruturais e criar um site do jeito que tem que ser.

Entendendo HTML Semântico + Acessibilidade

O que é Semântica?

// Um pouco de conceito

Definição

semântica

1. disciplina da linguística que se ocupa da significação das palavras e expressões linguísticas bem como das relações de sentido que estas estabelecem entre si

meudicionario.org

Definição

<body>

<div>...</div>

<div>...</div>

<div>...</div>

</body>

<body>

<header>...</header>

<main>...</main>

<footer>...</footer>

</body>

Definição

```
<body>
```

```
  <div class="header">...</div>
```

```
  <div class="main">...</div>
```

```
  <div class="footer">...</div>
```

```
</body>
```

Definição

```
<body>
```

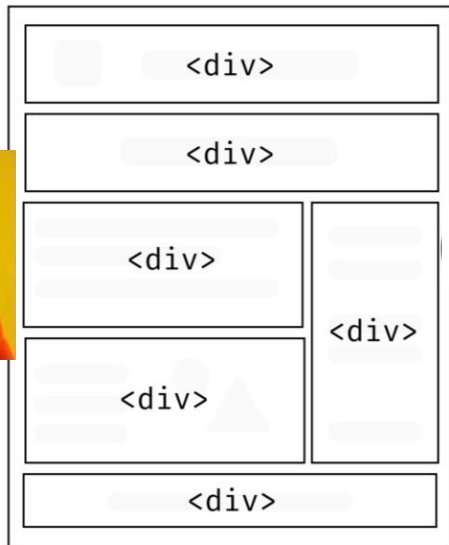
```
  <div class="cabecalho">...</div>
```

```
  <div class="corpo">...</div>
```

```
  <div class="rodape">...</div>
```

```
</body>
```

Definição



Entendendo HTML Semântico + Acessibilidade

Mudanças HTML 5

// Ué? Não usa mais?

Diferenças HTML 4 para HTML 5



HTML5 Differences from HTML4

W3C Working Group Note 9 December 2014

This Version:

<http://www.w3.org/TR/2014/NOTE-html5-diff-20141209/>

Latest Version:

<http://www.w3.org/TR/html5-diff/>

Participate:

[File a bug](#) ([open bugs](#))

Version History:

<https://github.com/whatwg/html-differences/commits>

Previous Versions:

<http://www.w3.org/TR/2014/WD-html5-diff-20140918/>

<http://www.w3.org/TR/2013/WD-html5-diff-20130528/>

<http://www.w3.org/TR/2012/WD-html5-diff-20121025/>

<http://www.w3.org/TR/2012/WD-html5-diff-20120329/>

<http://www.w3.org/TR/2011/WD-html5-diff-20110525/>

Publication as a Working Group Note does not imply endorsement by the W3C Membership progress.

This document was produced by a group operating under the [5 February 2004 W3C Patent](#) a patent. An individual who has actual knowledge of a patent which the individual believes

This document is governed by the [14 October 2005 W3C Process Document](#).

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<https://www.w3.org/TR/html5-diff/>

Novos elementos

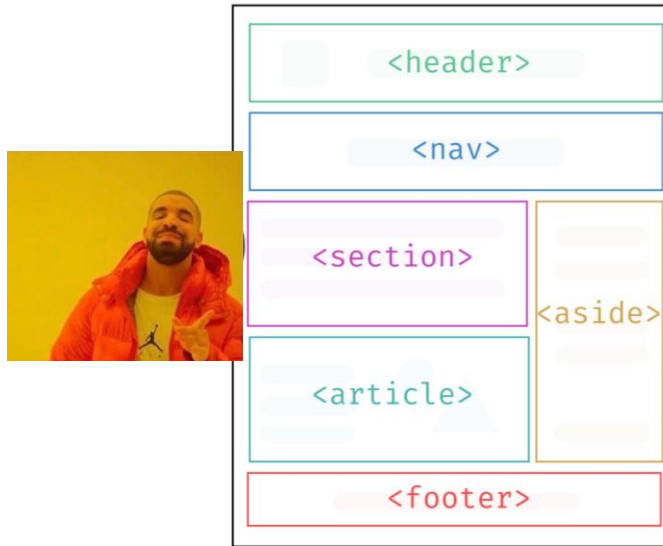
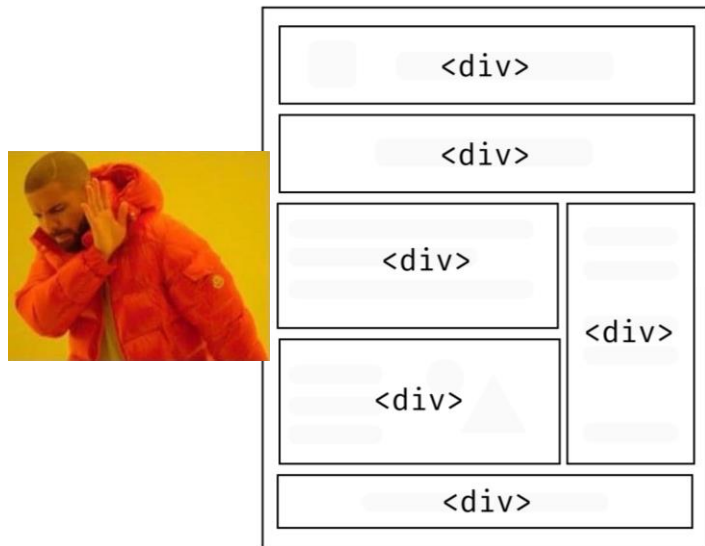
<main>, <header>, <footer>, <nav>, <section>,
<aside>, <article>, <vídeo>...

