# PSEUDO KLASE

Opisuje posebno stanje elementa

|  |  |  |
| --- | --- | --- |
| **SELEKTOR** | **PRIMJER** | **OPIS** |
| [:active](https://www.w3schools.com/cssref/sel_active.asp) | a:active | Selects the active link |
| [:checked](https://www.w3schools.com/cssref/sel_checked.asp) | input:checked | Selects every checked <input> element |
| [:disabled](https://www.w3schools.com/cssref/sel_disabled.asp) | input:disabled | Selects every disabled <input> element |
| [:empty](https://www.w3schools.com/cssref/sel_empty.asp) | p:empty | Selects every <p> element that has no children |
| [:enabled](https://www.w3schools.com/cssref/sel_enabled.asp) | input:enabled | Selects every enabled <input> element |
| [:first-child](https://www.w3schools.com/cssref/sel_firstchild.asp) | p:first-child | Selects every <p> elements that is the first child of its parent |
| [:first-of-type](https://www.w3schools.com/cssref/sel_first-of-type.asp) | p:first-of-type | Selects every <p> element that is the first <p> element of its parent |
| [:focus](https://www.w3schools.com/cssref/sel_focus.asp) | input:focus | Selects the <input> element that has focus |
| [:hover](https://www.w3schools.com/cssref/sel_hover.asp) | a:hover | Selects links on mouse over |
| [:in-range](https://www.w3schools.com/cssref/sel_in-range.asp) | input:in-range | Selects <input> elements with a value within a specified range |
| [:invalid](https://www.w3schools.com/cssref/sel_invalid.asp) | input:invalid | Selects all <input> elements with an invalid value |
| [:lang(language)](https://www.w3schools.com/cssref/sel_lang.asp) | p:lang(it) | Selects every <p> element with a lang attribute value starting with "it" |
| [:last-child](https://www.w3schools.com/cssref/sel_last-child.asp) | p:last-child | Selects every <p> elements that is the last child of its parent |
| [:last-of-type](https://www.w3schools.com/cssref/sel_last-of-type.asp) | p:last-of-type | Selects every <p> element that is the last <p> element of its parent |
| [:link](https://www.w3schools.com/cssref/sel_link.asp) | a:link | Selects all unvisited links |
| [:not(selector)](https://www.w3schools.com/cssref/sel_not.asp) | :not(p) | Selects every element that is not a <p> element |
| [:nth-child(n)](https://www.w3schools.com/cssref/sel_nth-child.asp) | p:nth-child(2) | Selects every <p> element that is the second child of its parent |
| [:nth-last-child(n)](https://www.w3schools.com/cssref/sel_nth-last-child.asp) | p:nth-last-child(2) | Selects every <p> element that is the second child of its parent, counting from the last child |
| [:nth-last-of-type(n)](https://www.w3schools.com/cssref/sel_nth-last-of-type.asp) | p:nth-last-of-type(2) | Selects every <p> element that is the second <p> element of its parent, counting from the last child |
| [:nth-of-type(n)](https://www.w3schools.com/cssref/sel_nth-of-type.asp) | p:nth-of-type(2) | Selects every <p> element that is the second <p> element of its parent |
| [:only-of-type](https://www.w3schools.com/cssref/sel_only-of-type.asp) | p:only-of-type | Selects every <p> element that is the only <p> element of its parent |
| [:only-child](https://www.w3schools.com/cssref/sel_only-child.asp) | p:only-child | Selects every <p> element that is the only child of its parent |
| [:optional](https://www.w3schools.com/cssref/sel_optional.asp) | input:optional | Selects <input> elements with no "required" attribute |
| [:out-of-range](https://www.w3schools.com/cssref/sel_out-of-range.asp) | input:out-of-range | Selects <input> elements with a value outside a specified range |
| [:read-only](https://www.w3schools.com/cssref/sel_read-only.asp) | input:read-only | Selects <input> elements with a "readonly" attribute specified |
| [:read-write](https://www.w3schools.com/cssref/sel_read-write.asp) | input:read-write | Selects <input> elements with no "readonly" attribute |
| [:required](https://www.w3schools.com/cssref/sel_required.asp) | input:required | Selects <input> elements with a "required" attribute specified |
| [:root](https://www.w3schools.com/cssref/sel_root.asp) | root | Selects the document's root element |
| [:target](https://www.w3schools.com/cssref/sel_target.asp) | #news:target | Selects the current active #news element (clicked on a URL containing that anchor name) |
| [:valid](https://www.w3schools.com/cssref/sel_valid.asp) | input:valid | Selects all <input> elements with a valid value |
| [:visited](https://www.w3schools.com/cssref/sel_visited.asp) | a:visited | Selects all visited links |

**CSS3 PROPERTIES**

# PRAVILA

Većinom idu na sam vrh dokumenta

**@charset**

- mora biti prvi property u eksternom CSS elementu, ne može biti u HTML-u. Označava koji character encoding se koristi u stylesheetu

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| charset | *Specifies the character encoding to use* |

**@font-face**

- služi za korištenje novih fontova, više se ne moraju koristiti samo web-safe fontovi. Mora se definirati ime fonta i poveznicu na njega

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| font-family | name |
| src | URL |
| font-stretch | normal condensed ultra-condensed extra-condensed semi-condensed expanded semi-expanded extra-expanded ultra-expanded |
| font-style | normal italic oblique |
| font-weight | normal bold 100 200 300 400 500 600 700 800 900 |
| unicode-range | unicode-range |

