CSS Rule Precedence

* Origin and importance
  + user agent important declarations
  + user important declarations
  + author important declarations
  + author normal declarations
  + user normal declarations
  + user agent normal declarations
* Specificity

A selector's specificity is calculated as follows:

* count 1 if the declaration is from is a 'style' attribute rather than a rule with a selector, 0 otherwise (= a) (In HTML, values of an element's "style" attribute are style sheet rules. These rules have no selectors, so a=1, b=0, c=0, and d=0.)
* count the number of ID attributes in the selector (= b)
* count the number of other attributes and pseudo-classes in the selector (= c)
* count the number of element names and pseudo-elements in the selector (= d)

The specificity is based only on the form of the selector. In particular, a selector of the form "[id=p33]" is counted as an attribute selector (a=0, b=0, c=1, d=0), even if the id attribute is defined as an "ID" in the source document's DTD.

Concatenating the four numbers a-b-c-d (in a number system with a large base) gives the specificity.

* Order – Finally, sort by order specified: if two declarations have the same weight, origin and specificity, the latter specified wins. Declarations in imported style sheets are considered to be before any declarations in the style sheet itself.

CSS Declaration

* Properties
  + Shorthand Properties - Some properties are shorthand properties, meaning that they allow authors to specify the values of several properties with a single property.
  + Vendor-specific extension (experimental feature)
* Values
  + Keywords - Many CSS property values can be specified as keywords. A keyword is an identifier, and it mustn’t be surrounded by quotation marks. So the correct syntax is background-color: yellow;, whereas background-color: "yellow"; is an error.
  + Numbers – A number can be specified either as an integer or a real number (one that contains a decimal point), and can have an initial - or + to indicate its sign. Numbers can only be specified in decimal notation.
  + Dimension
    - Length
      * Font-relative: em, ex, ch rem
      * Viewport-percentage: vw, vh, vmin, vmax
      * Absolute Lengths: cm, mm, in, px \*, pt, pc
    - Angle units: deg, grad, rad, turn
    - Duration: s, ms
    - Frequency: Hz, kHz
    - Resolution: dpi, dpcm, dppx
  + Percentage - Percentage values are denoted by <percentage>, and indicates a value that is some fraction of another reference value.
  + URI’s and URL’s
  + Colors - The <color> data type is defined in [CSS3COLOR]. UAs that support CSS Color Level 3 or its successor must interpret <color> as defined therein.
  + Strings - Strings are denoted by <string> and consist of a sequence of characters delimited by double quotes or single quotes.
  + Functions - A functional notation is a type of component value that can represent more complex types or invoke special processing.

Sources:

<https://www.w3.org/TR/css3-values/>