

# 04 - Navegação e atributos

# Roteiro

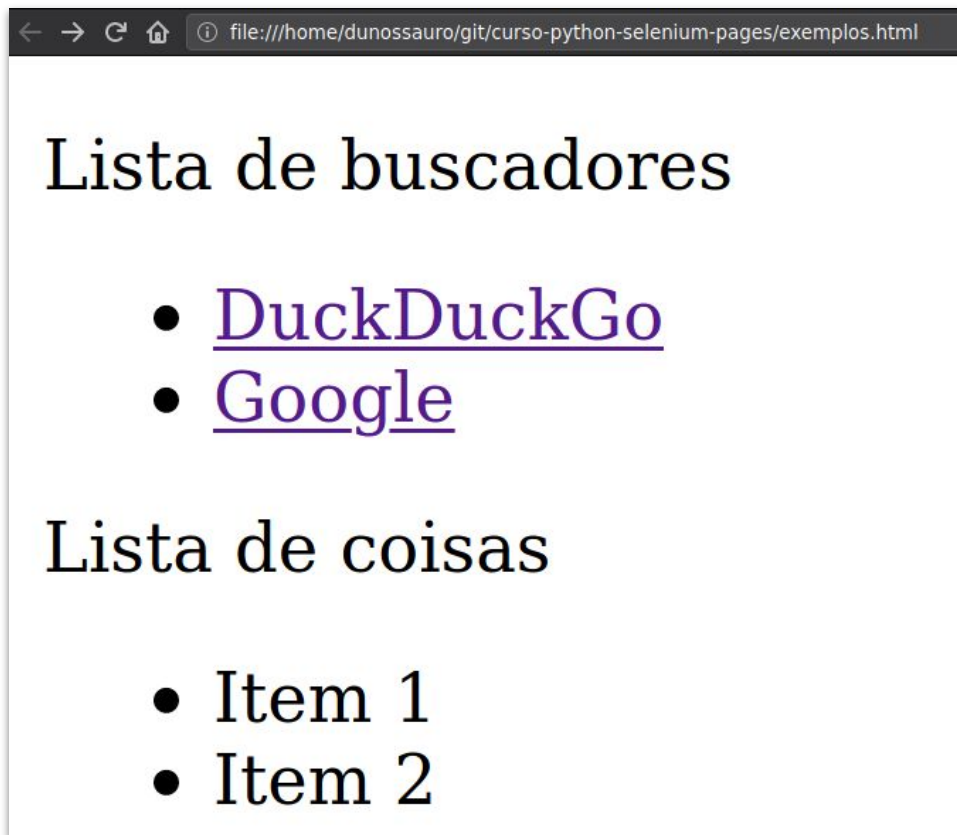
- Busca aninhada
- Atributos
- Navegação



# Busca aninhada



# Busca aninhada



# Busca aninhada

```
<body>
  <p>Lista de buscadores</p>
  <ul>
    <li>
      <a href="http://ddg.gg">DuckDuckGo</a>
    </li>
    <li>
      <a href="http://google.com.br">Google</a>
    </li>
  </ul>
  <p>Lista de coisas</p>
  <ul>
    <li>Item 1</li>
    <li>Item 2</li>
  </ul>
</body>
```



# Busca aninhada

← → ↻ 🏠 ⓘ file:///home/dunossauro/git/curso-python-selenium-pages/exemplos.html

## Lista de buscadores

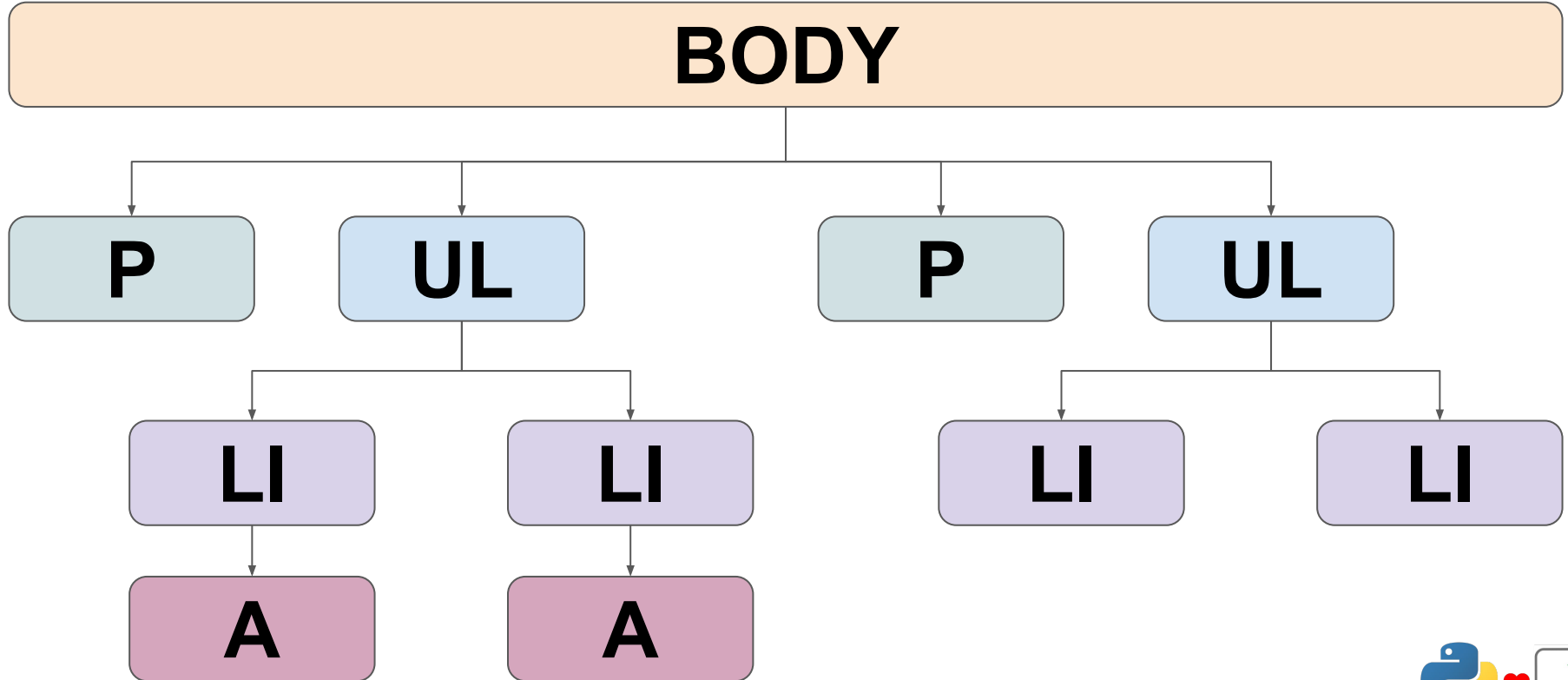
- [DuckDuckGo](#)
- [Google](#)