Deprecated

<basefont>, <big>, <center>, , <strike>, <tt>,
<frame>, <frameset>...

<https://www.w3.org/TR/html5-diff/>

Nova estrutura



<https://www.w3.org/TR/html5-diff/>

Entendendo HTML Semântico + Acessibilidade

Acessibilidade

// Internet é para TODOS

Internet é para todas as pessoas

Accessibility is essential for developers and organizations that want to create high quality websites and web tools, and not exclude people from using their products and services.

The mission of the [Web Accessibility Initiative \(WAI\)](#) is to lead the Web to its full potential to be accessible, enabling people with disabilities to participate equally on the Web.

W3C

Leading the web to its full potential

STANDARDS PARTICIPATE MEMBERSHIP ABOUT W3C

W3C » Standards » Web Design and Applications » Accessibility

ACCESSIBILITY

On this page → [why](#) • [what](#) • [how](#) • [learn more](#) • [wai](#)

*The power of the Web is in its universality.
Access by everyone regardless of disability is an essential aspect.*
Tim Berners-Lee, W3C Director and inventor of the World Wide Web

The Web is fundamentally designed to work for all people, whatever their hardware, software, language, location, or ability. When the Web meets this goal, it is accessible to people with a diverse range of hearing, movement, sight, and cognitive ability.

Thus **the impact of disability is radically changed on the Web because the Web removes barriers** to communication and interaction that many people face in the physical world. However, when web sites, applications, technologies, or tools are badly designed, they can create barriers that exclude people from using the Web.

Accessibility is essential for developers and organizations that want to create high quality websites and web tools, and not exclude people from using their products and services.

The mission of the Web Accessibility Initiative (WAI) is to lead the Web to its full potential to be accessible, enabling people with disabilities to participate equally on the Web.

See below for:

- [why: the case for web accessibility](#)
- [what: examples of web accessibility](#)
- [how: make your website and web tools accessible](#)
- [learn more](#)
- [Web Accessibility Initiative \(WAI\) at W3C](#)

Why: The Case for Web Accessibility

The Web must be accessible to provide equal access and equal opportunity to people with diverse abilities. Indeed, the [UN Convention on the](#)

Internet é para todas as pessoas

A acessibilidade é essencial para desenvolvedores e organizações que desejam criar sites e ferramentas da Web de alta qualidade e não excluir as pessoas de usar seus produtos e serviços.

A missão da Iniciativa de Acessibilidade da Web (WAI) é levar a Web a todo o seu potencial para ser acessível, permitindo que pessoas com deficiência participem igualmente na rede.

W3C

Leading the web to its full potential

STANDARDS PARTICIPATE MEMBERSHIP ABOUT W3C

W3C » Standards » Web Design and Applications » Accessibility

ACCESSIBILITY

On this page → [why](#) • [what](#) • [how](#) • [learn more](#) • [wai](#)

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WCAG (Web Content Accessibility Guidelines)

How to Meet WCAG (Quick Reference)

A customizable quick reference to Web Content Accessibility Guidelines (WCAG) 2 requirements (success criteria) and techniques. [Show About & How to Use](#)

W3C[®] Web Accessibility
Initiative WAI

Contents

Filter

Hide

Selected Filters: WCAG 2.0: all success criteria and all techniques.

Clear filters

Expand all sections

Share

1. Perceivable

1.1 Text Alternatives

1.1.1 Non-text Content

1.2 Time-based Media

1.2.1 Audio-only and Video-only (Prerecorded)

1.2.2 Captions (Prerecorded)

1.2.3 Audio Description or Media Alternative (Prerecorded)

1.2.4 Captions (Live)

1.2.5 Audio Description (Prerecorded)

1.2.6 Sign Language (Prerecorded)

1.2.7 Extended Audio Description (Prerecorded)

1.2.8 Media Alternative (Prerecorded)

1.2.9 Audio-only (Live)

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1.3.1 Info and Relationships

1.3.2 Meaningful Sequence

1.3.3 Sensory Characteristics

1.4 Distinguishable

1.4.1 Use of Color

1.4.2 Audio Control

1.4.3 Contrast (Minimum)

1.4.4 Resize text

1.4.5 Images of Text

1.4.6 Contrast (Enhanced)

1.4.7 Low or No Background Audio

1.4.8 Visual Presentation

1.4.9 Text of Text Area

Principle 1 – Perceivable

Information and user interface components must be presentable to users in ways they can perceive.

Guideline 1.1 – Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

1.1.1 Non-text Content — Level A

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. [Show full description](#)

[Show techniques and failures for 1.1.1](#)

Understanding 1.1.1

SHARE | BACK TO TOP

Guideline 1.2 – Time-based Media

Provide alternatives for time-based media.

