2021/04/26 - AULA 09.2

Laboratório de Sistemas Computacionais Complexos

https://uclab.xyz/sistemas-complexos-2021-aula09-2

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Em caso de dúvidas

Acessem www.slido.com com #complexos

ou

Agenda

Tema da aula:
JavaScript (no Browser)

1. A árvore DOM
2. Buscando no documento
3. Eventos no navegador

sugestão de consulta: https://javascript.info em particular “Part 2”

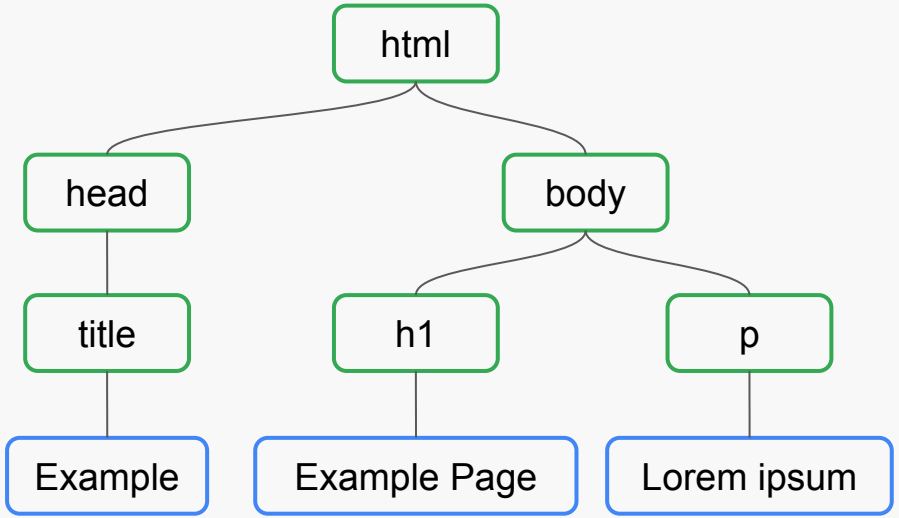
A árvore DOM

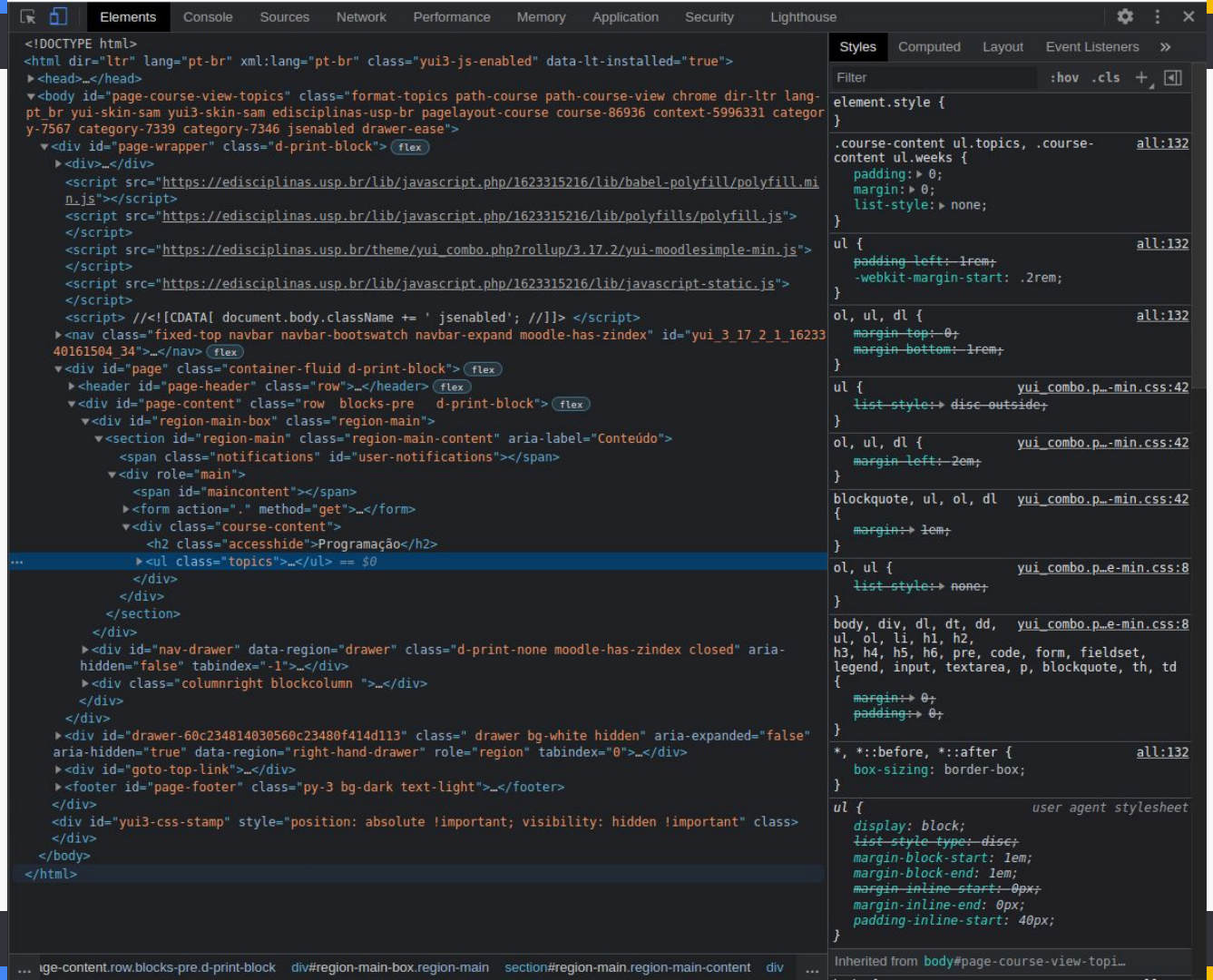
A árvore DOM

O que é DOM?

DOM significa *Document Object Model*, é uma árvore resultante da interpretação do HTML feita pelo navegador

```html
<html>
  <head>
    <title>Example</title>
  </head>
  <body>
    <h1>Example Page</h1>
    <p>Lorem ipsum</p>
  </body>
</html>
```




Elements
Console
Sources
Network
Performance
Memory
Application
Security
Lighthouse
<!DOCTYPE html>
<html dir="ltr" lang="pt-br" xml:lang="pt-br" class="yui3-js-enabled" data-lt-installed="true">
<head>…</head>
<body id="page-course-view-topics" class="format-topics path-course path-course-view chrome dir-ltr lang-pt_br yui-skin-sam yui3-skin-sam edisciplinas-usp-br pagelayout-course course-86936 context-5996331 category-7567 category-7339 category-7346 jsenabled drawer-ease">

…
<script src="https://edisciplinas.usp.br/lib/javascript.php/1623315216/lib/babel-polyfill/polyfill.min.js"></script>
<script src="https://edisciplinas.usp.br/lib/javascript.php/1623315216/lib/polyfills/polyfill.js"></script>
<script src="https://edisciplinas.usp.br/theme/yui_combo.php?rollup/3.17.2/yui-moodlesimple-min.js"></script>
<script src="https://edisciplinas.usp.br/lib/javascript.php/1623315216/lib/javascript-static.js"></script>
<script> //<![CDATA[document.body.className += ' jsenabled'; //]]> </script>
<nav class="fixed-top navbar navbar-bootswatch navbar-expand moodle-has-zindex" id="yui_3_17_2_1_1623340161504_34">…</nav>

<header id="page-header" class="row">…</header>

<section id="region-main" class="region-main-content" aria-label="Conteúdo">

<form action="." method="get">…</form>

<h2 class="accesshide">Programação</h2>
<ul class="topics">…</ul> == $0

</section>

…
…

…
…
<footer id="page-footer" class="py-3 bg-dark text-light">…</footer>

<div id="yui3-css-stamp" style="position: absolute !important; visibility: hidden !important" class>