# RASPORED NA STRANICI

Odlučuju koji će se element gdje nalaziti, kako će se međusobno ponašati

**border-collapse**

- hoće li se obrubi susjednih elemenata spojiti u jedan ili će biti odvojeni

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| separate | Borders are separated; each cell will display its own borders. This is default. |
| collapse | Borders are collapsed into a single border when possible (border-spacing and empty-cells properties have no effect) |

**box-decoration-break**

- govori kako će se background, padding, border, border-image, box-shadow, margin i clip-path ponašati kad je elementov box fragmentiran

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| slice | Default. Box decorations are applied to the element as a whole and break at the edges of the element fragments |
| clone | Box decorations apply to each fragment of the element as if the fragments were individual elements. Borders wrap the four edges of each fragment of the element, and backgrounds are redrawn in full for each fragment |

**clear**

- kontrolira float elemente pokraj ovog elementa

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default. The element is not pushed below left or right floated elements |
| left | The element is pushed below left floated elements |
| right | The element is pushed below right floated elements |
| both | The element is pushed below both left and right floated elements |

**column-count**

- u koliko će se stupaca element podijeliti

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| number | The optimal number of columns into which the content of the element will be flowed |
| auto | Default value. The number of columns will be determined by other properties, like e.g. "column-width" |

**column-fill**

- kako će se stupci napuniti, ako se elementu doda visina lakše se može kontrolirati raspored stupaca

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| balance | Default value. Fills each column with about the same amount of content, but will not allow the columns to be taller than the height (so, columns might be shorter than the height as the browser distributes the content evenly horizontally) |
| auto | Fills each column until it reaches the height, and do this until it runs out of content (so, this value will not necessarily fill all the columns nor fill them evenly) |

**column-rule-color**

- boja crte između stupaca

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| color | Specifies the color of the rule. |

**column-rule-style**

- stil linije između stupaca

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default value. Defines no rule |
| hidden | Defines a hidden rule |
| dotted | Defines a dotted rule |
| dashed | Defines a dashed rule |
| solid | Defines a solid rule |
| double | Defines a double rule |
| groove | Specifies a 3D grooved rule. The effect depends on the width and color values |
| ridge | Specifies a 3D ridged rule. The effect depends on the width and color values |
| inset | Specifies a 3D inset rule. The effect depends on the width and color values |
| outset | Specifies a 3D outset rule. The effect depends on the width and color values |

**column-rule-width**

- širina linije između stupaca

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| medium | Default value. Defines a medium rule |
| thin | Defines a thin rule |
| thick | Defines a thick rule |
| length | Specifies the width of the rule |

**column-span**

- kroz koliko se stupaca element treba raširiti

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default value. The element should span across one column |
| all | The element should span across all columns |

**column-width**

- širina stupca. Fleksibilna mjera, više kao prijedlog browseru, ako browser ne može postaviti barem dva stupca onda sve prebaci u jedan stupac

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default value. The column width will be determined by the browser. |
| length | A length that specifies the width of the columns. The number of columns will be the minimum number of columns needed to show all the content across the element. |

**object-position**

- koristi se s object-fit da bi se odredilo kako će se <img> ili <video> pozicionirati s x/y koordinatama unutar svog content boxa

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| *position* | Specifies the position of the image or video inside its content box. First value controls the x-axis and the second value controls the y-axis. Can be a string (left, center or right), or a number (in px or %). Negative values are allowed |

**orphans, widows**

- minimalan broj redaka koji mora biti ostavljen na dnu stranice ili stupca, ili na kraju stranice ili stupca

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| *integer* | Specifies the minimum number of lines that must be left at the bottom of a page or column. Negative values are not allowed |

**vertical-align**

- vertikalno poravnavanje elementa

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| baseline | The element is aligned with the baseline of the parent. This is default |
| length | Raises or lower an element by the specified length. Negative values are allowed. |
| % | Raises or lower an element by a percent of the "line-height" property. Negative values are allowed |
| sub | The element is aligned with the subscript baseline of the parent |
| super | The element is aligned with the superscript baseline of the parent |
| top | The element is aligned with the top of the tallest element on the line |
| text-top | The element is aligned with the top of the parent element's font |
| middle | The element is placed in the middle of the parent element |
| bottom | The element is aligned with the lowest element on the line |
| text-bottom | The element is aligned with the bottom of the parent element's font |

# BORDER, PADDING, MARGIN, OUTLINE

Uređivanje box-model dijelova

**border-image-outset**

- koliko će se obrub produžiti izvan border boxa

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| length | A length unit specifying how far from the edges the border-image will appear. Default value is 0 |
| number | Represent multiples of the corresponding border-width |

**border-image-repeat**

- treba li se obrub ponavljati i kako

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| stretch | Default value. The image is stretched to fill the area |
| repeat | The image is tiled (repeated) to fill the area |
| round | The image is tiled (repeated) to fill the area. If it does not fill the area with a whole number of tiles, the image is rescaled so it fits |
| space | The image is tiled (repeated) to fill the area. If it does not fill the area with a whole number of tiles, the extra space is distributed around the tiles |

**border-image-slice**

- kako će se slika obruba izrezati

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| number | The number(s) represent pixels for raster images or coordinates for vector images |
| % | Percentages are relative to the height or width of the image |
| fill | Causes the middle part of the image to be displayed |

