



Here's a comprehensive CSS cheatsheet to help you with common CSS properties, values, and concepts:

### Selectors

- `*` - Universal selector, selects all elements.
- `element` - Selects all instances of the element (e.g., `p`).
- `.class` - Selects all elements with the specified class (e.g., `.header`).
- `#id` - Selects the element with the specified ID (e.g., `#main`).
- `element, element` - Groups multiple selectors (e.g., `h1, h2`).
- `element element` - Selects all descendants (e.g., `div p`).
- `element > element` - Selects direct children (e.g., `div > p`).
- `element + element` - Selects the adjacent sibling (e.g., `h1 + p`).
- `element ~ element` - Selects siblings after the specified element (e.g., `h1 ~ p`).
- `element[attr="value"]` - Attribute selector (e.g., `input[type="text"]`).

### Box Model

- `width, height` - Sets the element's width and height.
- `padding` - Space inside the element, between content and border.
- `border` - Border around the element.
- `margin` - Space outside the element, between the border and other elements.
- `box-sizing` - Determines if padding and border are included in width/height (content-box or border-box).

### Positioning

- `position` - Specifies the positioning method (static, relative, absolute, fixed, sticky).
- `top, right, bottom, left` - Offsets for positioned elements.
- `z-index` - Stacking order for overlapping elements.

### Display and Visibility

- `display` - Determines how the element is displayed (block, inline, inline-block, none, flex, grid, etc.).
- `visibility` - Controls the visibility without affecting layout (visible, hidden).

### Flexbox

- `display: flex` - Activates Flexbox on a container.
- `flex-direction` - Defines the main axis direction (row, row-reverse, column, column-reverse).
- `justify-content` - Aligns items along the main axis (flex-start, center, space-between, etc.).
- `align-items` - Aligns items along the cross axis (flex-start, center, stretch, etc.).
- `flex-wrap` - Controls whether items wrap to the next line (nowrap, wrap, wrap-reverse).
- `align-self` - Overrides align-items for individual flex items.

### **Grid Layout**

- `display: grid` - Activates Grid Layout on a container.
- `grid-template-columns`, `grid-template-rows` - Defines the columns and rows.
- `grid-column`, `grid-row` - Specifies the start and end lines for an item.
- `gap` - Sets the spacing between grid items.
- `align-items`, `justify-items` - Aligns items within their grid cells.

### **Typography**

- `font-family` - Specifies the font (e.g., Arial, sans-serif).
- `font-size` - Sets the size of the text.
- `font-weight` - Sets the thickness (normal, bold, 400, 700, etc.).
- `font-style` - Controls the style (normal, italic, oblique).
- `line-height` - Sets the space between lines of text.
- `text-align` - Aligns text (left, right, center, justify).
- `text-decoration` - Adds decoration (none, underline, overline, line-through).
- `text-transform` - Controls text case (uppercase, lowercase, capitalize).
- `letter-spacing` - Adjusts the space between characters.
- `color` - Sets the text color.

### **Background**

- `background-color` - Sets the background color.
- `background-image` - Sets a background image (`url('image.jpg')`).
- `background-repeat` - Controls repeating of the background image (repeat, no-repeat, repeat-x, repeat-y).
- `background-size` - Defines the size of the background image (auto, cover, contain).
- `background-position` - Positions the background image (top, center, bottom, etc.).

### **Borders**

- border - Sets border width, style, and color (e.g., 1px solid black).
- border-radius - Rounds the corners of an element.
- border-color - Sets the color of the border.
- border-width - Sets the width of the border.
- border-style - Sets the style of the border (solid, dashed, dotted, etc.).

## Colors

- color - Text color.
- background-color - Background color.
- border-color - Border color.
- CSS Color Values:
  - Named colors: red, blue, green, etc.
  - HEX: #ff0000 for red.
  - RGB: rgb(255, 0, 0) for red.
  - RGBA: rgba(255, 0, 0, 0.5) for red with 50% opacity.
  - HSL: hsl(0, 100%, 50%) for red.

## Pseudoclasses

- :hover - Applies when the user hovers over an element.
- :focus - Applies when the element is focused (e.g., input).
- :active - Applies when the element is being clicked.
- :nth-child(n) - Selects the nth child (e.g., :nth-child(2)).
- :first-child, :last-child - Selects the first or last child.
- :not(selector) - Selects elements that do not match the selector.

## Pseudoelements

- ::before - Inserts content before the element's content.
- ::after - Inserts content after the element's content.
- ::first-letter - Styles the first letter of the element.
- ::first-line - Styles the first line of the element.

## Transitions and Animations

- transition - Adds transition effects to properties (e.g., transition: all 0.3s ease).
- animation - Defines an animation (e.g., animation: slidein 3s infinite).
- @keyframes - Defines the keyframes for an animation.

## Media Queries

- @media - Applies styles based on screen size or other media features.

CSS

Copy code

```
@media (max-width: 600px) {  
  body {  
    background-color: lightblue;  
  }  
}
```

## Responsive Design

- max-width - Restricts the width to a maximum value.
- min-width - Sets a minimum width.
- height, max-height, min-height - Similar to width properties.
- vh, vw - Units relative to viewport height and width.
- em, rem - Relative units based on font size.

## Miscellaneous

- overflow - Controls the content that overflows its container (visible, hidden, scroll, auto).
- opacity - Sets the opacity of an element (0 to 1).
- visibility - Controls whether an element is visible (visible, hidden).
- cursor - Changes the cursor when hovering over the element (e.g., pointer, default, text).