## Lista de coisas

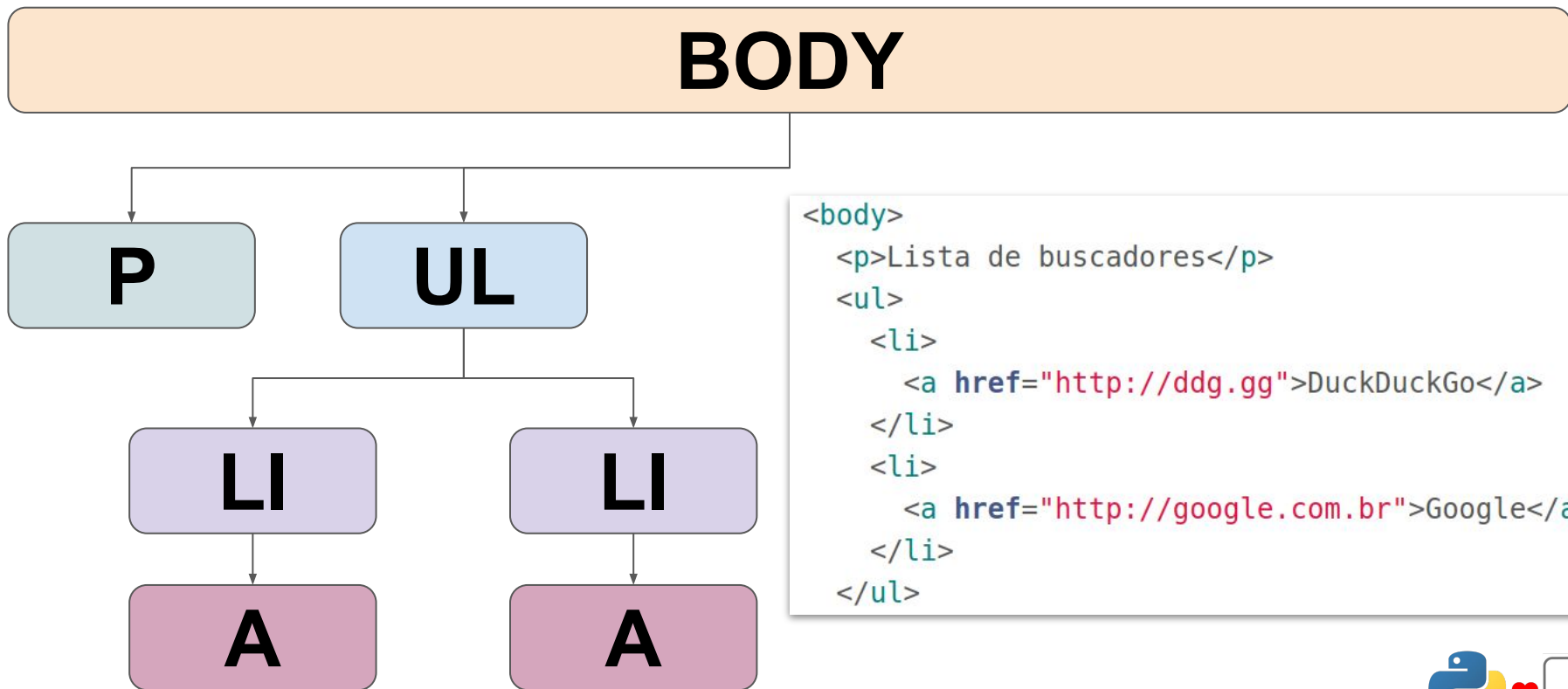
- Item 1
- Item 2

```
<body>
  <p>Lista de buscadores</p>
  <ul>
    <li>
      <a href="http://ddg.gg">DuckDuckGo</a>
    </li>
    <li>
      <a href="http://google.com.br">Google</a>
    </li>
  </ul>
  <p>Lista de coisas</p>
  <ul>
    <li>Item 1</li>
    <li>Item 2</li>
  </ul>
</body>
```

# Visitando o DOM



# Visitando o DOM



```
<body>
  <p>Lista de buscadores</p>
  <ul>
    <li>
      <a href="http://ddg.gg">DuckDuckGo</a>
    </li>
    <li>
      <a href="http://google.com.br">Google</a>
    </li>
  </ul>
```



# Visitando o DOM

**BODY**

**P**

**UL**

**LI**

**LI**

```
<p>Lista de coisas</p>
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
</ul>
</body>
```

# Maasssss, vamos tentar encontrar o LI

```
>>> browser.find_elements_by_tag_name('li')
```

```
<body>
  <p>Lista de buscadores</p>
  <ul>
    <li>
      <a href="http://ddg.gg">DuckDuckGo</a>
    </li>
    <li>
      <a href="http://google.com.br">Google</a>
    </li>
  </ul>
  <p>Lista de coisas</p>
  <ul>
    <li>Item 1</li>
    <li>Item 2</li>
  </ul>
</body>
```

# Maasssss, vamos tentar encontrar o LI

```
>>> browser.find_elements_by_tag_name('li')
```

```
[  
  webelement,  
  webelement,  
  webelement,  
  webelement,  
]
```

```
<body>  
<p>Lista de buscadores</p>  
<ul>  
  <li>  
    <a href="http://ddg.gg">DuckDuckGo</a>  
  </li>  
  <li>  
    <a href="http://google.com.br">Google</a>  
  </li>  
</ul>  
<p>Lista de coisas</p>  
<ul>  
  <li>Item 1</li>  
  <li>Item 2</li>  
</ul>  
</body>
```

# Maasssss, vamos tentar encontrar o LI

```
>>> browser.find_elements_by_tag_name('li')
```

```
[  
webelement,  
webelement,  
webelement,  
webelement,  
]
```

```
<body>  
<p>Lista de buscadores</p>  
<ul>  
  <li>  
    <a href="http://ddg.gg">DuckDuckGo</a>  
  </li>  
  <li>  
    <a href="http://google.com.br">Google</a>  
  </li>  
</ul>  
<p>Lista de coisas</p>  
<ul>  
  <li>Item 1</li>  
  <li>Item 2</li>  
</ul>  
</body>
```