1.2.1 Audio-only and Video-only (Prerecorded) — Level A

For prerecorded audio-only and prerecorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labeled as such: [Show full description](#)

[Show techniques and failures for 1.2.1](#)

Understanding 1.2.1

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1.2.2 Captions (Prerecorded) — Level A

Captions are provided for all prerecorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labeled as such. [Show full description](#)

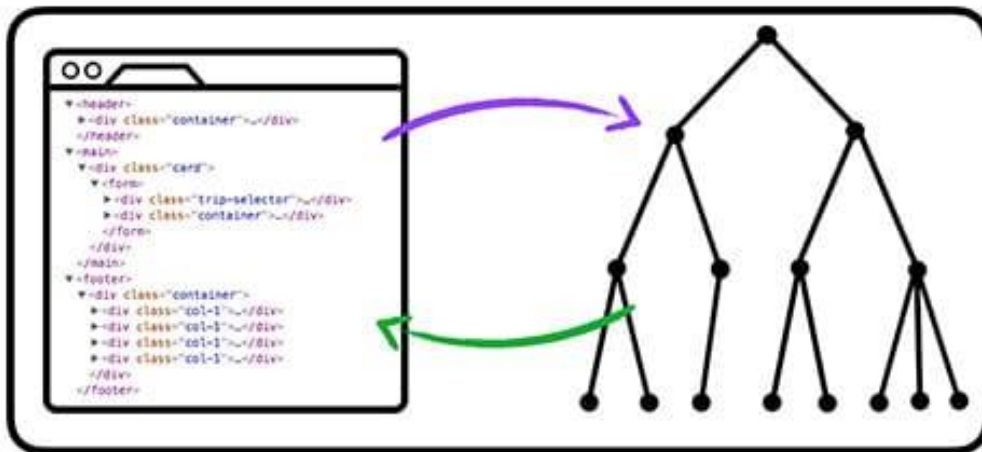
[Show techniques and failures for 1.2.2](#)

Understanding 1.2.2

SHARE | BACK TO TOP

<https://www.w3.org/WAI/WCAG21/quickref/?versions=2.0>

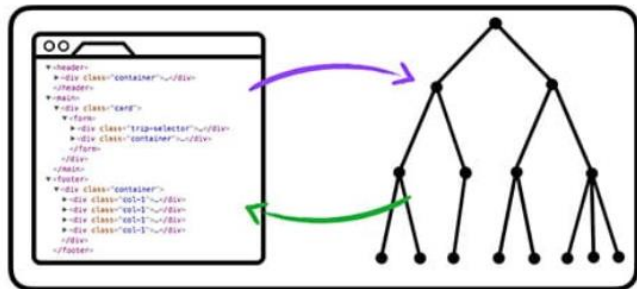
Árvore de acessibilidade (Accessibility Tree)



DOM

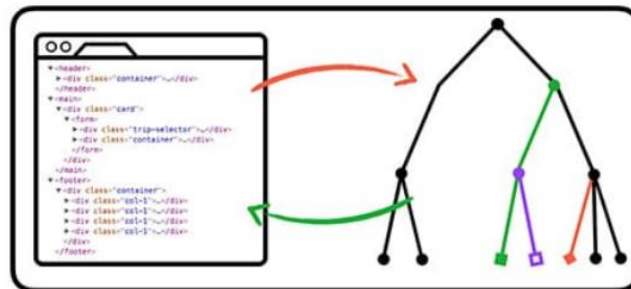
accessibility
tree

Árvore de acessibilidade (Accessibility Tree)



