

JavaScript

DOM *document object model*

PHP web development 2019/2020

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browser objects

browser objects

window

the browser window

document

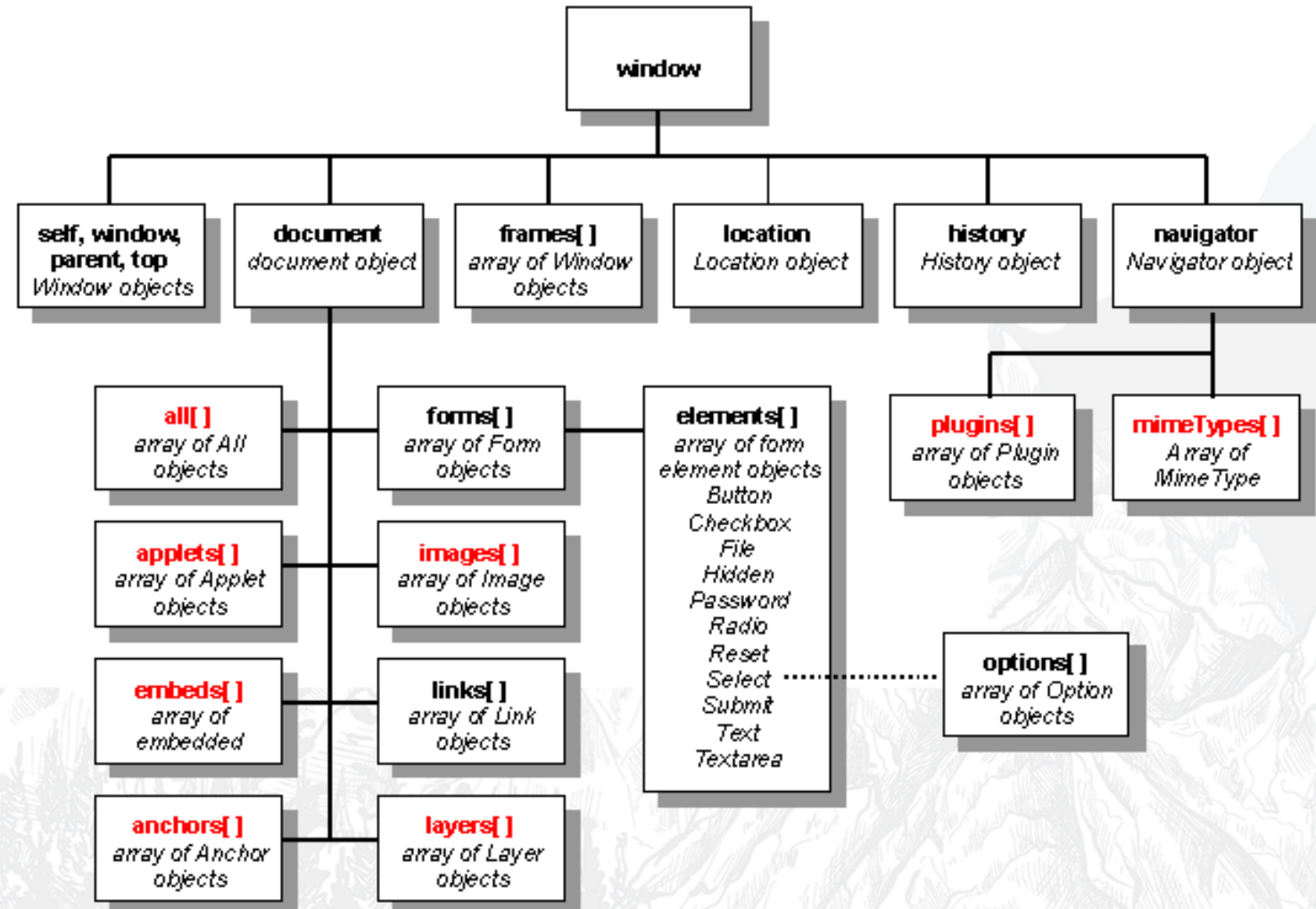
the currently open document in the browser

screen

the visual part of the browser

navigator

info about the current browser



browser objects

document object methods

```
document.links  
document.links[0].href = "yahoo.com";  
document.write("This is some <b>bold text</b>");  
document.location
```

A dark blue circle is centered on the page, containing the text "DOM" in white. The background is a light gray illustration of a mountain range with evergreen trees in the foreground.