# Vamos Codar isso

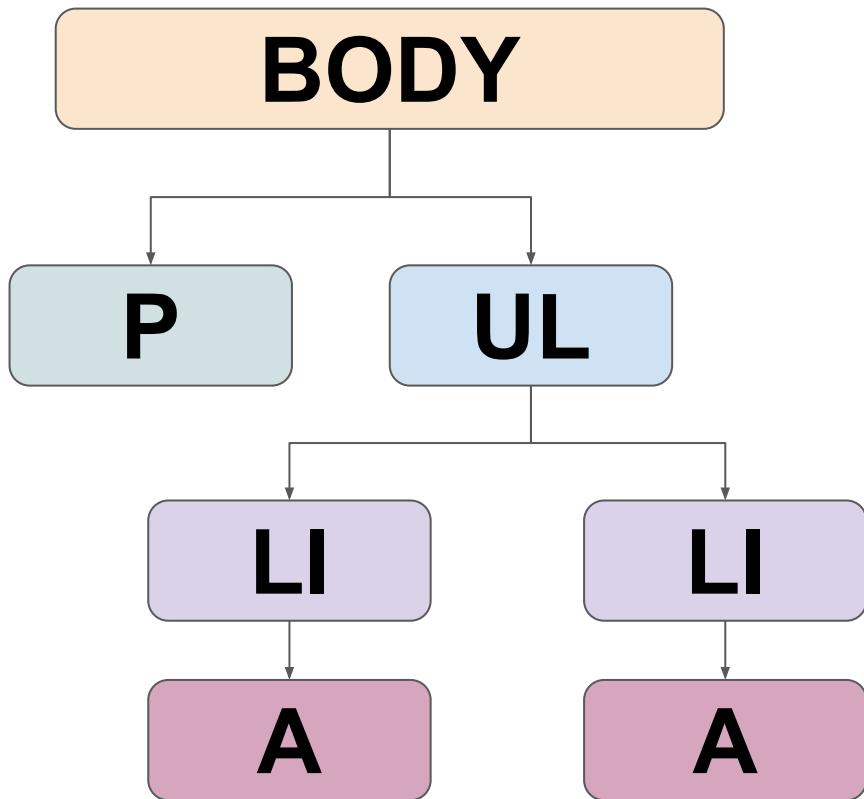
[https://selenium.dunossauro.live/aula\\_04\\_a.html](https://selenium.dunossauro.live/aula_04_a.html)



# Atributos

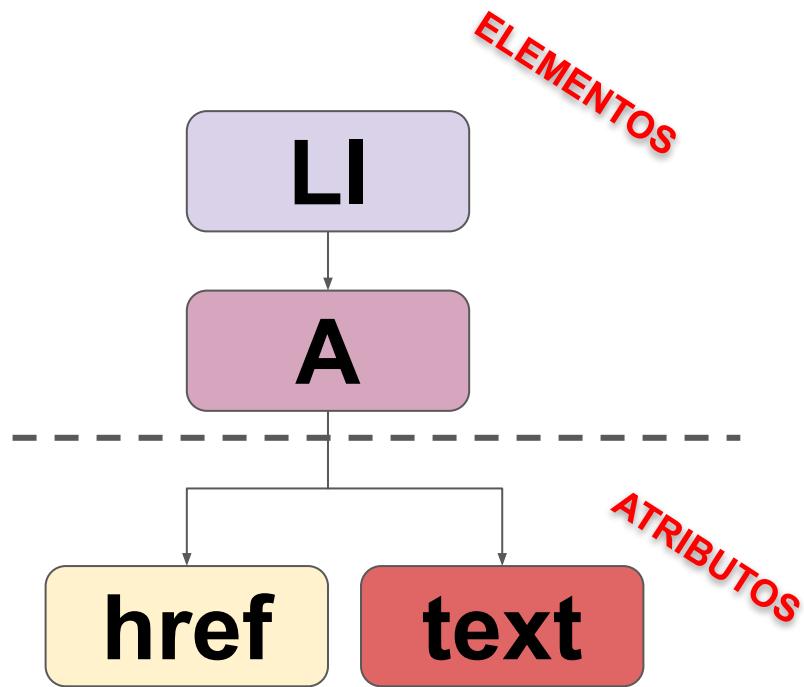


# Visitando o DOM



```
<body>
  <p>Lista de buscadores</p>
  <ul>
    <li>
      <a href="http://ddg.gg">DuckDuckGo</a>
    </li>
    <li>
      <a href="http://google.com.br">Google</a>
    </li>
  </ul>
```

# Visitando o DOM



```
<body>
  <p>Lista de buscadores</p>
  <ul>
    <li>
      <a href="http://ddg.gg">DuckDuckGo</a>
    </li>
    <li>
      <a href="http://google.com.br">Google</a>
    </li>
  </ul>
```



# Visitando o DOM

```
>>> browser.find_elements_by_tag_name('a')
```

```
[  
  webelement,  
  webelement,  
]
```

```
<body>  
  <p>Lista de buscadores</p>  
  <ul>  
    <li>  
      <a href="http://ddg.gg">DuckDuckGo</a>  
    </li>  
    <li>  
      <a href="http://google.com.br">Google</a>  
    </li>  
  </ul>
```

# Visitando o DOM

```
>>> browser.find_elements_by_tag_name('a')
```

```
[  
  webelement,  
  webelement,  
]
```

```
>>> elemento.get_attribute('href')
```

```
<body>  
  <p>Lista de buscadores</p>  
  <ul>  
    <li>  
      <a href="http://ddg.gg">DuckDuckGo</a>  
    </li>  
    <li>  
      <a href="http://google.com.br">Google</a>  
    </li>  
  </ul>
```



# Visitando o DOM

```
>>> browser.find_elements_by_tag_name('a')
```

```
[  
  webelement,  
  webelement,  
]
```

```
>>> elemento.text
```

```
<body>  
  <p>Lista de buscadores</p>  
  <ul>  
    <li>  
      <a href="http://ddg.gg">DuckDuckGo</a>  
    </li>  
    <li>  
      <a href="http://google.com.br">Google</a>  
    </li>  
  </ul>
```

Diagram illustrating the DOM structure and element access:

- The HTML structure shows a list of search engines: DuckDuckGo and Google.
- The text "DuckDuckGo" is highlighted, with a label "text" pointing to it.
- Red arrows indicate the mapping from the Python code to the DOM elements:
  - From the first `webelement` in the list to the `href` attribute of the first `<a>` tag.
  - From the second `webelement` in the list to the `href` attribute of the second `<a>` tag.