DOM

accessibility
tree

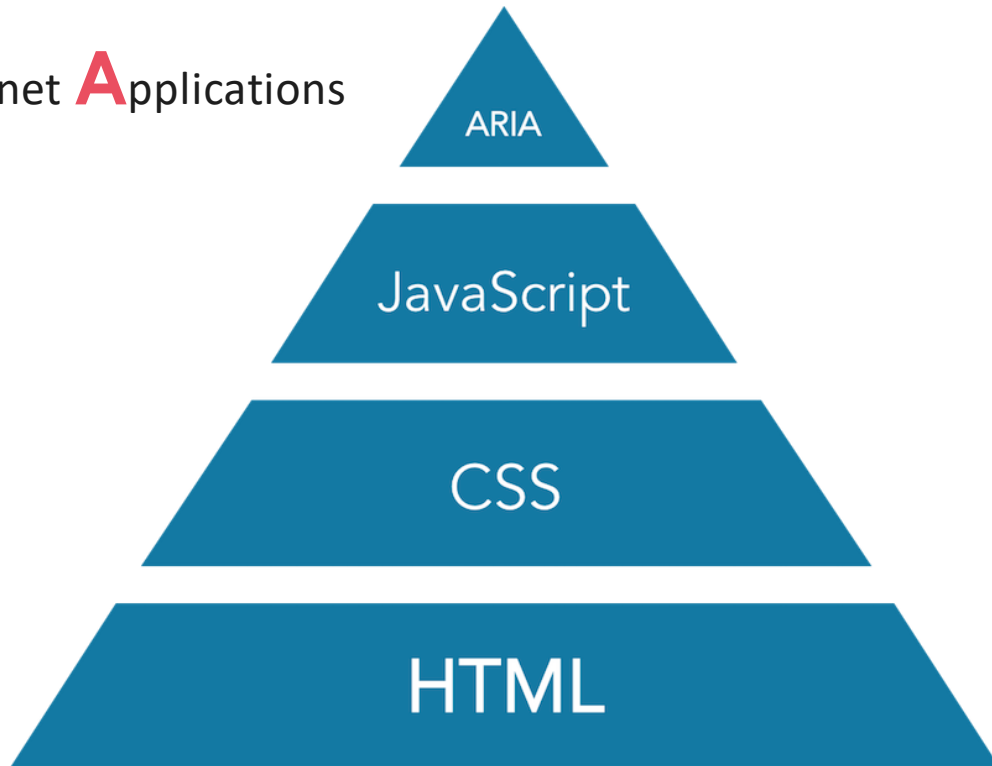


DOM
+
ARIA

accessibility
tree

WAI-ARIA

Accessible **R**ich **I**nternet **A**pplications



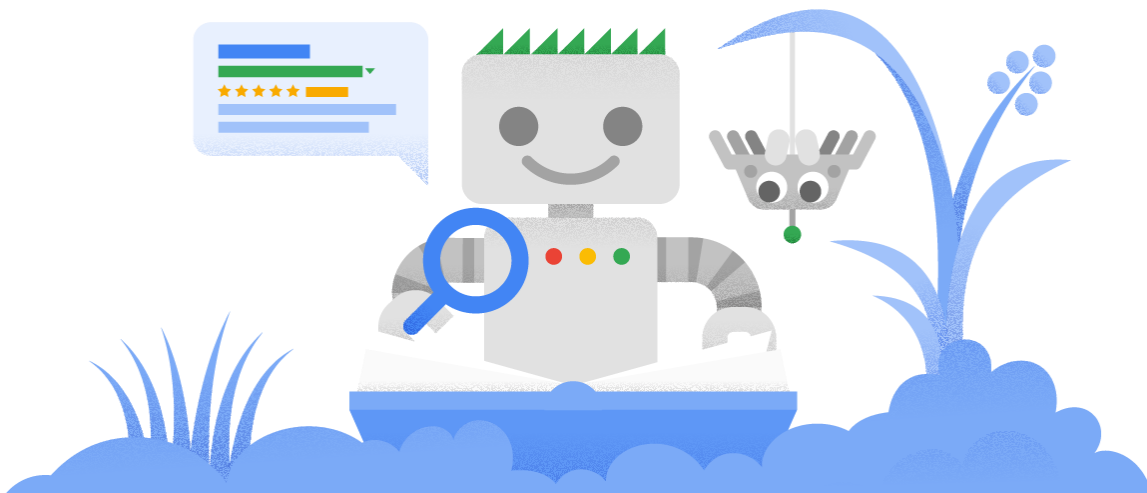
Entendendo HTML Semântico + Acessibilidade

Web Scraping

// Eeeeeita

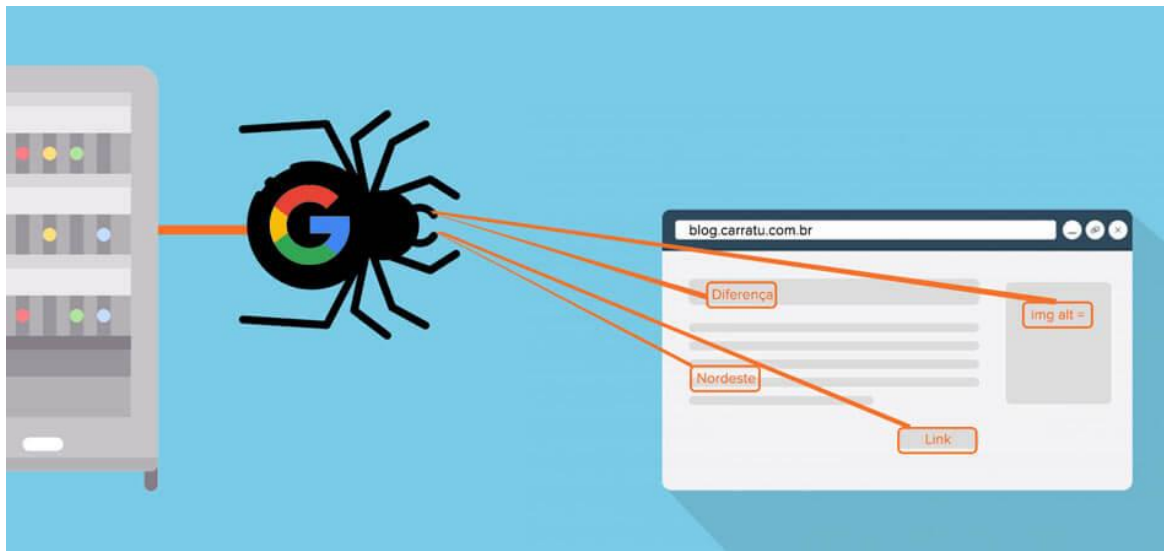
Vamos começar do início...

"**Rastreador**" (**Crawler** - às vezes também chamado de "robô" ou "indexador") é um termo genérico para qualquer programa usado para descobrir e examinar sites automaticamente seguindo links entre páginas da Web.



GoogleBot

Através de uma página, o robô segue os links, vai visitando, e vai indexando...



O que é Web Scraping?