**border-image-source**

- izvor za sliku koja će se ponavljati u obrubu

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | No image will be used |
| image | The path to the image to be used as a border |

**border-image-width**

- širina obrubne slike

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| length | A length unit (px) specifying the size of the border-width |
| number | Default value 1. Represents multiples of the corresponding border-width |
| % | Refers to the size of the border image area: the width of the area for horizontal offsets, the height for vertical offsets |
| auto | If specified, the width is the intrinsic width or height of the corresponding image slice |

**border-spacing**

- udaljenost između obruba jednog elementa i susjednog, efekt sličan kao grid gap

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| length length | Specifies the distance between the borders of adjacent cells in px, cm, etc. Negative values are not allowed.  If one value is specified, it defines both the horizontal and vertical spacing between cells  If two values are specified, the first sets the horizontal spacing and the second sets the vertical spacing |

**border-style**

- stil obruba elementa

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default value. Specifies no border |
| hidden | The same as "none", except in border conflict resolution for table elements |
| dotted | Specifies a dotted border |
| dashed | Specifies a dashed border |
| solid | Specifies a solid border |
| double | Specifies a double border |
| groove | Specifies a 3D grooved border. The effect depends on the border-color value |
| ridge | Specifies a 3D ridged border. The effect depends on the border-color value |
| inset | Specifies a 3D inset border. The effect depends on the border-color value |
| outset | Specifies a 3D outset border. The effect depends on the border-color value |

# FLEXBOX

Display: flex;

**align-content**

- koristi se u flexu, modificira ponašanje flex-wrap propertija, za razliku od align-items, ovaj poravnava flex linije. Justify-content se koristi za glavnu liniju flexa, a align-content za sporednu

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| stretch | Default value. Lines stretch to take up the remaining space |
| center | Lines are packed toward the center of the flex container |
| flex-start | Lines are packed toward the start of the flex container |
| flex-end | Lines are packed toward the end of the flex container |
| space-between | Lines are evenly distributed in the flex container |
| space-around | Lines are evenly distributed in the flex container, with half-size spaces on either end |
| space-evenly | Lines are evenly distributed in the flex container, with equal space around them |

**align-items**

- poravnanje itema unutar flex-kontejnera

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| stretch | Default. Items are stretched to fit the container |
| center | Items are positioned at the center of the container |
| flex-start | Items are positioned at the beginning of the container |
| flex-end | Items are positioned at the end of the container |
| baseline | Items are positioned at the baseline of the container |

**align-self**

- poravnavanje pojedinog itema unutar flex-kontejnera

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default. The element inherits its parent container's align-items property, or "stretch" if it has no parent container |
| stretch | The element is positioned to fit the container |
| center | The element is positioned at the center of the container |
| flex-start | The element is positioned at the beginning of the container |
| flex-end | The element is positioned at the end of the container |
| baseline | The element is positioned at the baseline of the container |

**flex-basis**

- širina fleksibilnog elementa

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| *number* | A length unit, or percentage, specifying the initial length of the flexible item(s) |
| auto | Default value. The length is equal to the length of the flexible item. If the item has no length specified, the length will be according to its content |

**flex-grow**

- koliko će item narasti u usporedbi s ostalim elementima u fleksibilnom kontejneru

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| *number* | A number specifying how much the item will grow relative to the rest of the flexible items. Default value is 0 |

**flex-shrink**

- koliko će se item smanjiti u usporedbi s ostalim elementima u fleksibilnom kontejneru

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| number | *A number specifying how much the item will shrink relative to the rest of the flexible items. Default value is 1* |

**flex-wrap**

- trebaju li se fleksibilni itemi wrapati ili ne

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| nowrap | Default value. Specifies that the flexible items will not wrap |
| wrap | Specifies that the flexible items will wrap if necessary |
| wrap-reverse | Specifies that the flexible items will wrap, if necessary, in reverse order |

**justify-content**

- poravnavanje itema u flex kontejneru po glavnoj liniji kad ne zauzimaju sam potreban prostor. Slično kao align-items

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| flex-start | Default value. Items are positioned at the beginning of the container |
| flex-end | Items are positioned at the end of the container |
| center | Items are positioned in the center of the container |
| space-between | Items will have space between them |
| space-around | Items will have space before, between, and after them |
| space-evenly | Items will have equal space around them |

**order**

- poredak flex elemenata u odnosu na ostale flex elemente unutar istog kontejnera

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| number | *Default value 0. Specifies the order for the flexible item* |

# GRID

Display: grid;

**grid-area**

- shorthand za grid-row-start, grid-column-start, grid-row-end, grid-column-end. Također, ovo se koristi za imenovanje itema koji će se potom koristiiti kod grid-template-areas

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| itemname | Specifies a name for the grid item |

**grid-auto-columns**

- veličina stupaca u grid kontejneru

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default value. The size of the columns is determined by the size of the container |
| fit-content() |  |
| max-content | Sets the size of each column depending on the largest item in the column |
| min-content | Sets the size of each column depending on the smallest item in the column |
| minmax(min.max) | Sets a size range greater than or equal to *min* and less than or equal to *max* |
| length | Sets the size of the columns, by using a legal length value. |
| % | Sets the size of the columns, by using a percent value |