# Atributos

ELEMENTOS

LI

A

```
>>> browser.find_element_by_tag_name('li')
```

```
>>> browser.find_element_by_tag_name('a')
```

ATRIBUTOS

href

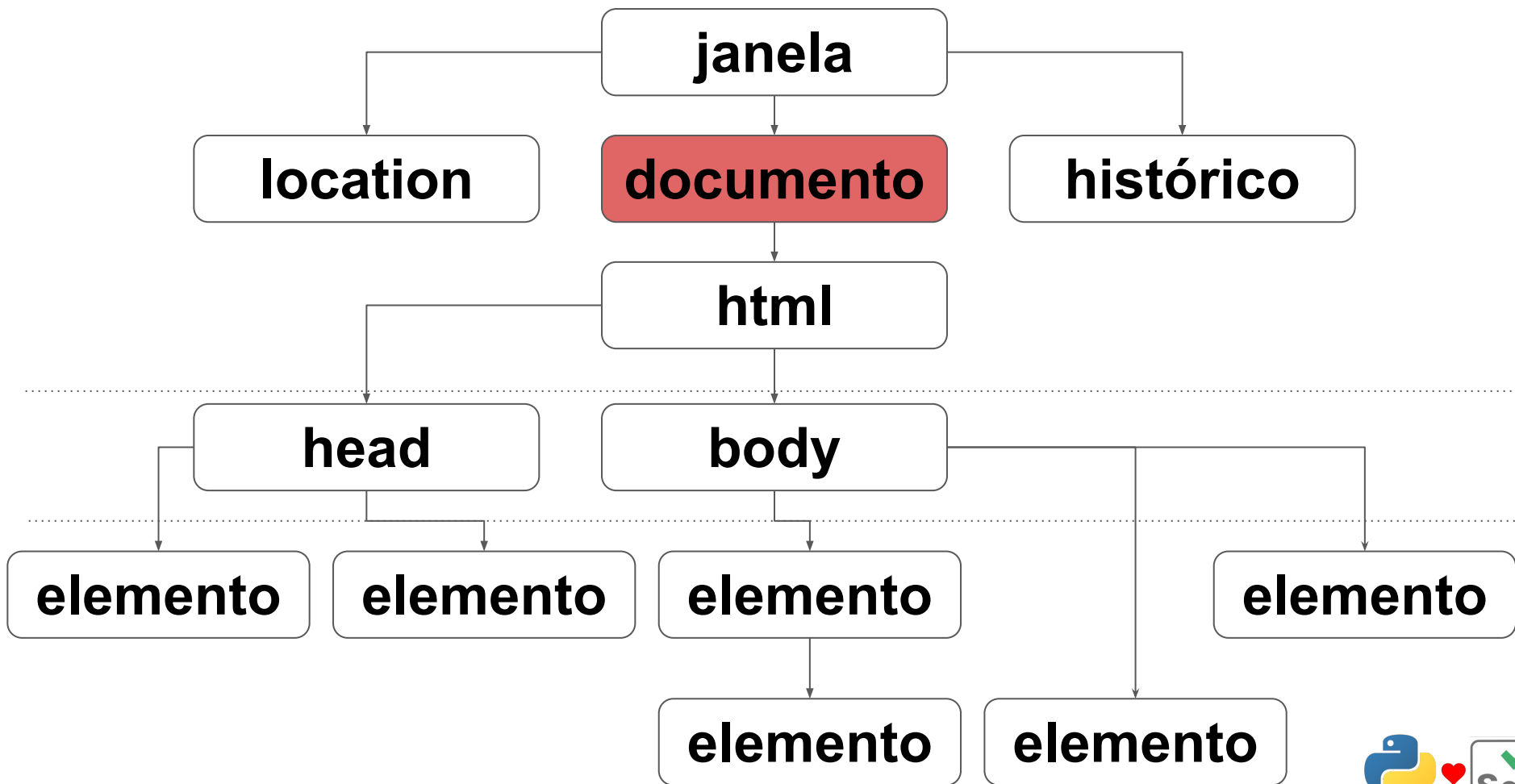
text

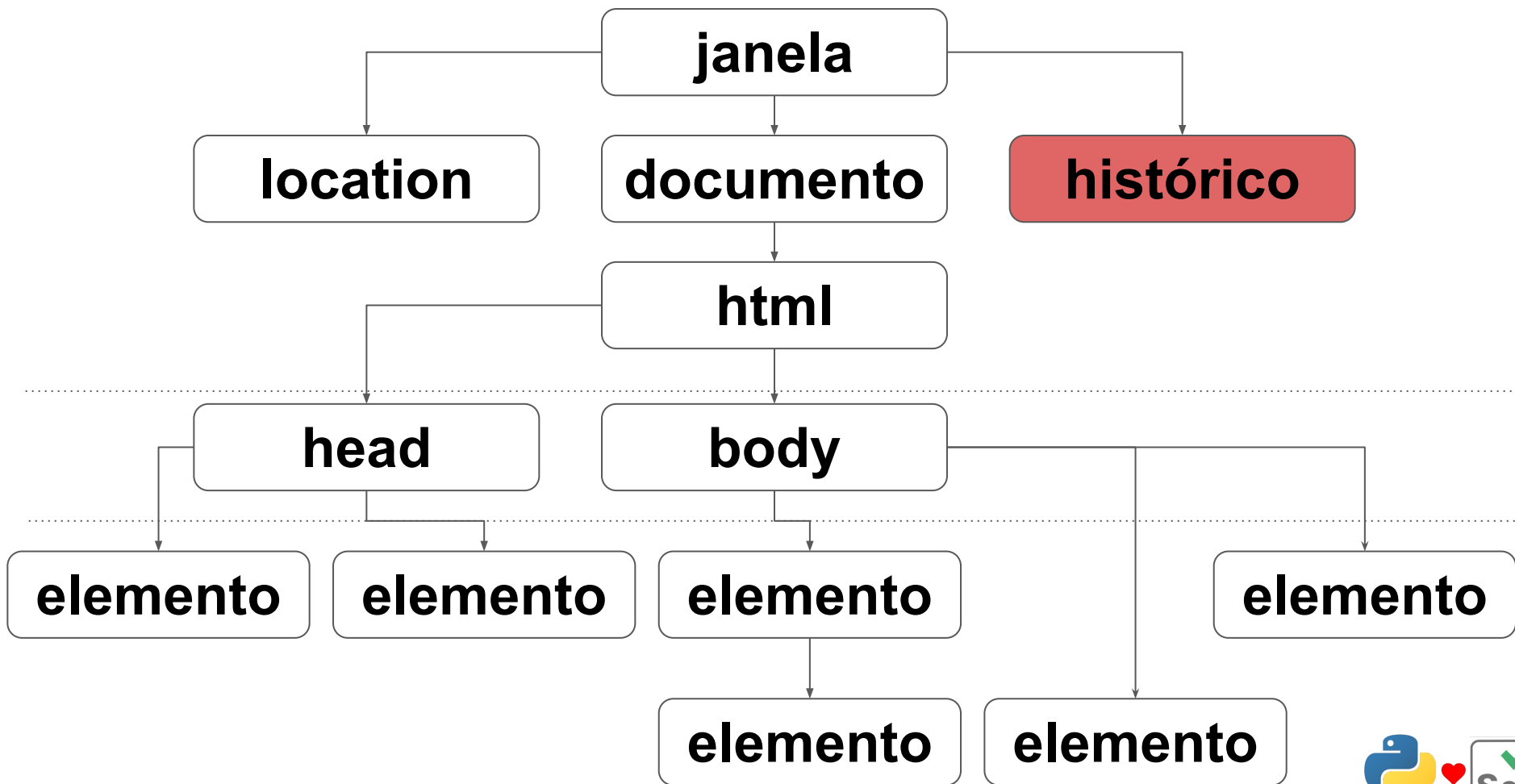
```
>>> elemento.text
```

```
>>> elemento.get_attribute('href')
```