<https://www.kabum.com.br> > computadores > pc-gamer ▾

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[PC Gamer Concórdia...](#) · [PC Gamer Concórdia AMD...](#) · [PC Gamer Concórdia i7...](#)



<https://www.shopinfo.com.br> > computadores-gamer ▾

PC Gamer Barato - Compre em até 24x

A Shopinfo tem **PC Gamer** com placas de vídeo e process

Acesse o site e compre PCs completos, montados e barat

[PC Gamer Neologic Dragon...](#) · [Pc Gamer Neologic NLI83](#)

<https://www.pichau.com.br> > pichau-gamer

Comprar PC Gamer, Mais Completos Co

Computadores Gamer Melhores e mais Completos e Bara

Personalizados com menor Preço, Você só encontra aqui

Juros.

[Computador Pichau Gamer...](#) · [Computador Mancer Gamer...](#)

<https://www.kabum.com.br> > computadores > pc-gamer ▾

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[PC Gamer Concórdia...](#) · [PC Gamer Concórdia AMD...](#) · [PC Gamer Concórdia i7...](#)



<https://www.terabyteshop.com.br> > pc-gamer ▾

PC Gamer Completo e Barato Monte seu Computador

Computador Gamer Personalizado Intel ou AMD Ryzen, Monte Seu **PC Gamer**

Completo e Barato para Jogos ou Trabalho, Menor Preço do Brasil.

★★★★★ Avaliação: 5 - 1.955 comentários - R\$ 1.940,41 a R\$ 12.317,71



As pessoas também perguntam

Quanto custa um PC Gamer forte? ▾

Qual PC Gamer comprar em 2022? ▾

Agora entendiiii...



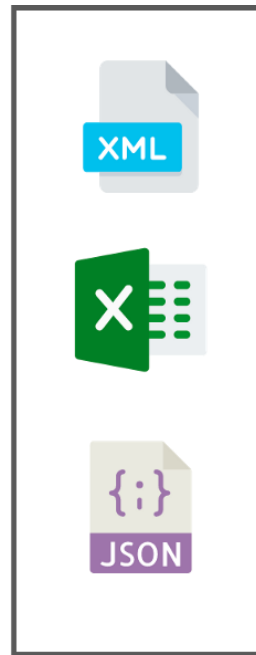
O que é Web Scraping?



**Target a website
and define what data
must be collected**



**Extract and analyze
the source code**



Structured data

O que é Web Scraping?

D1			
	A	B	C
1	Article Title	URL	Additional Info
2	Economics	/wiki/Economics	167 KB (18,415 words) - 14:10, 22 May 2019
3	Keynesian economics	/wiki/Keynesian_economics	83 KB (10,775 words) - 05:41, 10 May 2019
4	Positive economics	/wiki/Positive_economics	8 KB (838 words) - 16:17, 19 May 2019
5	Environmental economics	/wiki/Environmental_economics	28 KB (3,400 words) - 13:47, 22 May 2019
6	Neoclassical economics	/wiki/Neoclassical_economics	25 KB (3,209 words) - 21:43, 17 May 2019
7	Heterodox economics	/wiki/Heterodox_economics	28 KB (2,906 words) - 06:15, 22 May 2019
8	Socialist economics	/wiki/Socialist_economics	131 KB (17,468 words) - 18:23, 24 April 2019
9	Agricultural economics	/wiki/Agricultural_economics	17 KB (1,825 words) - 00:03, 15 May 2019
10	Development economics	/wiki/Development_economics	52 KB (6,160 words) - 13:46, 19 May 2019
11	Labour economics	/wiki/Labour_economics	36 KB (4,588 words) - 22:06, 23 April 2019
12	Behavioral economics	/wiki/Behavioral_economics	80 KB (8,427 words) - 18:48, 21 May 2019
13	Master of Economics	/wiki/Master_of_Economics	5 KB (534 words) - 16:02, 22 July 2018
14	Welfare economics	/wiki/Welfare_economics	23 KB (2,793 words) - 05:16, 21 May 2019
15	Classical economics	/wiki/Classical_economics	20 KB (2,542 words) - 18:24, 11 March 2019
16	Capital Economics	/wiki/Capital_Economics	3 KB (251 words) - 11:57, 19 November 2018
17	Bachelor of Economics	/wiki/Bachelor_of_Economics	3 KB (271 words) - 19:18, 6 March 2019
18	Microeconomics	/wiki/Microeconomics	32 KB (3,586 words) - 05:34, 20 May 2019
19	Gross (economics)	/wiki/Gross_(economics)	430 bytes (7 words) - 15:39, 26 February 2019
20	Health economics	/wiki/Health_economics	20 KB (2,419 words) - 21:31, 14 April 2019
21	Managerial economics	/wiki/Managerial_economics	9 KB (800 words) - 09:08, 4 May 2019
22	Positive economics	/wiki/Positive_economics	8 KB (838 words) - 16:17, 19 May 2019
23	Home economics	/wiki/Home_economics	30 KB (3,551 words) - 21:18, 13 May 2019
24	Managerial economics	/wiki/Managerial_economics	9 KB (800 words) - 09:08, 4 May 2019
25	Institutional economics	/wiki/Institutional_economics	28 KB (3,087 words) - 09:00, 17 May 2019
26	Trickle-down economics	/wiki/Trickle-down_economics	18 KB (2,034 words) - 10:51, 20 May 2019

Mas “péra aí” ... isso não é ilegal?



