







Styling

Lesson 9



Lesson Plan

1

What is included in decorative styling and why we need it.

2

Pseudo-elements vs Pseudo-classes.

3

Shadows and Filters.

4

How to define shape – mask, clip-path, shape-outside.

Pseudo-classes

Help style specific attributes or states that are not reflected in the DOM.

- User-action pseudo-classes
- The lang pseudo-class
- The negation pseudo-class
- **Structural** pseudo-classes
- User interface pseudo-class selectors



Link Pseudo-classes for <a>

```
:link - styles unvisited links
```

:visited - styles visited links

```
a:link { color: blue; }
a:visited { color: purple; }
```



User-action pseudo-classes

:active - element is being clicked

: focus - element is in focus

:hover - mouse is hovering over the element

a, button, input

The lang pseudo-class

Applied to elements with the lang attribute

```
p:lang(fr) { font-style: italic; }

    Adieu

    Sugeng rawuh
```

The negation pseudo-class

Styles are applied to all elements except those matching the selector

```
:not(p) { } - all elements except paragraphs tags
:not(.intro) { } - all elements except those with class .intro
:not(#news) { } - all elements except those with id #news
:not(:lang(fr)) { } - all elements except those with the French language
:not([disabled]) { } - all elements except those without the disabled attribute

p:not(.intro) { } - all paragraphs except those with the class .intro
```

Structural

pseudo-classes

Allow you to select elements based on their position in the document structure.

! If the document structure changes, the structural pseudo-class might apply to a different element or potentially to no element at all.

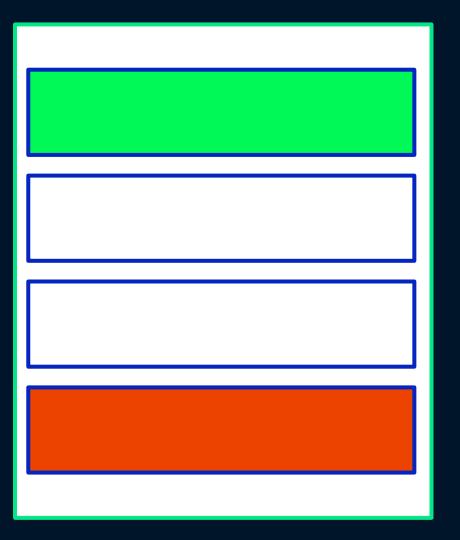
It can sometimes be difficult to determine exactly which element the styles will be applied to.

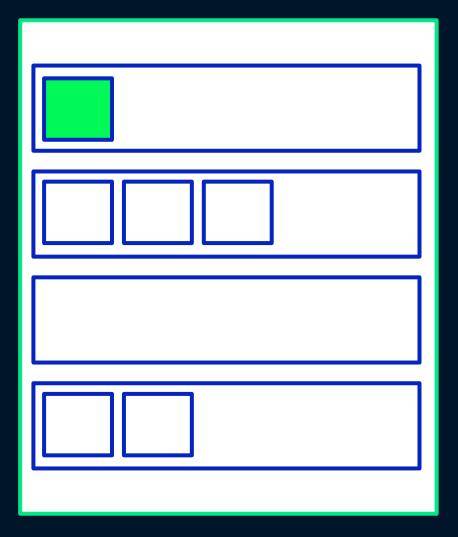
```
:first-child { }
:only-child { }
:nth-child(3n) { }
```



:first-child :last-child

 Selects the element that is the first/last child of another element.





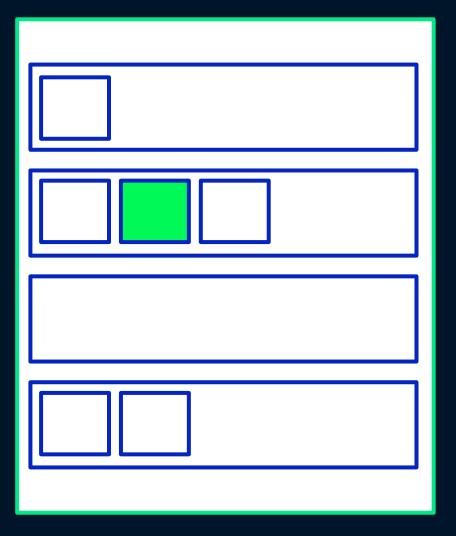
pseudo-class

:only-child

Selects an element that is the only child of another element.

```
div:only-child { }

<article>
     <div> 1 </div>
</article>
```