# Navegação







# Navegação

```
browser.get('http://ddg.gg')
```





# Navegação

```
browser.get('http://ddg.gg')
```

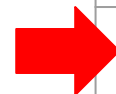


Histórico	
pos	url
0	http://ddg.gg

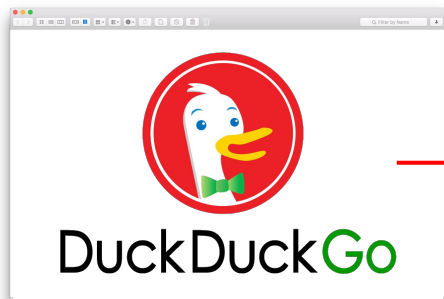
# Navegação

```
browser.get('http://ddg.gg')  
browser.get('http://redit.com')
```

Histórico	
pos	url
1	http://ddg.gg
0	http://redit.com



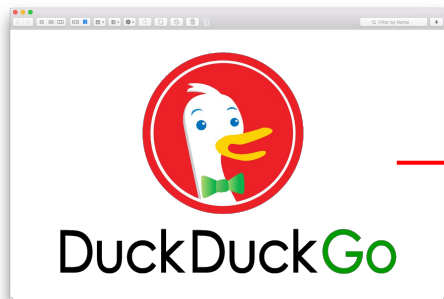
# Navegação



Histórico	
pos	url
2	http://ddg.gg
1	http://redit.com
0	https://www.fsf.org/

```
>>> browser.get('http://fsf.org')
```

# Navegação

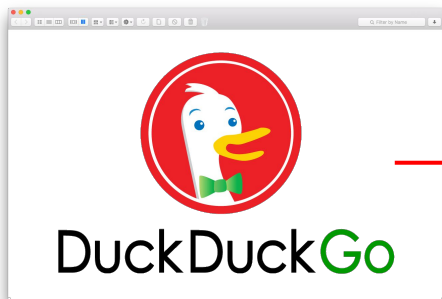


Histórico	
pos	url
2	http://ddg.gg
1	http://redit.com
0	https://www.fsf.org/

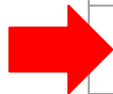


```
>>> browser.get('http://fsf.org')  
>>> browser.back()
```

# Navegação



Histórico	
pos	url
2	http://ddg.gg
1	http://redit.com
0	https://www.fsf.org/

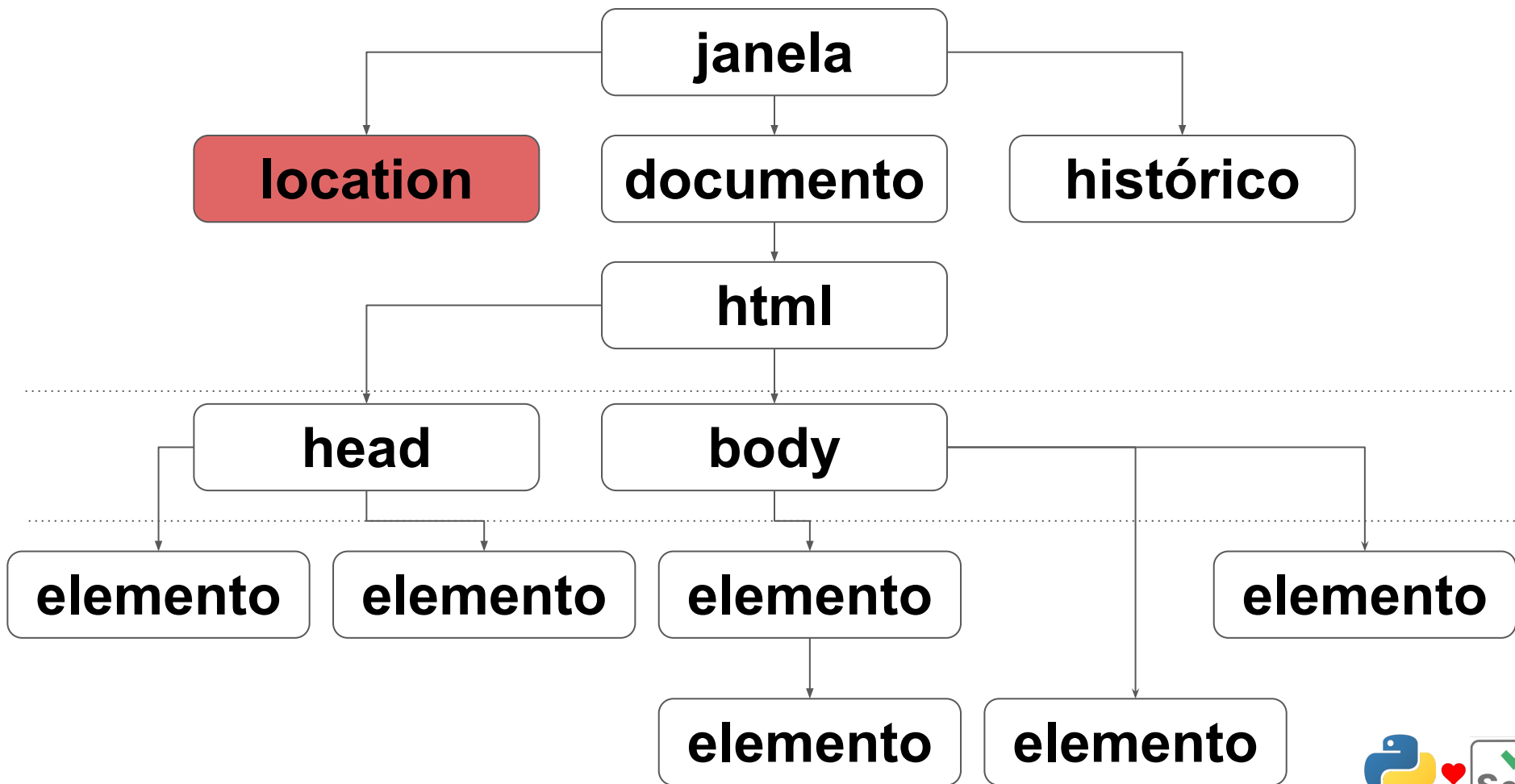


```
>>> browser.get('http://fsf.org')  
>>> browser.back()  
>>> browser.forward()
```