Podemos dizer que Web Scraping não é ilegal por si só, mas deve-se ser ético ao fazê-lo. Se bem feito, o Web Scraping pode nos ajudar a fazer o melhor uso da web, cujo maior exemplo é o Google Search Engine

Entendendo HTML Semântico + Acessibilidade

`<main>`, `<header>`, `<footer>`

// Sem Divs (só no momento certo)

Entendendo HTML Semântico + Acessibilidade

`<nav>`, `<section>`, `<aside>`

// Nav = Navigator... faz sentido!

Entendendo HTML Semântico + Acessibilidade

`<article>`, `<blockquote>`, `<q>`

// `<q>` = Quê?

Entendendo HTML Semântico + Acessibilidade

<figure>, <figcaption>,
<picture>

// Tudo foto (ooooou será que não?)

Entendendo HTML Semântico + Acessibilidade

Resenha: O que é SEO?

// Bora para o bate papo

SEO

Search Engine Optimization (Otimização para Mecanismos de Buscas)

Conjunto de técnicas voltadas para otimizar o posicionamento do site em mecanismos de buscas.

<https://www.kabum.com.br/computadores/pc-gamer>

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<https://www.shopinfo.com.br/computadores-gamer>

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Acesse o site e compre PCs completos, montados e baratos.

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<https://www.pichau.com.br/pichau-gamer>

Comprar PC Gamer, Mais Completos Computadores ...

Computadores Gamer Melhores e mais Completos e Baratos, Compre **PC Gamer**

Personalizados com menor Preço, Você só encontra aqui na Pichau Até 10x Sem Juros.

[Computador Pichau Gamer...](#) · [Computador Mancer Gamer...](#)



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★★★★★ Avaliação: 5 · 1.955 comentários · R\$ 1.940,41 a R\$ 12.317,71



As pessoas também perguntam

Quanto custa um PC Gamer forte?

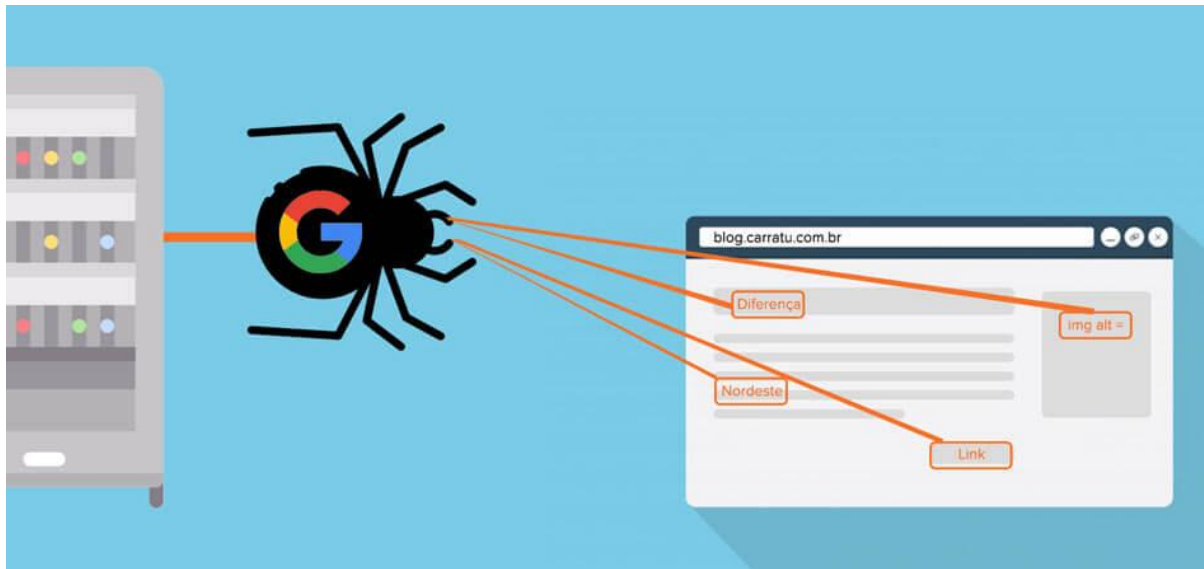


Qual PC Gamer comprar em 2022?

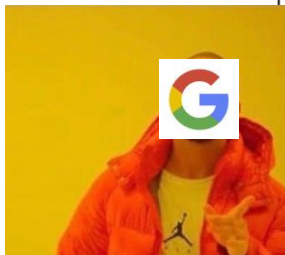
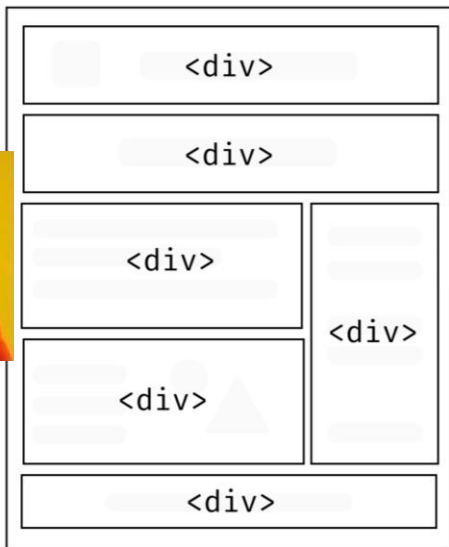