</body>
</html>
… ige-content.row.blocks-pre.d-print-block
div#region-main-box.region-main
section#region-main.region-main-content
div …
Styles
Computed
Layout
Event Listeners
Filter
:hov .cls
element.style {
}
.course-content ul.topics, .course-content ul.weeks { all:132
padding: 0;
margin: 0;
list-style: none;
}
ul { all:132
padding-left: 1rem;
-webkit-margin-start: .2rem;
}
ol, ul, dl { all:132
margin-top: 0;
margin-bottom: 1rem;
}
ul { yui_combo.p…-min.css:42
list-style: disc outside;
}
ol, ul, dl { yui_combo.p…-min.css:42
margin-left: 2em;
}
blockquote, ul, ol, dl { yui_combo.p…-min.css:42
margin: 1em;
}
ol, ul { yui_combo.p…e-min.css:8
list-style: none;
}
body, div, dl, dt, dd, ul, ol, li, h1, h2, h3, h4, h5, h6, pre, code, form, fieldset, legend, input, textarea, p, blockquote, th, td { yui_combo.p…e-min.css:8
margin: 0;
padding: 0;
}
*, *::before, *::after { all:132
box-sizing: border-box;
}
ul { user agent stylesheet
display: block;
list-style-type: disc;
margin-block-start: 1em;
margin-block-end: 1em;
margin-inline-start: 0px;
margin-inline-end: 0px;
padding-inline-start: 40px;
}
Inherited from body#page-course-view-topi…

Buscando no documento

Buscando no documento

método	parâmetro	retorno	live?	só da raiz?
`querySelector`	seletor CSS	nó	não	não
`querySelectorAll`	seletor CSS	lista de nó	não	não
`getElementById`	id	nó	não	sim
`getElementsByName`	nome	lista de nó	sim	sim
`getElementsByTagName`	tag ou *	lista de nó	sim	não
`getElementsByClassName`	classe	lista de nó	sim	não

Buscando no documento

```
document.querySelectorAll(‘.topics > li’)
```

```
> document.querySelectorAll('.topics > li')
< NodeList(38) [li#section-0.section.main.clearfix, li#section-1.section.main.clearfix, li#section-2.section.main.clearfix,
  li#section-3.section.main.clearfix, li#section-4.section.main.clearfix.current, li#section-5.section.main.clearfix, li#section-6.section.main.clearfix,
  li#section-7.section.main.clearfix, li#section-8.section.main.clearfix, li#section-9.section.main.clearfix, li#section-10.section.main.clearfix,
  li#section-11.section.main.clearfix, li#section-12.section.main.clearfix, li#section-13.section.main.clearfix, li#section-14.section.main.clearfix,
  li#section-15.section.main.clearfix, li#section-16.section.main.clearfix, li#section-17.section.main.clearfix, li#section-18.section.main.clearfix,
  li#section-19.section.main.clearfix, li#section-20.section.main.clearfix, li#section-21.section.main.clearfix, li#section-22.section.main.clearfix,
  li#section-23.section.main.clearfix, li#section-24.section.main.clearfix, li#section-25.section.main.clearfix, li#section-26.section.main.clearfix,
  li#section-27.section.main.clearfix, li#section-28.section.main.clearfix, li#section-29.section.main.clearfix, li#section-30.section.main.clearfix,
  li#section-31.section.main.clearfix, li#section-32.section.main.clearfix, li#section-33.section.main.clearfix, li#section-34.section.main.clearfix,
  li#section-35.section.main.clearfix, li#section-36.section.main.clearfix, li#section-37.section.main.clearfix]
```

Eventos no navegador

Eventos no navegador

`click`	`contextmenu`	`mouseover`	`mouseout`
`mousedown`	`mouseup`	`mousemove`	`keydown`
`keyup`	`submit`	`focus`	`DOMContentLoaded`

a lista completa de evento em https://developer.mozilla.org/pt-BR/docs/Web/Events

Eventos no navegador

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title></title>
</head>
<body>
  <h1>Example</h1>
  <div>
    <p>
      Dolor est ab architecto praesentium similique tempore voluptatem, aut optio. Aliquid deserunt minima tenetur numquam ipsam nemo, reiciendis. Unde blanditiis nulla accusamus facilis consectetur repudiandae eius Accusamus blanditiis voluptate voluptates
    </p>
  </div>

  <script>
    document.querySelector('p').onclick = (e) => {
          console.log("Click on the paragraph!");
          console.log(e);
        }
  </script>
</body>
</html>
```

```
Click on the paragraph!
▶ MouseEvent {isTrusted: true, screenX: 861, screenY: 297,
>
```

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Senha do Estudante: **ozgjuq**

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