

`[HTMLDocument | HTMLElement | Node | NodeList].getElementsByClassNames`

For future implementations this DOM getter is thought to be a native method of any `[HTMLElement]` or any `[Node]` object as well as of any `[NodeList]` object.

In addition this method should also be \*kind of a public static\* property of the two \*namespace\*s `[Node]` and `[NodeList]` since this is the only possible way to provide such functionality in a comprehensive way to today's browsers afterwards at all.

### **[classNames] - The Methods Core Attribute - Thoughts:**

`[classNames]` should remain a single all purpose attribute, where users will provide their `search(pattern(s))` to ...

#### **... Examples:**

- `"happy, excited, erubescant"` will match any occurrence of any of the given comma separated single `_class_names_`. Thus such an attribute value gets treated like an arguments list/array.

And furthermore this is the reason to label this method as `"getElementsByClassNames"`.

- `"happy excited erubescant"` will exactly match any elements `[className]` attribute that features any loose combination of the given (multiple) `_class_name_`.

- `"happy excited erubescant, excited coy erubescant, excited"` is a combination of the above discussed features. Here the methods returning result list would contain elements that's `[className]` attribute features any loose combination of either the given (multiple) `_class_name_` `"happy excited erubescant"` or the (multiple) `_class_name_` `"excited coy erubescant"` - moreover every match on `"excited"` will be added to this list.

- The second nature of `[classNames]` is not made up of the just discussed string type. This argument should definitely be allowed to be a `[RegExp]` object as well.

**Note:** Certainly the result list references every possible match only once.

### **Multiple Class Names Within An Elements [className] Attribute**

#### **How It Is Supposed To Work:**

Sticking to [\[http://www.w3.org/TR/CSS21/selector.html#class-html\]](http://www.w3.org/TR/CSS21/selector.html#class-html) css class rules that are provided in the following different ways

```
...
p.happy {background-color: #00bfff;} /* [deepSkyBlue] */
p.excited {background-color: #ffa500;} /* [orange] */
p.happy.excited {background-color: #ffc0cb;} /* [pink] */

p.happy.excited.joking {background-color: #fff0;} /* [yellow] */
p.happy.excited.joking.childish {background-color: #fff0;} /* [yellow] */
p.excited.erubescant {background-color: #ff7f50;} /* [coral] */
p.excited.coy.erubescant {background-color: #f00;} /* [red] */

p.happy.excited.joking {background-color: #fff0;} /* [yellow] */
```

... are supposed to be acknowledged if applied by an elements `[class]` attribute as shown in the following example ...

```
<p class="happy">happy : [deepSkyBlue]</p>
<p class="excited">excited : [orange]</p>
<p class="excited happy">excited happy : [pink]</p>
<p class="happy excited">happy excited : [pink]</p>
<p class="happy erubescient excited">(happy) erubescient excited - [coral]</p>
<p class="erubescient happy excited">erubescient (happy) excited - [coral]</p>
<p class="excited erubescient coy happy">excited erubescient coy (happy) : [red]</p>
<p class="excited coy happy erubescient">excited coy (happy) erubescient : [red]</p>
<p class="coy happy erubescient excited">coy (happy) erubescient excited : [red]</p>
<p class="coy happy erubescient">coy happy erubescient : [deepSkyBlue]</p>
<p class="excited coy erubescient happy excited">excited coy erubescient happy excited :
[red]</p>
<p class="happy excited coy excited erubescient">happy excited coy excited erubescient :
[red]</p>
<p class="erubescient coy excited happy joking">erubescient coy excited happy joking :
[red]</p>
<p class="happy joking excited erubescient coy">happy joking excited erubescient coy :
[red]</p>
<p class="erubescient coy happy excited joking">erubescient coy happy excited joking :
[red]</p>
<p class="happy excited joking erubescient coy">happy excited joking erubescient coy :
[red]</p>
<p class="happy excited joking childish erubescient coy">happy excited joking childish
erubescient coy : [yellow]</p>
<p class="happy joking excited erubescient coy childish">happy joking excited erubescient coy
childish : [yellow]</p>
```

... that's practical use clearly points out that order is not an exclude/preclude criterion whether a rule gets applied or not but surely/definitely matters a rules specificity for it will take effect or not.

Thus the discussed getter has to work likewise.

## **Multiple Class Names Within An Elements `[className]` Attribute**

### **How A Major Part Of The Prospective Users Might Expect It To Work As Well:**

They may want to provide multiple classes as one of the many possible variants to which this methods `[classNames]` attribute can adopt/mutate. And they might think of the given order as kind of an identifier to a certain such classified element or rather element group/cluster.

Therefore it should be considered to let this method work by default within the specifications conform *\*loose combination\** mode. The methods last boolean type argument - maybe `[complyStrictOrder]` - hereby gets omitted and therefore gets converted to `[false]`.

But if this argument was set explicitly `[true]` `[getElementsByClassNames]` runs within a *\*strict class names order\** mode.

In case the `[classNames]` attribute is a regular expression any value of `[complyStrictOrder]` will be ignored - the method just has to run this given filter.

A fully implemented API of the above discussed matter than might look like the following pseudo code tries to illustrate:

```

/*
 *static* methods of the [[Node]] / [[NodeList]] *namespace*:
 */

NodeList.prototype.getElementsByClassName(nodeListObj, classNames[, complyStrictOrder]);

Node.prototype.getElementsByClassName(nodeObj, classNames[, complyStrictOrder]);

/*
 before a serious implementation takes place
 the type or instance of the returned list
 needs to be discussed: [[Array]] vs [[NodeList]]

 valid arguments values/types/instances:

 - nodeListObj: [HTMLCollection|NodeList|Array]
 - nodeObj: [HTMLElement|Node]
 - classNames: [undefined|null|"*"|" "|string|String|RegExp]

   [undefined], [null], [""] are all synonyms for ["*"] and will
   result to a list that references all elements that's [className]
   attribute has been set in any way (HTML coded or assigned by
   JavaScript).

 - complyStrictOrder: [undefined|boolean|Boolean]
 */

/*
 [document] getter that most of the prospective users do expect:
 */

document.getElementsByClassName(classNames[, complyStrictOrder]);

//[[object HTMLDocument]].getElementsByClassName(classNames[, complyStrictOrder]);

/*
 (prototype) methods of every [HTMLElement] and/or [Node] object
 as well as of every [NodeList] object:
 */

[[object HTMLElement]].getElementsByClassName(classNames[, complyStrictOrder]);

[[object NodeList]].getElementsByClassName(classNames[, complyStrictOrder]);

```