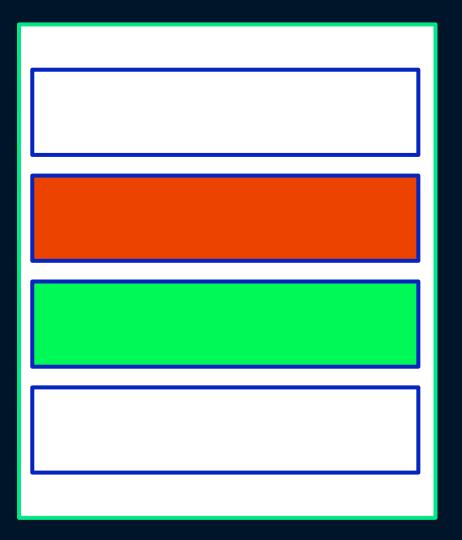
pseudo-class

:only-of-type

- Selects an element that is the only element of its type within its parent.

:first-of-type :last-of-type

 Selects an element that is the first/last of its type within its parent element.



:nth-child(n) :nth-last-child(n)

 Selects specific child elements in a parent element starting from the beginning or the end.

n:

- number
- number + n (selects every n-th element)
- expression with +/- (allows starting from an element other than the first)
- even (all even elements)
- odd (all odd elements)

```
:nth-child(odd)
                    :nth-child(n+1)
:nth-child(even)
                      :nth-child(2)
:nth-child(2n-1) :nth-last-child(2)
:nth-child(2n)
                    :nth-child(n+1)
```

:nth-of-type(n) :nth-last-of-type(n)

Selects elements of a specific type in the parent element starting from the beginning or the end.

n:

- number
- **number + n** (selects every **n-th** element)
- expression with +/- (allows starting from an element other than the first)
- even (all even elements)
- odd (all odd elements)

```
:nth-of-type(odd) :nth-of-type(n+1)
```

```
:nth-of-type(even) :nth-of-type(2)
```

```
:nth-of-type(2n-1) :nth-last-of-type(2)
```

```
:nth-of-type(2n) :nth-of-type(n+1)
```



:root

Selects the root element of the document (taghtml>).

:empty

 Selects an element that has no content or child elements (an empty element).

A space is already a character, so the tag is no longer considered empty.

It also applies to input elements where no value has been entered.

```
:root { }
<html>
  <head> 1 </head>
  <body> 1 </body>
</html>
p:empty { }
<article>
  1 

  <span></span>
</article>
```

Pseudo-elements

- (fake elements) Allow styling elements that are not in the document tree.

```
::-webkit-scrollbar - styles the scrollbar
```

Other pseudo-elements of the form ::-webkit-scrollbar-*, are used only with prefixes
 and only in webkit browsers

```
.invisible-scrollbar::-webkit-scrollbar {
  display: none;
}
```



Pseudo-elements for text

```
::first-line - styles the first line of text
::first-letter - styles the first letter of text
```

```
p::first-line { }
p:first-letter { }

This is the first line
  of a paragraph of text
```

Pseudo-elements for Lists

- Usage of counters in lists
- Styling list markers

::marker – Styling list markers.

```
ol {
   counter-reset: section;
}
li::before {
   counter-increment: section;
   content: counter(section);
}
li::marker { }
```

BOX-SHADOW

p { box-shadow: red 5px 8px 15px 18px inset; }

External shadows

- Placed outside the border
- Mimics the shape of the block, including rounded corners, etc.

Internal shadows (inset)

Placed abovebackground-images,background-colorbut below content



Syntax box-shadow

```
p { box-shadow: inset 5px 8px 15px 18px red; }
offset-x, offset-y, blur-radius, spread-radius - order matters
```

inset

internal shadow

optional

order does not matter

offset-x

horizontal offset

positive = right, negative = left, 0 = no offset

offset-y

vertical offset

positive = down, negative = up, 0 = no offset

blur-radius

optional, default is 0 which means sharp edges, values only greater than 0

spread-radius

optional, default is 0, increases or decreases the size of the shadow

color

optional,
if not specified, it inherits the element's
color
order does not matter

box-shadow

Text 0px -**5px** 5px 5px 0px inset **0px 5px 5px 5px 5px** -5px 0 5px 0 **5px 5px 5px -5px 5px 5px 5px 5px**