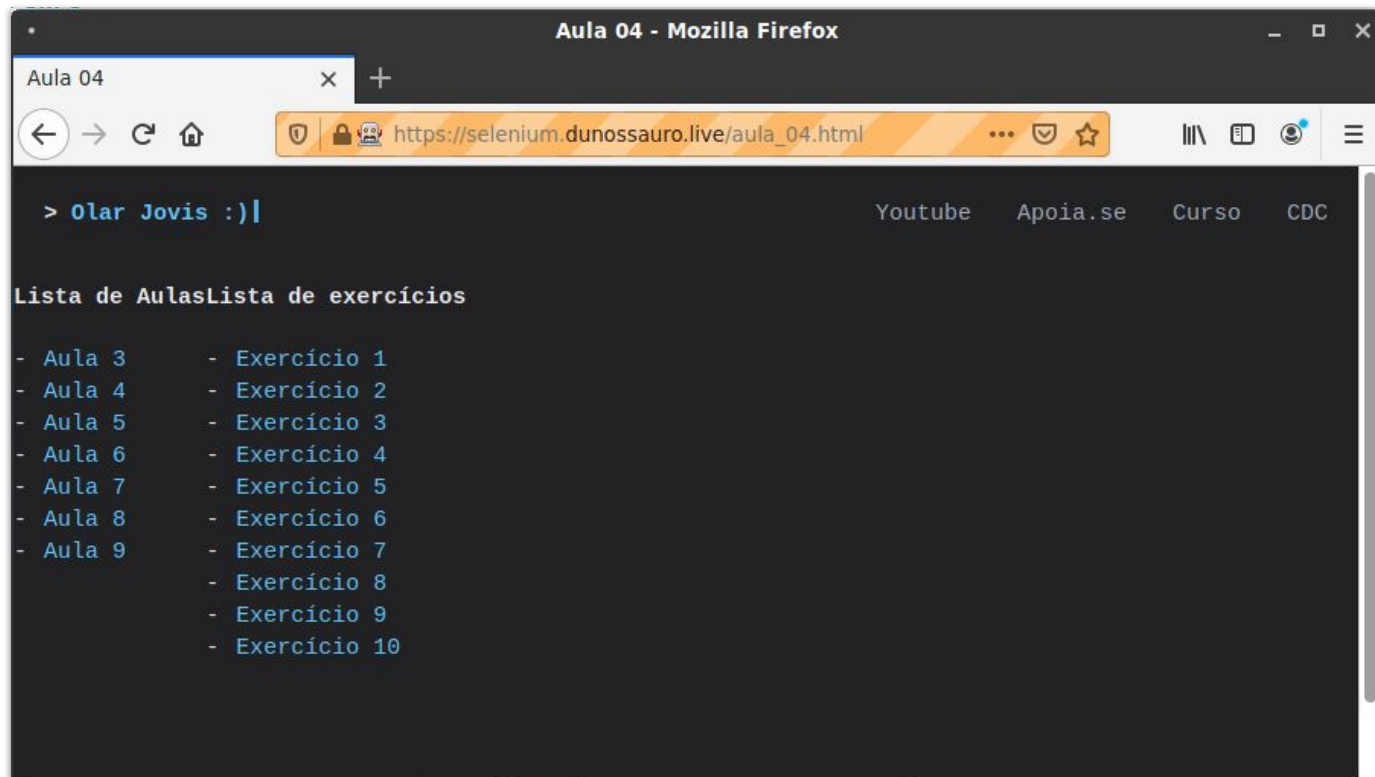
# Vamos brincar com caixinhas

[https://selenium.dunossauro.live/aula\\_04\\_b.html](https://selenium.dunossauro.live/aula_04_b.html)