**grid-auto-flow**

- kako se automatski smješteni itemi postavljaju u grid

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| row | Default value. Places items by filling each row |
| column | Places items by filling each column |
| dense | Place items to fill any holes in the grid |
| row dense | Places items by filling each row, and fill any holes in the grid |
| column dense | Places items by filling each column, and fill any holes in the grid |

**grid-auto-rows**

- postavlja veličinu redova u grid kontejneru

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default value. The size of the rows is determined by the size of the largest item in the row |
| max-content | Sets the size of each row to depend on the largest item in the row |
| min-content | Sets the size of each row to depend on the largest item in the row |
| length | Sets the size of the rows, by using a legal length value. |

**grid-column-end**

- u kojem će stupcu item završiti u grid kontejneru

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default value. The item will span one column |
| span *n* | Specifies the number of columns the item will span |
| column-line | Specifies on which column to end the display of the item |

**grid-column-start**

- u kojem će stupcu item početi u grid kontejneru

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default value. The item will be placed following the flow |
| span *n* | Specifies the number of columns the item will span |
| column-line | Specifies on which column to start the display of the item |

**grid-row-end**

- u kojem će redu item završiti u grid kontejneru

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default value. The item will span one row. |
| span *n* | Specifies the number of rows the item will span. |
| row-line | Specifies on which row to end the display of the item. |

**grid-row-start**

- u kojem će redu item početi u grid kontejneru

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default value. The item will be placed by following the flow. |
| row-line | Specifies on which row to start the display of the item. |

**grid-template-areas**

- specificira prostore unutar grid kontejnera. Itemi se imenuju pomoću grid-area, a na njih se referira pomoću grid-template-areas. Definiraju se uz pomoć navodnika i točaka

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default value. No named grid areas |
| itemnames | A sequence that specifies how each columns and row should display |

# UREĐIVANJE ELEMENATA

razno uređivanje veličine, boje i ostalih efekata kod elemenata

**backdrop-filter**

- dodaje grafički filter na prostor iza elementa

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default value. No filter is applied to the backdrop |
| filter | A space-separated list of filter-functions like:  blur()  brightness()  contrast()  drop-shadow()  grayscale()  hue-rotate()  invert()  opacity()  sepia()  saturate()  or an url to an SVG filter that will be applied to the backdrop |

**backface-visibility**

- kod rotacije elemenata, hoće li se stražnji dio elementa vidjeti ili ne

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| visible | Default value. The backside is visible |
| hidden | The backside is not visible |

**background-attachment**

- je li se pozadina skrolla zajedno s ostatkom stranice, ili ostaje na statičnom mjestu

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| scroll | The background image will scroll with the page. This is default |
| fixed | The background image will not scroll with the page |
| local | The background image will scroll with the element's contents |

**background-blend-mode**

- način stapanja svakog od sloja pozadine (boje i/ili slike)

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | This is default. Sets the blending mode to normal |
| multiply | Sets the blending mode to multiply |
| screen | Sets the blending mode to screen |
| overlay | Sets the blending mode to overlay |
| darken | Sets the blending mode to darken |
| lighten | Sets the blending mode to lighten |
| color-dodge | Sets the blending mode to color-dodge |
| saturation | Sets the blending mode to saturation |
| color | Sets the blending mode to color |
| luminosity | Sets the blending mode to luminosity |

**background-clip**

- koliki dio elementa prekriva pozadina

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| border-box | Default value. The background extends behind the border |
| padding-box | The background extends to the inside edge of the border |
| content-box | The background extends to the edge of the content box |

**background-origin**

- odakle će pozadinska slika započeti

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| padding-box | Default value. The background image starts from the upper left corner of the padding edge |
| border-box | The background image starts from the upper left corner of the border |
| content-box | The background image starts from the upper left corner of the content |

**background-position**

- početna pozicija slike

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| left top left center left bottom right top right center right bottom center top center center center bottom | If you only specify one keyword, the other value will be "center" |
| x% y% | The first value is the horizontal position and the second value is the vertical. The top left corner is 0% 0%. The right bottom corner is 100% 100%. If you only specify one value, the other value will be 50%. Default value is: 0% 0% |
| xpos ypos | The first value is the horizontal position and the second value is the vertical. The top left corner is 0 0. Units can be pixels (0px 0px) or any other [CSS units](https://www.w3schools.com/cssref/css_units.asp). If you only specify one value, the other value will be 50%. You can mix % and positions |

**background-repeat**

- hoće li se pozadinska slika ponavljati i kako, po defaultu se ponavlja i po vertikali i po horizontali

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| repeat | The background image is repeated both vertically and horizontally.  The last image will be clipped if it does not fit. This is default |
| repeat-x | The background image is repeated only horizontally |
| repeat-y | The background image is repeated only vertically |
| no-repeat | The background-image is not repeated. The image will only be shown once |
| space | The background-image is repeated as much as possible without clipping. The first and last image is pinned to either side of the element, and whitespace is distributed evenly between the images |
| round | The background-image is repeated and squished or stretched to fill the space (no gaps) |

**background-size**

- veličina pozadinske slike

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default value. The background image is displayed in its original size |
| *length* | Sets the width and height of the background image. The first value sets the width, the second value sets the height. If only one value is given, the second is set to "auto. |
| *percentage* | Sets the width and height of the background image in percent of the parent element. The first value sets the width, the second value sets the height. If only one value is given, the second is set to "auto" |
| cover | Resize the background image to cover the entire container, even if it has to stretch the image or cut a little bit off one of the edges |
| contain | Resize the background image to make sure the image is fully visible |