Multiple box-shadow



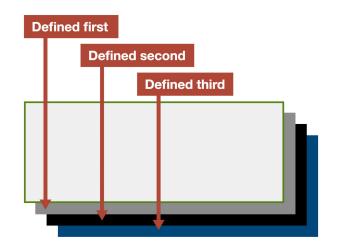
can be applied to a single element by separating each shadow with a comma:

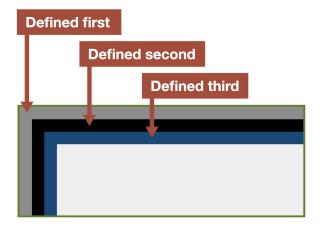
order in box-shadow

The order of the shadows matters

```
p { box-shadow: first, second, third; }
```

the first shadow in the list will be on top, and subsequent shadows will be layered below it.





TEXT-SHADOW

Text

HELLO

- Only external shadows.
- Follows the shape of the text.
- Multiple shadows can be applied.
- Syntax is similar to box-shadow:

```
offset-x
offset-y
blur-radius
color
```











filter

Applies visual effects to elements
 (like in instagram)

Values:

- **Keyword** blur
- url url("filters.svg#filter-id")

```
filter: blur(5px);
filter: contrast(175%) brightness(3%);
```

filter

```
blur(px)
brightness(0-1)
contrast(%)
drop-shadow(x y blur color) - inner
shadow
grayscale(%) - black and white
hue-rotate(deg) - shifts the color palette
around the color wheel
invert(%)
opacity(%)
saturate(%)
sepia(%) - like vintage photo
```



No Filter Applied



filter: blur(2px);



filter: brightness(0.4);



filter: contrast(200%);



filter: drop-shadow(16px red);



filter: grayscale(80%);



filter: hue-rotate(90deg);



filter: invert(85%):



filter: opacity(15%);

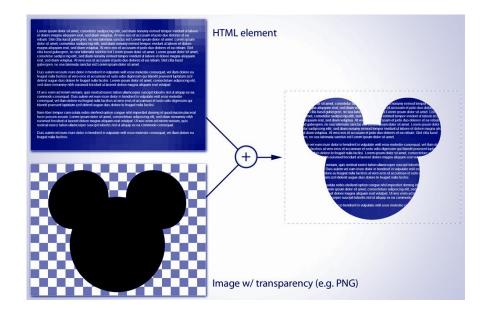


filter: saturate(400%);



filter: sepia(560%);





Imagine cutting out a circle in a sheet of paper and placing it over a picture; you've applied a mask.

Used to create complex shapes for elements.

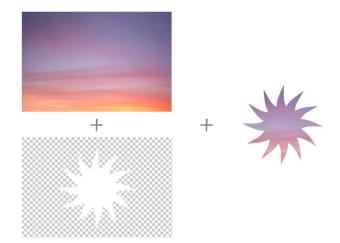
Masks operate based on the alpha channel:

- → Black full invisibility
- → White full visibility
- → **Gray** partial transparency



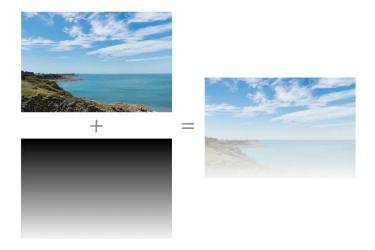
Image:

mask: url(mask.png);



Gradient:

mask: linear-gradient(from, to);



CSS mask properties

mask-image - the image used as the mask

mask-mode - chooses the mask based on transparent
or opaque areas

mask-position - mask position relative to the
element

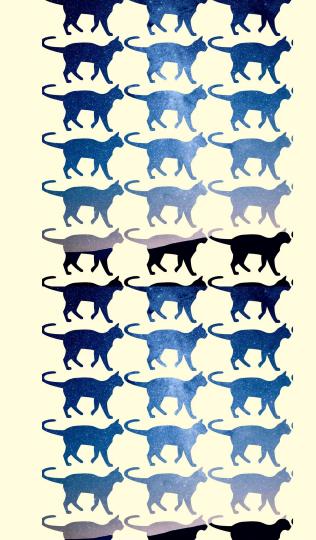
mask-size

mask-repeat - whether the mask repeats

mask-origin - defines the starting point of the mask
- border, padding, content

mask-clip - the area to which the mask is applied

mask-composite - allows combining mask layers

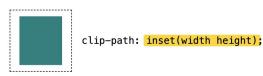




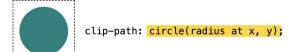


Defines the area to show or hide

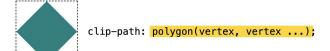
Consists of shapes or coordinates



clip-path: inset(width height round border-radius);