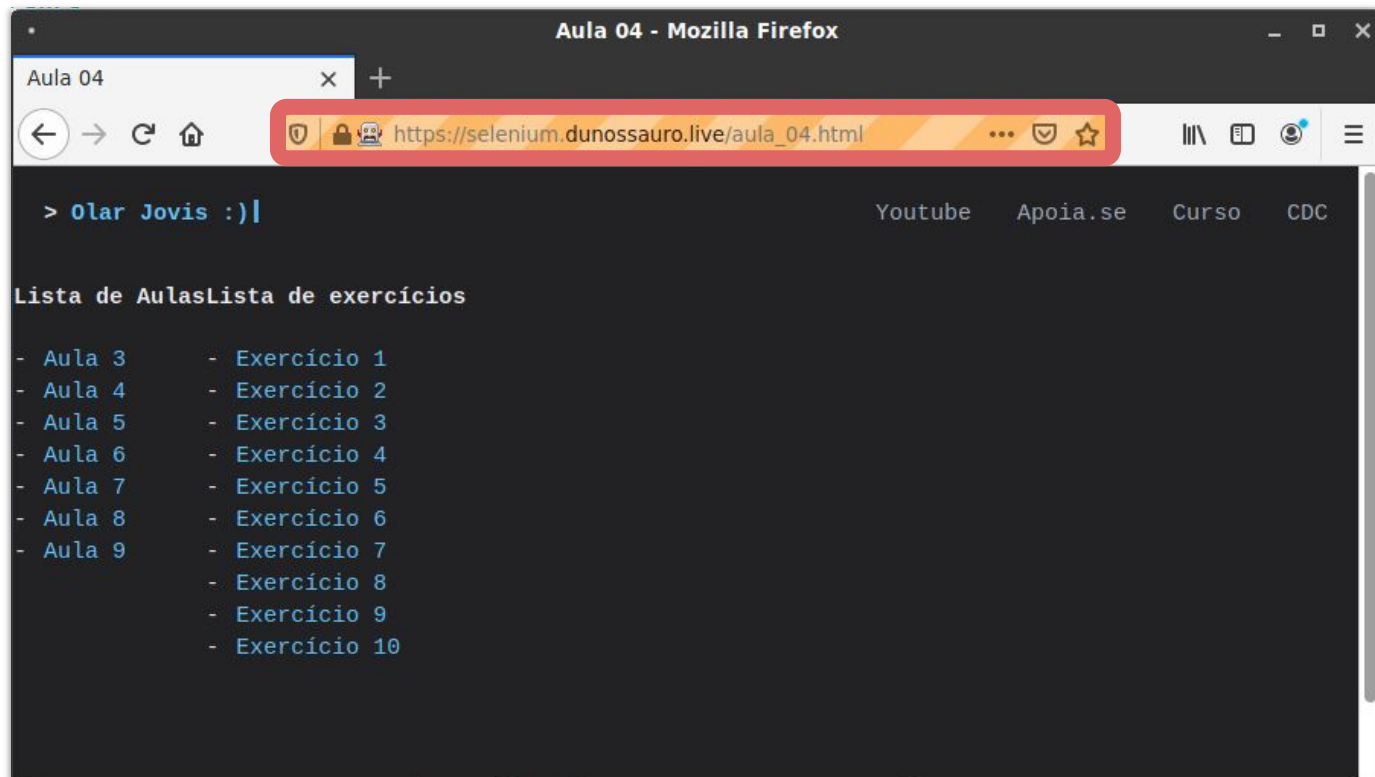


# Navegação



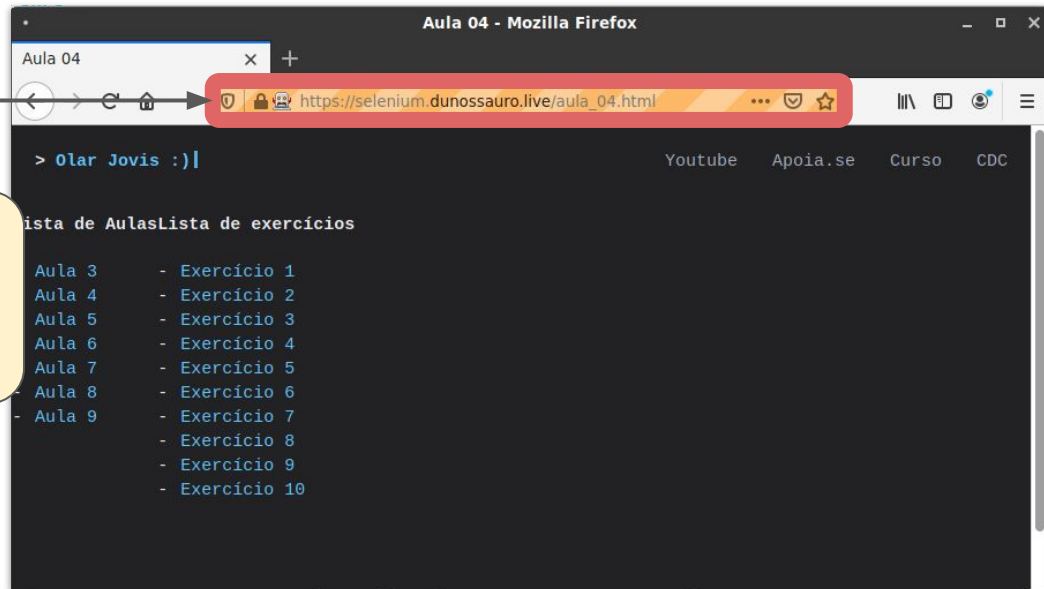


# Navegação



# Navegação

>>> browser.current\_url



# Entendendo uma URL

`http://selenium.dunossauro.live/aula_04.html`



# Entendendo uma URL

`http://selenium.dunossauro.live/aula_04.html`

`http://`

schema

# Entendendo uma URL

`http://selenium.dunossauro.live/aula_04.html`

`http://`

schema

Existem várias alternativas

`https://`

`file://`

`ftp://`

...

# Entendendo uma URL

`http://selenium.dunossauro.live/aula_04.html`

`http://`

schema

`selenium.dunossauro.live`

netloc

# Entendendo uma URL

`http://selenium.dunossauro.live/aula_04.html`

`http://`

schema

`selenium.dunossauro.live`

netloc

`aula_04.html`

path

# URLlib



# Entendendo uma URL

`http://selenium.dunossauro.live/aula_04.html`

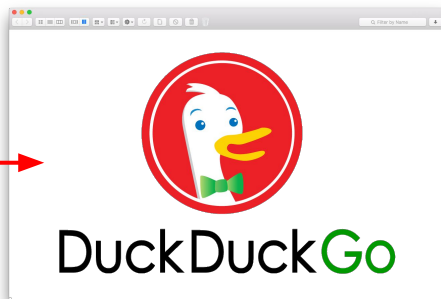
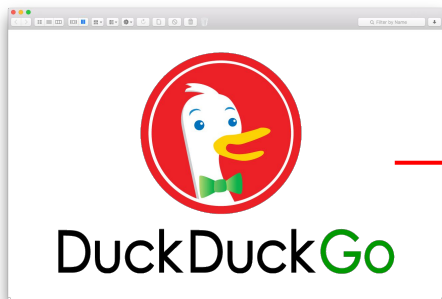
```
>>> from urllib.parse import urlparse  
>>> urlparse(browser.current_url)
```

```
ParseResult(  
    scheme='http',  
    netloc='selenium.dunossauro.live',  
    path='/aula_04.html',  
    params="",  
    query="",  
    fragment=""  
)
```