**caption-side**

- gdje će se pokraj tablice nalaziti njezin opis

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| top | Puts the caption above the table. This is default |
| bottom | Puts the caption below the table |

**clip-path**

- smanjuje veći element na manji oblik, npr. pravokutnik, krug ili SVG. Odličan alat za napraviti npr. okruglu sliku

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| *clip-source* | Defines a URL to an SVG <clipPath> element |
| basic-shape | Clips an element to a basic shape: circle, ellipse, polygon or inset |
| margin-box | Uses the margin box as the reference box |
| border-box | Uses the border box as the reference box |
| padding-box | Uses the padding box as the reference box |
| content-box | Uses the content box as the reference box |
| fill-box | Uses the object bounding box as reference box |
| stroke-box | Uses the stroke bounding box as reference box |
| view-box | Uses the SVG viewport as reference box |
| none | This is default. No clipping is done |

**empty-cells**

- u tablici, hoće li se prikazati obrub na praznim ćelijama ili ne, ovo nema efekt ako je border-collapse:collapse;

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| show | Display borders on empty cells. This is default |
| hide | Hide borders on empty cells |

**filter**

- dodaje vizualne efekte na element, najčešće <img>

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default value. Specifies no effects |
| blur(*px*) | Applies a blur effect to the image. A larger value will create more blur. If no value is specified, 0 is used. |
| brightness(*%*) | Adjusts the brightness of the image. 0% will make the image completely black. 100% (1) is default and represents the original image. Values over 100% will provide brighter results. |
| contrast(*%*) | Adjusts the contrast of the image. 0% will make the image completely black. 100% (1) is default, and represents the original image. Values over 100% will provide results with more contrast. |
| drop-shadow(*h-shadow v-shadow blur spread color*) | Applies a drop shadow effect to the image. **Possible values:** *h-shadow* - Required. Specifies a pixel value for the horizontal shadow. Negative values place the shadow to the left of the image. *v-shadow* - Required. Specifies a pixel value for the vertical shadow. Negative values place the shadow above the image. *blur* - Optional. This is the third value, and must be in pixels. Adds a blur effect to the shadow. A larger value will create more blur (the shadow becomes bigger and lighter). Negative values are not allowed. If no value is specified, 0 is used (the shadow's edge is sharp). *spread* - Optional. This is the fourth value, and must be in pixels. Positive values will cause the shadow to expand and grow bigger, and negative values will cause the shadow to shrink. If not specified, it will be 0 (the shadow will be the same size as the element). **Note:** Chrome, Safari and Opera, and maybe other browsers, do not support this 4th length; it will not render if added. *color* - Optional. Adds a color to the shadow. If not specified, the color depends on the browser (often black). An example of creating a red shadow, which is 8px big both horizontally and vertically, with a blur effect of 10px: filter: drop-shadow(8px 8px 10px red); **Tip:** This filter is similar to the [box-shadow](https://www.w3schools.com/cssref/css3_pr_box-shadow.asp) property. |
| grayscale(*%*) | Converts the image to grayscale. 0% (0) is default and represents the original image. 100% will make the image completely gray (used for black and white images). **Note:** Negative values are not allowed. |
| hue-rotate(*deg*) | Applies a hue rotation on the image. The value defines the number of degrees around the color circle the image samples will be adjusted. 0deg is default, and represents the original image. **Note:** Maximum value is 360deg. |
| invert(*%*) | Inverts the samples in the image. 0% (0) is default and represents the original image. 100% will make the image completely inverted. **Note:** Negative values are not allowed. |
| opacity(*%*) | Sets the opacity level for the image. The opacity-level describes the transparency-level, where: 0% is completely transparent. 100% (1) is default and represents the original image (no transparency). **Note:** Negative values are not allowed. **Tip:** This filter is similar to the [opacity](https://www.w3schools.com/cssref/css3_pr_opacity.asp) property. |
| saturate(*%*) | Saturates the image. 0% (0) will make the image completely un-saturated. 100% is default and represents the original image. Values over 100% provides super-saturated results. **Note:** Negative values are not allowed. |
| sepia(*%*) | Converts the image to sepia. 0% (0) is default and represents the original image. 100% will make the image completely sepia. **Note:** Negative values are not allowed. |
| url() | The url() function takes the location of an XML file that specifies an SVG filter, and may include an anchor to a specific filter element. Example: filter: url(svg-url#element-id) |

**image-rendering**

- koja će se vrsta algoritma koristiti na slikama

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Let the browser choose the scaling algorithm. This is default |
| smooth | Use an algorithm that smooth out the colors in the image |
| high-quality | Same as smooth, but with a preference for higher-quality scaling |
| crisp-edges | Use an algorithm that will preserve the contrast and edges in the image |
| pixelated | If the image is scaled up, the nearest-neighbor algorithm is used, so the image will appear as being composed of large pixels. If the image is scaled down, it will be the same as auto |

**mask-image**

- jedna se slika prikazuje preko druge, npr. pozadinska slika preko loga

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | This is default |
| image | An image to use as the mask layer |
| url | An url reference to an image or an SVG <mask> element |