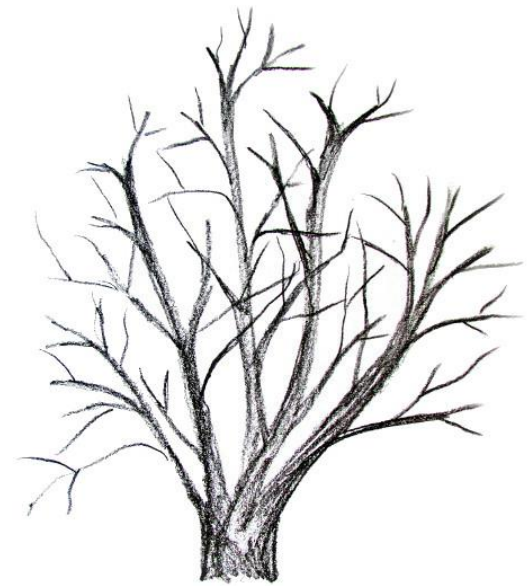
DOM

DOM

Document
Object
Model

When a web page is loaded, the browser creates a **Document Object Model** of the page.

The **HTML DOM**
model is constructed as a tree
of **Objects** -
of all the elements
in the document



The **HTML DOM** is an **Object Model** for **HTML**. It defines:

- HTML elements as **objects**
- **Properties** for all HTML elements
- **Methods** for all HTML elements
- **Events** for all HTML elements

The **HTML DOM** is an **API** (Programming Interface) for **JavaScript**:

- JavaScript can add/change/remove HTML elements
- JavaScript can add/change/remove HTML attributes
- JavaScript can add/change/remove CSS styles
- JavaScript can react to HTML events
- JavaScript can add/change/remove HTML events





Selecting DOM elements

Selecting ...

Selecting ...

HTML елементите могат да бъдат достъпни и запазени в променливи с помощта на DOM API

Selecting ...

target an html element by id or why id is to be unique

```
let email_2 = document.getElementById('email_address2');
```

```
//returns one element
```

```
let span = document.querySelector('#email_form span');
```

```
//returns the first element of that selector
```


Selecting ...

targeting a group of html elements

```
let inputs = document.getElementsByTagName('input');  
  
let email = document.getElementsByName('email_address2');  
  
let classGroup = document.getElementsByClassName('className');  
  
let formInputs = document.querySelectorAll('#email_form input');  
  
//all of that selector
```

Selecting ...

targeting with methods for a type of elements

```
let body = document.body;
```

```
let links = document.links; //all the links elements in a  
                             document
```

```
let forms = document.forms; //all the form elements
```

```
let form = document.forms[2] //third form in the forms  
                             collection
```


Selecting ...

selecting nested elements

```
<div id="wrapper">  
  <div>Divs in wrapper</div>  
  <div>Divs in wrapper</div>  
</div>
```

```
var wrapper = document.getElementById('wrapper');  
var divsInWrapper = wrapper.getElementsByTagName('div');
```


Selecting ...

selecting nested elements

```
<div id="wrapper">  
  <div>Divs in wrapper</div>  
  <div>Divs in wrapper</div>  
</div>
```

```
var divsInWrapper = wrapper.querySelectorAll('.wrapper div');
```

Selecting ...

Return a **single element**

getElementById()

querySelector('selector')