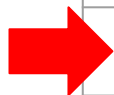
# Voltando ao selenium



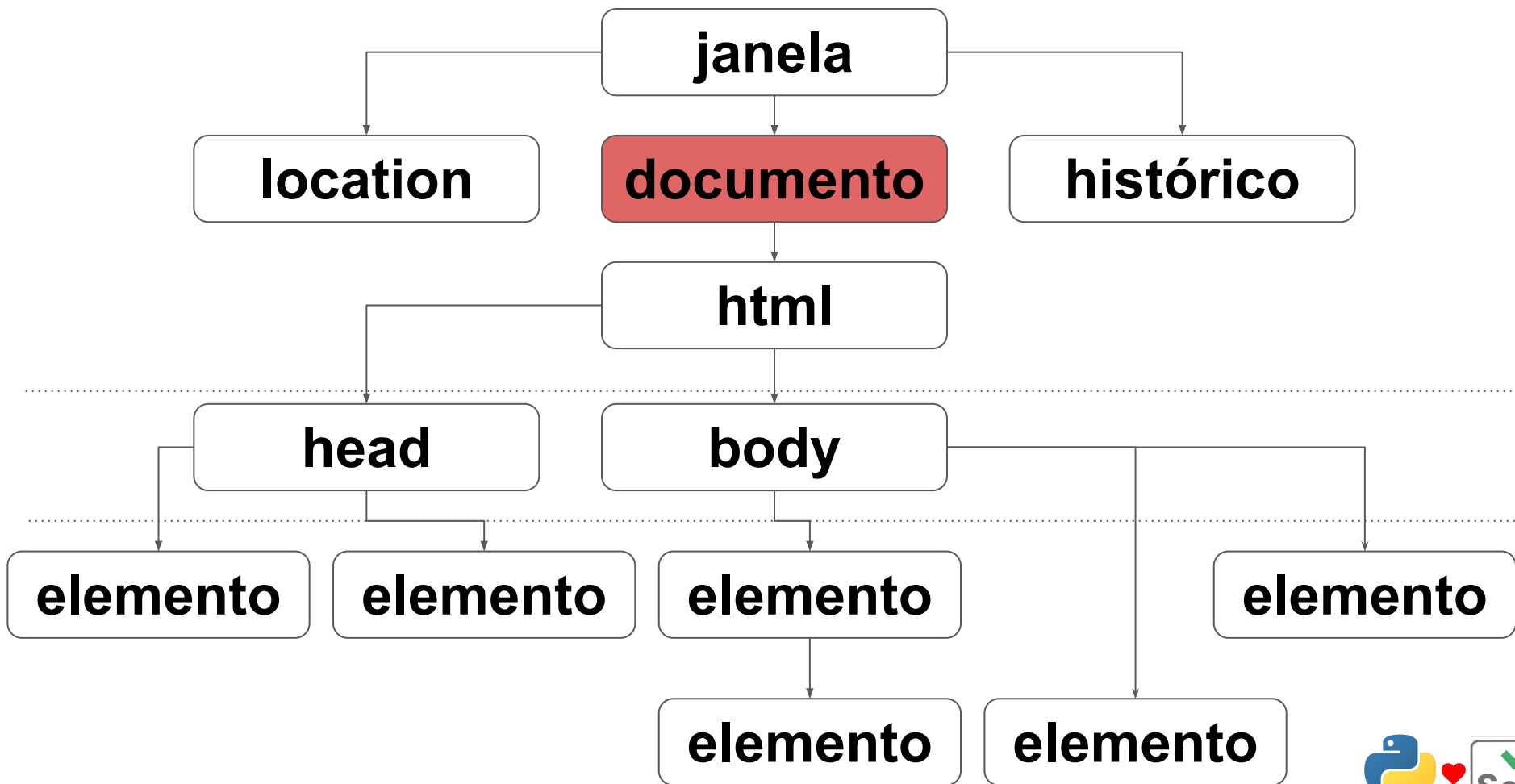
# Navegação



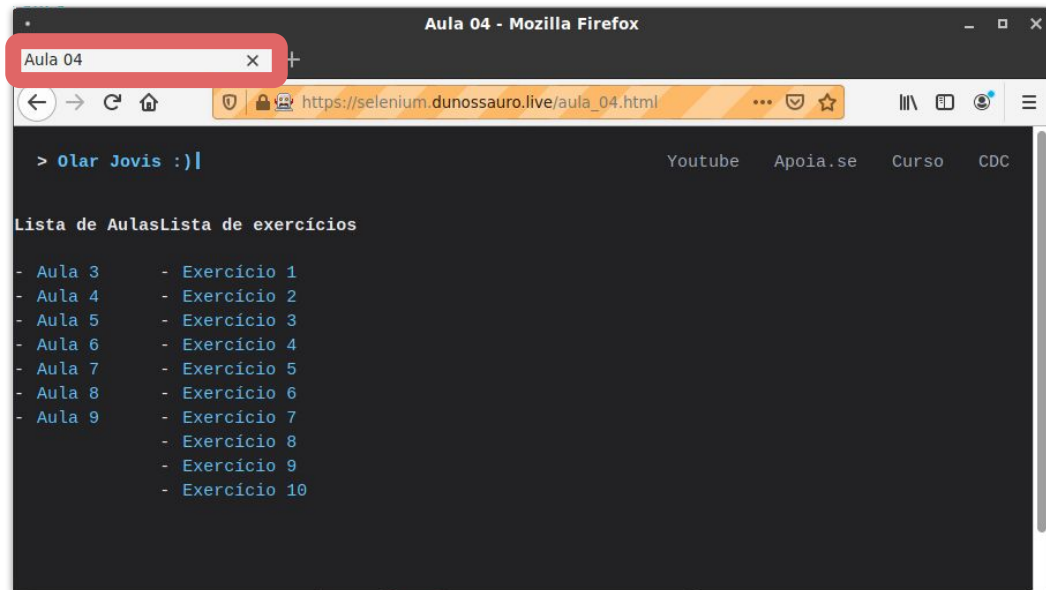
Histórico	
pos	url
1	http://ddg.gg
0	http://ddg.gg



```
>>> browser.refresh()
```

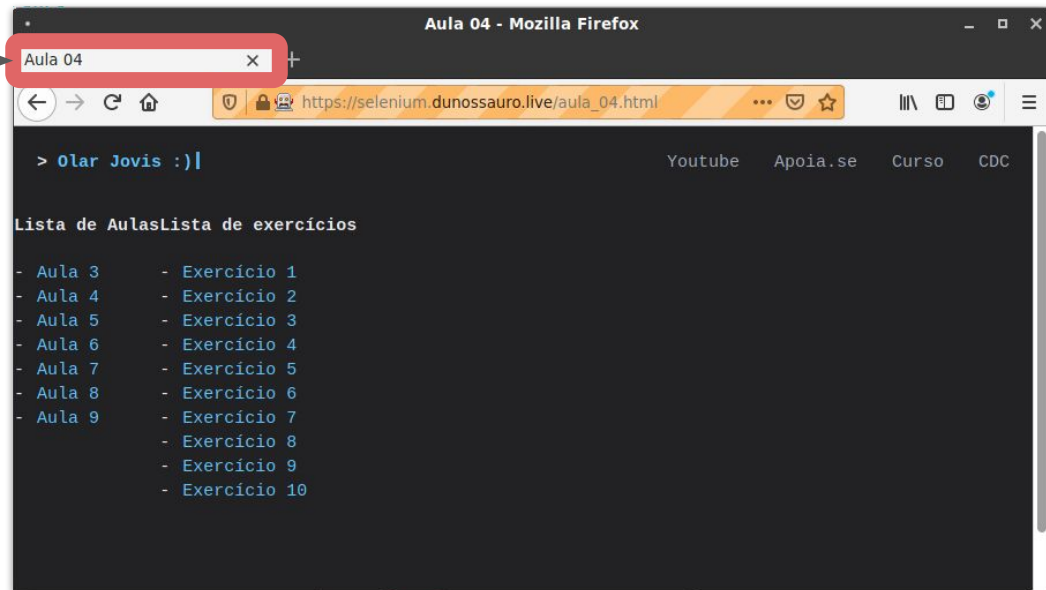


# Em busca do título



# Em busca do título

>>> browser.title



# Bora ver isso funcionando

[https://selenium.dunossauro.live/aula\\_04.html](https://selenium.dunossauro.live/aula_04.html)



# Exercício

[https://selenium.dunossauro.live/exercicio\\_03.html](https://selenium.dunossauro.live/exercicio_03.html)