GoogleBot

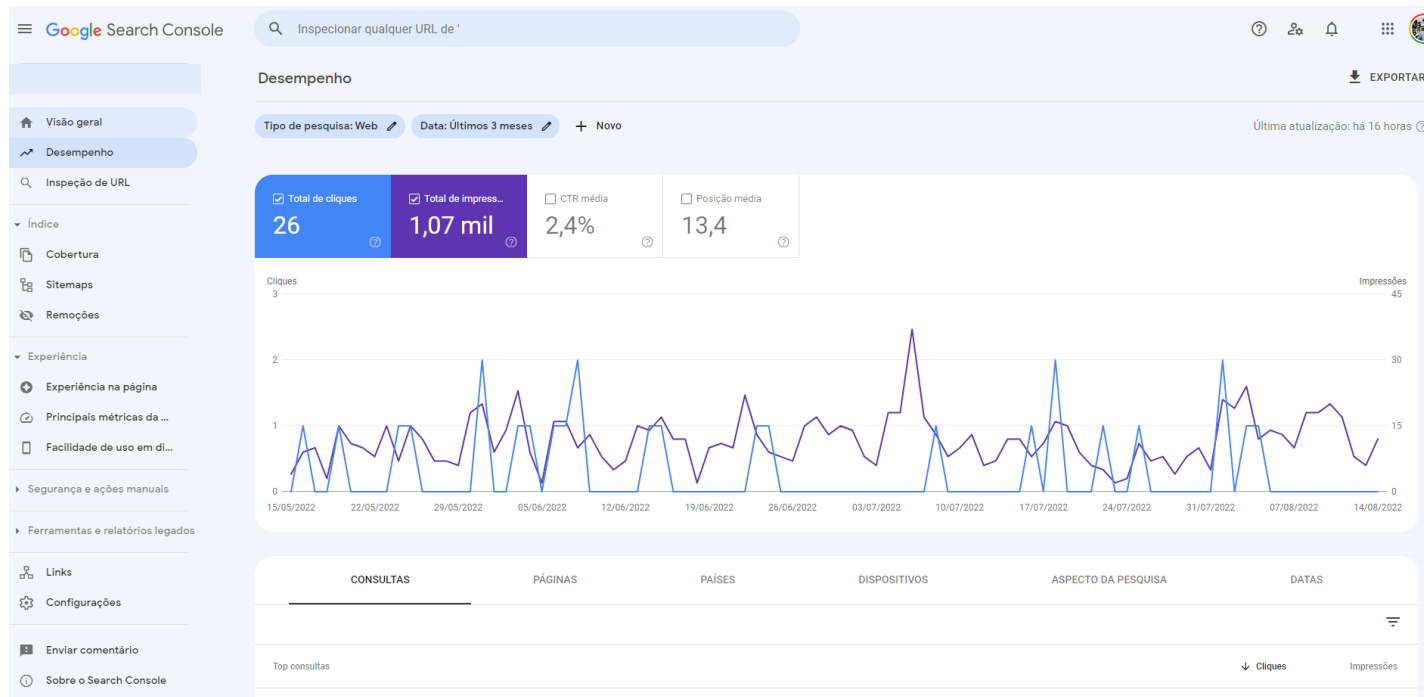
Através de uma página, o robô segue os links, vai visitando, e vai indexando...



Lógico que lembro...



Google Search Console



Google Ads

É o principal serviço de publicidade da Google e principal fonte de receita desta empresa.



Dicas

Dicas para otimizar seu HTML para ele aparecer melhor nas buscas.

Adicione títulos que condizem com o conteúdo da sua página

<https://www.kabum.com.br> > computadores > pc-gamer ▼

PC Gamer com 15% OFF no PIX | KaBuM!

PC Gamer/ Computador Gamer. Com jogos cada vez mais avançados e realistas, um **PC Gamer** é o equipamento ideal para te ajudar a vencer várias batalhas, ...

[PC Gamer Concórdia...](#) - [PC Gamer Concórdia AMD...](#) - [PC Gamer Concórdia i7...](#)



`<title>` PC Gamer com 15% OFF no PIX | Kabum! `</title>`

Dicas

Dicas para otimizar seu HTML para ele aparecer melhor nas buscas.

Adicione descrições objetivas e condizentes

<https://www.kabum.com.br> > computadores > pc-gamer ▼

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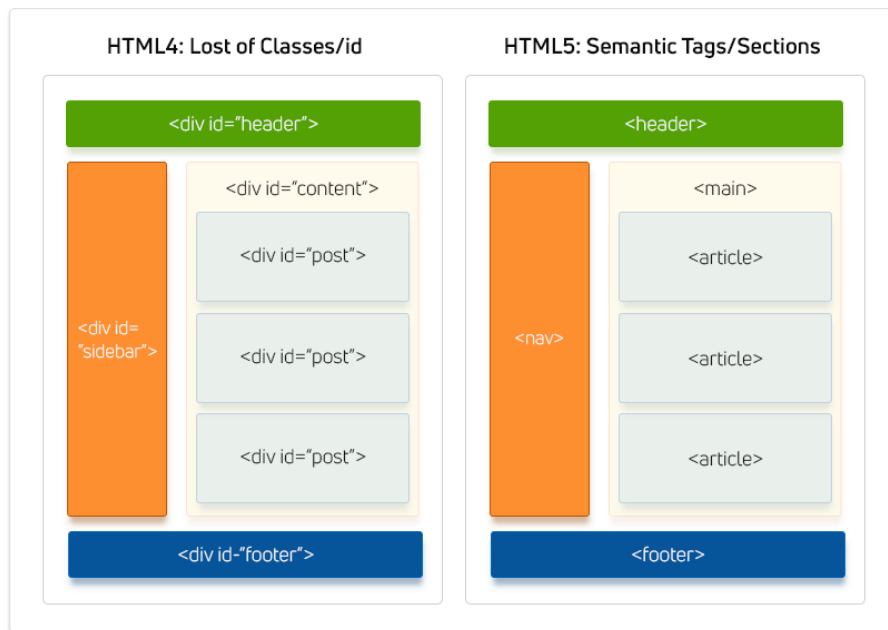


```
<meta name="description" content="PC Gamer com 15% OFF no PIX | Kabum!" />
```