CSS clip-path shapes

```
inset - rectangle
circle
ellipse
polygon - any shape with any number
of corners
```

path - SVG path with coordinates

clip-path: path("M0.5,1 C0.5 ... ")

MASK VS CLIP-PATH

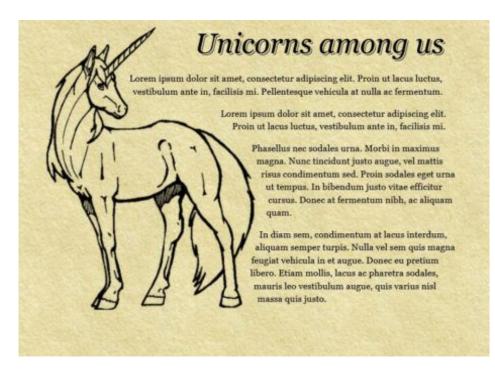
Raster	Vector
Partial Transparency	Opacity Only
Pre-drawn Images	Custom Shapes
More Complex Settings (mask-* properties)	Limits Element Shape (no additional properties)
Static Shape	Animatable Shape Changes
Text Wraps Shape Perimeter	Text Wraps Around Original Rectangle

shape-outside

Text Wrapping Around a Shape.

Shapes:

- circle() Creates a circular shape for the text to wrap around.
- ellipse()
- inset() Defines a rectangular area.
- polygon() Creates any shape with three or more corners.
- url() Uses an image as the shape for text wrapping.



Applied to an element that the text should wrap around.

shape-outside

vulputate magna eros eu erat. Aliquam erat volutpat. Nam dui mi, tincidunt quis, accumsan porttitor, facilisis luctus, metus

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean

ultricies mi vitae est. Mauris placerat eleifend leo. Quisque sit amet est et sapien ullamcorper pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros

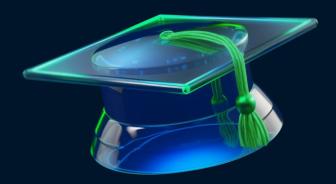
mi, uncidunt quis, accumsan portutor, facinsis fuctus,

Pellentesque habitant tristique senectus et ne malesuada fames ac tu egestas. Vestibulum to quam, feugiat vitae, ul eget, tempor sit amet, Donec eu libero sit ame egestas semper. Aenea

ultricies mi vitae est. Mauris placerat eleifend leo. Quis amet est et sapien ullamcorper pharetra. Vestibulum ei condimentum sed, commodo vitae, ornare sit amet, wi Aenean fermentum, elit eget tincidunt condimentum, e

Summary

- 1. Pseudo-elements
- 2. Pseudo-classes
- 3. Shadows
- 4. Filters
- 5. Masks



Homework

- Complete one of the following courses to reinforce your understanding of the theory
- Achieve the highest level of accuracy with the design mockup:
 - Apply all states for links and buttons:
 hover, active, focus, according to the UI kit
 - Apply visual effects such as shadows, shapes, filters and etc
 - Use pseudo-elements where necessary
 - Set all internal and external margins and padding

Your website should look exactly like the design mockup. This is the final stage of work on the website. Next, we will only be adding animations.













Please fill out the feedback form

It's very important for us



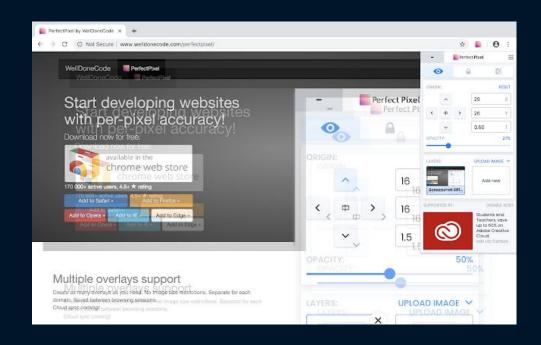
THANK YOU! Have a good evening!



Perfect Pixel

- соответствие верстки макету пиксель в пиксель

- → Стандарт индустрии
- → Иногда допускаются отклонения до 5px
- → Проверяется с помощью специального плагина в браузере



Переполнение контентом

- сайт после верстки может меняться

- → Больше/меньше текста
- → изменение порядка элементов
- → удаление/добавление новых элементов
- → картинки могут поменяться
- → ввод данных в форму