**mask-mode**

- razni modovi kako se maska koristi, radi samo za Firefox

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| match-source | If the mask-image property is an image (an image URL or a gradient), set mask-mode to alpha. If the mask-image property is an SVG <mask> element, use the <mask> element's mask-type property. This is default. |
| luminance | Use the luminance values of the mask image as the mask values |
| alpha | Use the alpha values of the mask image as the mask values |

**mask-origin**

- originalna pozicija maskiranog sloja na slici

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| border-box | The position is relative to the border box. This is default |
| content-box | The position is relative to the content box |
| padding-box | The position is relative to the padding box |
| margin-box | The position is relative to the margin box |
| fill-box | The position is relative to the object bounding box |
| stroke-box | The position is relative to the stroke bounding box |
| view-box | Use the nearest SVG viewport as reference box |

**mask-position**

- početna pozicija maske u odnosu na mask position area

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| left top left center left bottom right top right center right bottom center top center center center bottom | If you only specify one keyword, the other value will be "center" |
| x% y% | The first value is the horizontal position and the second value is the vertical. The top left corner is 0% 0%. The right bottom corner is 100% 100%. If you only specify one value, the other value will be 50%. Default value is: 0% 0% |
| xpos ypos | The first value is the horizontal position and the second value is the vertical. The top left corner is 0 0. Units can be pixels (0px 0px) or any other CSS unit. If you only specify one value, the other value will be 50%. You can mix % and positions |

**mask-repeat**

- treba li se maska i kako ponavljati

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| repeat | The mask image is repeated both vertically and horizontally. The last image will be clipped if it does not fit. This is default |
| repeat-x | The mask image is repeated only horizontally |
| repeat-y | The mask image is repeated only vertically |
| space | The mask image is repeated as much as possible without clipping. The first and last image is pinned to either side of the element, and whitespace is distributed evenly between the images |
| round | The mask image is repeated and squished or stretched to fill the space (no gaps) |
| no-repeat | The mask image is not repeated. The image will only be shown once |

**mask-size**

- veličina maske

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | This is default |
| *size* | Specifies the size of the mask image in px, em, etc, or in % |
| contain | Scales the mask image in a way that both its width and its height fit inside the container |
| cover | Scales the mask image in a way that both its width and its height cover the container |

**mix-blend-mode**

- kako se sadržaj elementa treba stopiti s pozadinom direktnog parenta

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | This is default. Sets the blending mode to normal |
| multiply | Sets the blending mode to multiply |
| screen | Sets the blending mode to screen |
| overlay | Sets the blending mode to overlay |
| darken | Sets the blending mode to darken |
| lighten | Sets the blending mode to lighten |
| color-dodge | Sets the blending mode to color-dodge |
| color-burn | Sets the blending mode to color-burn |
| difference | Sets the blending mode to difference |
| exclusion | Sets the blending mode to exclusion |
| hue | Sets the blending mode to hue |
| saturation | Sets the blending mode to saturation |
| color | Sets the blending mode to color |
| luminosity | Sets the blending mode to luminosity |

**object-fit**

- kako će se <img> ili <video> resizeat da bi stao u svoj kontejner

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| fill | This is default. The replaced content is sized to fill the element's content box. If necessary, the object will be stretched or squished to fit |
| contain | The replaced content is scaled to maintain its aspect ratio while fitting within the element's content box |
| cover | The replaced content is sized to maintain its aspect ratio while filling the element's entire content box. The object will be clipped to fit |
| none | The replaced content is not resized |
| scale-down | The content is sized as if none or contain were specified (would result in a smaller concrete object size) |

**overflow-wrap**

- smije li browser prerezati dugačke riječi koje bi overflowale kontejner

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | Long words will not break, even if they overflow the container. This is default |
| anywhere | Long words will break if they overflow the container |
| break-word | Long words will break if they overflow the container |

**perspective**

- child elementu dodaje perspektivu, što se koristi za 3D prikaz

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| length | How far the element is placed from the view |
| none | Default value. Same as 0. The perspective is not set |

**perspective-origin**

- child elementu se dodaje perspektiva, a ovo definira iz koje se pozicije gleda 3D element

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| x-axis | Defining where the view is placed at the x-axis  Possible values:  left  center  right  length  %  Default value: 50% |
| y-axis | Defining where the view is placed at the y-axis  Possible values:  top  center  bottom  length  %  Default value: 50% |

**resize**

- definira može li korisnik i kako mijenjati veličinu elementa, ne primjenjuje se na inline elemente ili na block elemente gdje je overflow=“visible“, overflow treba biti scroll, auto ili hidden

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default value. The user cannot resize the element |
| both | The user can resize both the height and width of the element |
| horizontal | The user can resize the width of the element |
| vertical | The user can resize the height of the element |

**table-layout**

- definira algoritam za postavljanje ćelija, redaka i stupaca u tablicu, kod table-layout:fixed; stvara se dojam da se tablica i stranica puno brže učitavaju

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | *Browsers use an automatic table layout algorithm. The column width is set by the widest unbreakable content in the cells. The content will dictate the layout* |
| fixed | *Sets a fixed table layout algorithm. The table and column widths are set by the widths of table and col or by the width of the first row of cells. Cells in other rows do not affect column widths. If no widths are present on the first row, the column widths are divided equally across the table, regardless of content inside the cells* |

# UREĐIVANJE TEKSTA I FONTA

Slova, riječi, fontovi…

**direction**

- usmjerenje teksta ili pisanje unutar block-level elementa, najbolje koristiti zajedno s unicode-bidi