Dicas

Dicas para otimizar seu HTML para ele aparecer melhor nas buscas.

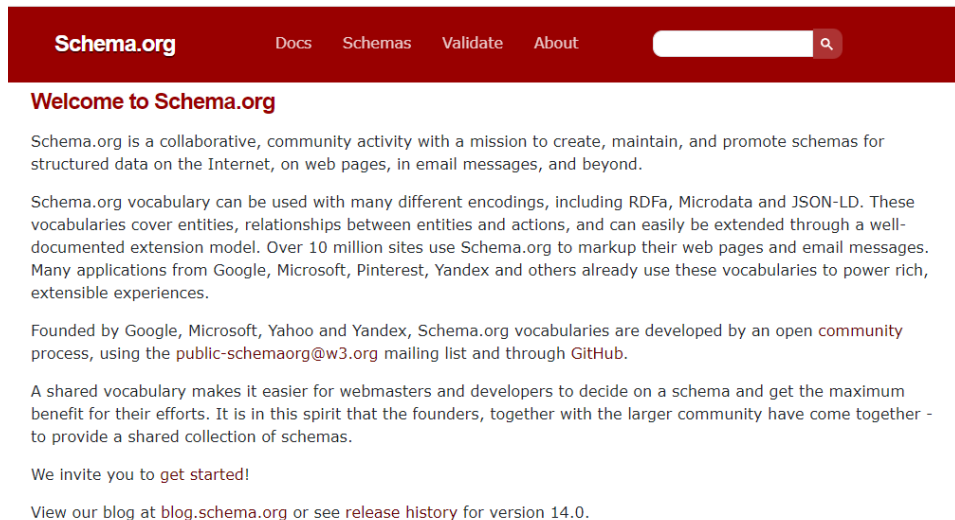
Ótima semântica no HTML



Dicas

Dicas para otimizar seu HTML para ele aparecer melhor nas buscas.

Schema.org



The screenshot shows the Schema.org homepage. At the top is a dark red navigation bar with the 'Schema.org' logo on the left and links for 'Docs', 'Schemas', 'Validate', and 'About' on the right. A search bar is also present in the navigation bar. Below the navigation bar, the heading 'Welcome to Schema.org' is followed by a paragraph explaining that Schema.org is a collaborative community activity for structured data. Another paragraph describes the Schema.org vocabulary and its use by various applications. A third paragraph mentions the founders (Google, Microsoft, Yahoo, and Yandex) and the open community process. A fourth paragraph encourages webmasters and developers to use the shared vocabulary. The page concludes with an invitation to get started and a link to the blog.

Schema.org Docs Schemas Validate About

Welcome to Schema.org

Schema.org is a collaborative, community activity with a mission to create, maintain, and promote schemas for structured data on the Internet, on web pages, in email messages, and beyond.

Schema.org vocabulary can be used with many different encodings, including RDFa, Microdata and JSON-LD. These vocabularies cover entities, relationships between entities and actions, and can easily be extended through a well-documented extension model. Over 10 million sites use Schema.org to markup their web pages and email messages. Many applications from Google, Microsoft, Pinterest, Yandex and others already use these vocabularies to power rich, extensible experiences.

Founded by Google, Microsoft, Yahoo and Yandex, Schema.org vocabularies are developed by an open community process, using the public-schemaorg@w3.org mailing list and through [GitHub](#).

A shared vocabulary makes it easier for webmasters and developers to decide on a schema and get the maximum benefit for their efforts. It is in this spirit that the founders, together with the larger community have come together - to provide a shared collection of schemas.

We invite you to [get started](#)!

View our blog at blog.schema.org or see [release history](#) for version 14.0.

Dicas

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Schema.org

```
<div itemscope itemtype="https://schema.org/SportsTeam">  
  <span itemprop="name">San Francisco 49ers</span>  
  <div itemprop="member" itemscope itemtype="https://schema.org/OrganizationRole">  
    <div itemprop="member" itemscope itemtype="https://schema.org/Person">  
      <span itemprop="name">Joe Montana</span>  
    </div>  
    <span itemprop="startDate">1979</span>  
    <span itemprop="endDate">1992</span>  
    <span itemprop="roleName">Quarterback</span>  
  </div>  
</div>
```

SEO é um conjunto de técnicas



Obrigado!

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[linkedin.com/in/diogomainardes](https://www.linkedin.com/in/diogomainardes)

[twitch.tv/dimmbrr](https://www.twitch.tv/dimmbrr)