Return a **collection of elements**

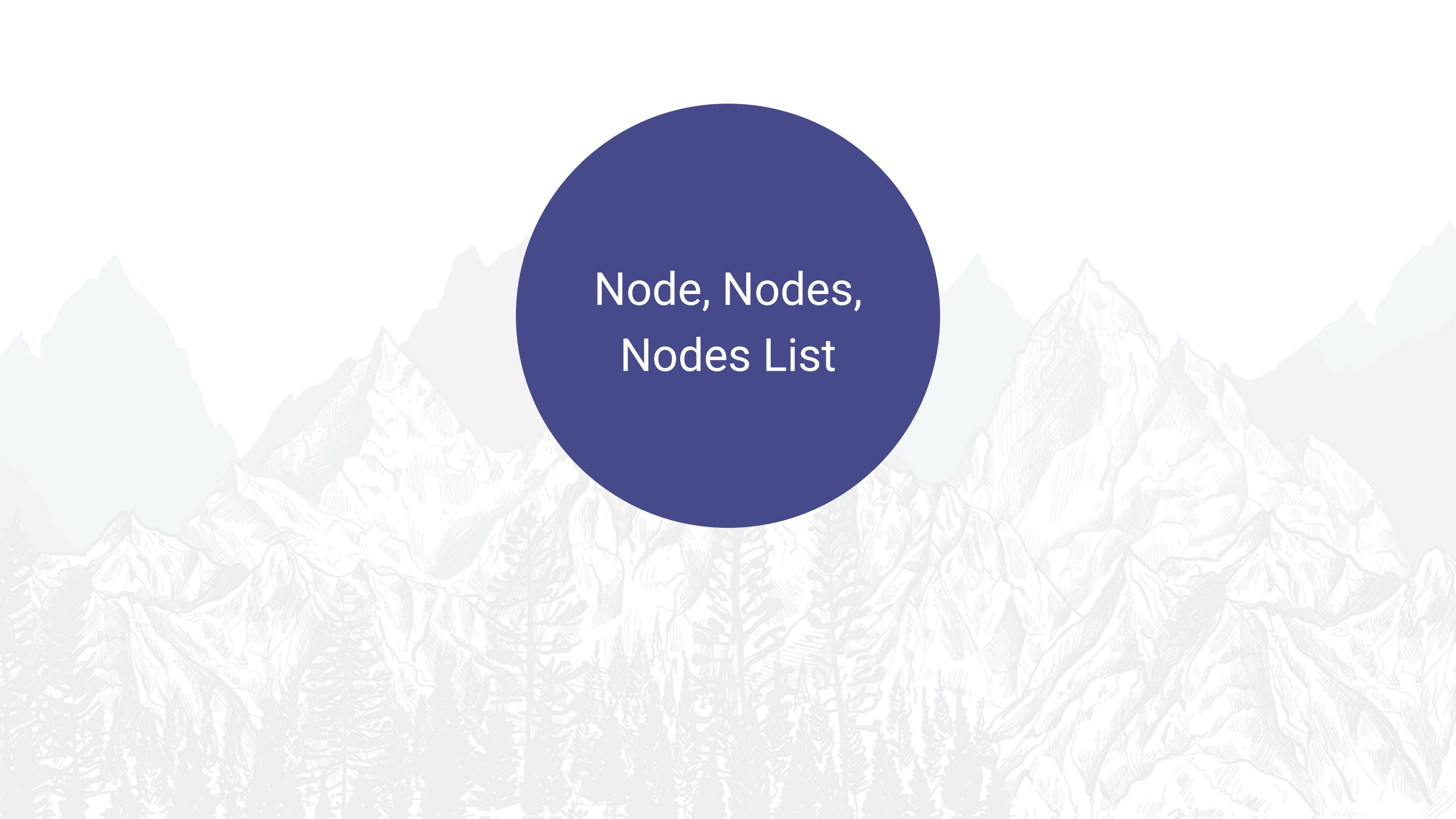
getElementsByTagName('tag name');

getElementsByTagName('name');

getElementsByClassName('className');

querySelectorAll('selector')





Node, Nodes, Nodes List

Node, Nodes, Nodes List

Node,
Nodes,
Nodes List

NodeList - elements/collection returned by the DOM API method -

- o `getElementsByTagName(tagName)`
- o `getElementsByName(name)`
- o `getElementsByClassName(className)`
- o `querySelectorAll(selector)`

Node, Nodes, Nodes List

Node,
Nodes,
Nodes List

NodeList is a JavaScript Object

has

- length property
- index for every node in the list

Node, Nodes, Nodes List

Node,
Nodes,
Nodes List

There are -

live node lists

- returned by the **getElementsByTagName** methods

static node lists

- returned by the **querySelector** methods

Node, Nodes, Nodes List

Node,
Nodes,
Nodes List

live node list

watches for changes in its nodes and
reflects them

static node list

doesn't change the data for its nodes
if they
have been changed

Questions?



Гнездото
Coworking

Цялостен
курс по
програми
ране

Дизайн
курс

Курс по
дигит.
маркетинг

MindHub



Partners



**Telerik
Academy**



MindHub

ПРОМЯНАТА

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