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| ltr | Text direction goes from left-to-right. This is default |
| rtl | Text direction goes from right-to-left |

**font-feature-settings**

- dodaje napredne typografske mogućnosti u opentype fontovima

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | Default. Use the default settings to lay out text |
| *feature-value* | Format: string [1|0|on|off] Always a string of 4 ASCII characters. |

**font-kerning**

- širina slova

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default. The browser determines whether font kerning should be applied or not |
| normal | Specifies that font kerning is applied |
| none | Specifies that font kerning is not applied |

**font-size-adjust**

- kod različitih font-familyja slova su različite veličine, ovo ih izjednačava. Korisno u situaciji kad prvi izabrani font nije dostupan, a drugi zbog drugačije veličine poremeti izgled stranice

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| number | Defines the aspect value to use |
| none | Default value. No font size adjustment |

**font-stretch**

- neki font-family daju širu i užu varijantu slova

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| ultra-condensed | Makes the text as narrow as it gets |
| extra-condensed | Makes the text narrower than condensed, but not as narrow as ultra-condensed |
| condensed | Makes the text narrower than semi-condensed, but not as narrow as extra-condensed |
| semi-condensed | Makes the text narrower than normal, but not as narrow as condensed |
| normal | Default value. No font stretching |
| semi-expanded | Makes the text wider than normal, but not as wide as expanded |
| expanded | Makes the text wider than semi-expanded, but not as wide as extra-expanded |
| extra-expanded | Makes the text wider than expanded, but not as wide as ultra-expanded |
| ultra-expanded | Makes the text as wide as it gets |

**font-style**

- hoće li tekst biti običan ili ukošen

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | The browser displays a normal font style. This is default |
| italic | The browser displays an italic font style |
| oblique | The browser displays an oblique font style |

**font-variant**

- tekst napiše u velikim tiskanim slovima, ali su stara velika slova ipak veća od malih koja su postala velika

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | The browser displays a normal font. This is default |
| small-caps | The browser displays a small-caps font |

**font-variant-caps**

- dodatne mogućnosti za font-variant

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | Deactivates the use of alternate glyphs |
| small-caps | Displays small capitals |
| all-small-caps | Displays small capitals for both upper and lowercase letters |
| petite-caps | Displays petite capitals |
| all-petite-caps | Displays petite capitals for both upper and lowercase letters |
| unicase | Displays a mix of small capitals for uppercase letters with normal lowercase letters |
| titling-caps | Displays titling capitals |
| unset |  |

**hanging-punctuation**

- mogu li interpunkcijski znakovi biti izvan line boxa

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | No punctuation mark may be placed outside the line box at the start or at the end of a full line of text |
| first | Punctuation may hang outside the start edge of the first line |
| last | Punctuation may hang outside the end edge of the last line |
| allow-end | Punctuation may hang outside the end edge of all lines if the punctuation does not otherwise fit prior to justification |
| force-end | Punctuation may hang outside the end edge of all lines. If justification is enabled on this line, then it will force the punctuation to hang |

**hyphens**

- lomljenje dugih riječi s – ili razmacima ukoliko je potrebno

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Words are not hyphenated |
| manual | Default. Words are only hyphenated at &hyphen; or &shy; (if needed) |
| auto | Words are hyphenated where the algorithm is deciding (if needed) |

**quotes**

- postavlja vrstu navodnika

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Specifies that the "open-quote" and "close-quote" values of the "content" property will not produce any quotation marks |
| string string string string | Specifies which quotation marks to use. The first two values specifies the first level of quotation embedding, the next two values specifies the next level of quote embedding, etc |

**tab-size**

- širina prostora kod pritisnute tab tipke, vidljivo jedino kod <textarea> i <pre> elemenata

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| *number* | The number of space-characters to be displayed for each tab-character. Default value is 8 |
| *length* | The length of a tab-character. This property value is not supported in any of the major browsers |

**text-align-last**

- kako će se poravnati posljednja linija u tekstu (odnosi se na sve zadnje rečenice u svakom odlomku unutar elementa)

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default value. The last line is justified and aligned left |
| left | The last line is aligned to the left |
| right | The last line is aligned to the right |
| center | The last line is center-aligned |
| justify | The last line is justified as the rest of the lines |
| start | The last line is aligned at the beginning of the line (left if the text-direction is left-to-right, and right is the text-direction is right-to-left) |
| end | The last line is aligned at the end of the line (right if the text-direction is left-to-right, and left is the text-direction is right-to-left) |

**text-indent**

- uvučena prva linija u bloku teksta, dozvoljene i negativne vrijednosti

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| length | Defines a fixed indentation in px, pt, cm, em, etc. Default value is 0. |
| % | Defines the indentation in % of the width of the parent element |

**text-justify**

način poravnavanje teksta kad je izabran text-align:justify;

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | The browser determines the justification algorithm |
| inter-word | Increases/Decreases the space between words |
| inter-character | Increases/Decreases the space between characters |
| none | Disables justification methods |

**text-overflow**

- način na koji se prikazuje sadržaj koji je overflowan

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| clip | Default value. The text is clipped and not accessible |
| ellipsis | Render an ellipsis ("...") to represent the clipped text |
| string | Render the given string to represent the clipped text |

**text-transform**

- transformira slova u velika ili mala

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | No capitalization. The text renders as it is. This is default |
| capitalize | Transforms the first character of each word to uppercase |
| uppercase | Transforms all characters to uppercase |
| lowercase | Transforms all characters to lowercase |

**unicode-bidi**

- koristi se zajedno s direction property da bi se omogućilo korištenje više tekstova unutar dokumenta

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | The element does not open an additional level of embedding. This is default |
| embed | For inline elements, this value opens an additional level of embedding |
| bidi-override | For inline elements, this creates an override. For block elements, this creates an override for inline-level descendants not within another block element |
| isolate | The element is isolated from its siblings |
| isolate-override |  |
| plaintext |  |

**white-space**

- kako se barata razmacima unutar elementa, hoće li ih se prikazati ili ne

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | Sequences of whitespace will collapse into a single whitespace. Text will wrap when necessary. This is default |
| nowrap | Sequences of whitespace will collapse into a single whitespace. Text will never wrap to the next line. The text continues on the same line until a <br> tag is encountered |
| pre | Whitespace is preserved by the browser. Text will only wrap on line breaks. Acts like the <pre> tag in HTML |
| pre-line | Sequences of whitespace will collapse into a single whitespace. Text will wrap when necessary, and on line breaks |
| pre-wrap | Whitespace is preserved by the browser. Text will wrap when necessary, and on line breaks |

**word-break**

- način na koji će se riječi prekinuti kad dođu do kraja retka

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | Default value. Uses default line break rules |
| break-all | To prevent overflow, word may be broken at any character |
| keep-all | Word breaks should not be used for Chinese/Japanese/Korean (CJK) text. Non-CJK text behavior is the same as value "normal" |
| break-word | To prevent overflow, word may be broken at arbitrary points |

**word-spacing**

- povećava ili smanjuje veličinu razmaka između riječi, mogu i negativne vrijednosti

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | Defines normal space between words (0.25em) . This is default |
| length | Defines an additional space between words (in px, pt, cm, em, etc). Negative values are allowed. |

**word-wrap**

- dugačke riječi se prelamaju u drugi red

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| normal | Break words only at allowed break points. This is default |
| break-word | Allows unbreakable words to be broken |

**writing-mode**

- hoće li se tekst pisati horizontalno ili vertikalno

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| horizontal-tb | Let the content flow horizontally from left to right, vertically from top to bottom |
| vertical-rl | Let the content flow vertically from top to bottom, horizontally from right to left |
| vertical-lr | Let the content flow vertically from top to bottom, horizontally from left to right |

# LISTE

Uređivanje listi

**list-style-image**

- listama umjesto točke dodaje sliku

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | No image will be displayed. Instead, the list-style-type property will define what type of list marker will be rendered. This is default |
| url | The path to the image to be used as a list-item marker |

**list-style-position**

- pozicija točke kod listi u odnosu na obrub elementa

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| inside | The bullet points will be inside the list item |
| outside | The bullet points will be outside the list item. This is default |

**list-style-type**

- vrsta točki na listama

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| disc | Default value. The marker is a filled circle |
| armenian | The marker is traditional Armenian numbering |
| circle | The marker is a circle |
| cjk-ideographic | The marker is plain ideographic numbers |
| decimal | The marker is a number |
| decimal-leading-zero | The marker is a number with leading zeros (01, 02, 03, etc.) |
| georgian | The marker is traditional Georgian numbering |
| hebrew | The marker is traditional Hebrew numbering |
| hiragana | The marker is traditional Hiragana numbering |
| hiragana-iroha | The marker is traditional Hiragana iroha numbering |
| katakana | The marker is traditional Katakana numbering |
| katakana-iroha | The marker is traditional Katakana iroha numbering |
| lower-alpha | The marker is lower-alpha (a, b, c, d, e, etc.) |
| lower-greek | The marker is lower-greek |
| lower-latin | The marker is lower-latin (a, b, c, d, e, etc.) |
| lower-roman | The marker is lower-roman (i, ii, iii, iv, v, etc.) |
| none | No marker is shown |
| square | The marker is a square |
| upper-alpha | The marker is upper-alpha (A, B, C, D, E, etc.) |
| upper-greek | The marker is upper-greek |
| upper-latin | The marker is upper-latin (A, B, C, D, E, etc.) |
| upper-roman | The marker is upper-roman (I, II, III, IV, V, etc.) |

# RAZNO

Ostale naredbe

**counter-increment**

- povećava ili smanjuje vrijednost jednog ili više CSS brojača

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default value. No counters will be incremented |
| id number | The id defines which counter to increment. The number sets how much the counter will increment on each occurrence of the selector. The default increment is 1. Negative values are allowed. If id refers to a counter that has not been initialized by counter-reset, the default initial value is 0 |

**counter-reset**

- stvara ili resetira CSS brojače. Često se koristi s ::before ili ::after pseudoelementima

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| none | Default value. No counters will be reset |
| id number | The id defines which counter to reset. The number sets the value the counter is reset to on each occurrence of the selector. The default *number* value is 0 |

**isolation**

- treba li element stvoriti novi stacking content. Korisno je s background-blend-mode ili mix-blend-mode

|  |  |
| --- | --- |
| **VRIJEDNOST** | **OPIS** |
| auto | Default. A new stacking context is created only if one of the properties applied to the element requires it |
| isolate | A new stacking context must be created |