**learning Objective**

* Master the algorithm for prefix matching in CSS
* Understand all the universal font families
* Master CSS property settings for basic fonts

**Content**

* Font-family represents the font family in CSS. The font family name can be separated by a comma. The initial font value is determined by the browser settings and can be inherited, with example below.
* ***<!-- HTML -->***
* <h1>**I am a title** </h1>
* <p>**I am a paragraph, I am a paragraph, I am a paragraph...**</p>
* ***<!-- CSS -->***
* <style>
* **H1 {**
* Font-family**: Helvetica, sans-serif;**
* **}**
* **Body {**
* Font-family**: Georgia, serif;**
* **}**
* </style>
* The font matching algorithm is briefed as follows:
  + The browser first gets a list of system fonts
  + For each character in the element, use the font-family attribute and other attributes to match, if it is matched, tentatively set the font
  + If it is not matched in step 2, select the next optional font-family for step 2
  + If it matches a font, but the font does not have it, continue step 2 for the next optional font-family
  + If the font is not matched, use the browser default font
* Universal font family
  + Serif: Georgia, Simsun
  + Sans-Serif: Arial, Helvetica, black body, Microsoft Yahei
  + Cursive handwriting: Caflisch Script, Carcass
  + Fantasy font: Comic Sans MS, Papyrus, Zapfino
  + Monospace font: Consolas, Courier, Chinese font
* When using font-family, English font is placed in front of Chinese font, always followed by universal font family.
* Font-size:
  + Define the size of the text, by using px, percentage, em, etc. as the unit
  + Value:
    - Absolute value: xx-small | x-small | small | medium | large | x-large | xx-large
    - Relative value: larger | smaller
    - Length
    - Percentage, calculated in relation to the parent element
  + The initial value is medium (which is determined by the browser settings; it is usually 16px) and can be inherited.
* The length unit em: it is generally calculated in relation to the font-size of the element. When used in the font-size attribute, it is calculated in relation to the font-size of the parent element.
* Font-style:
  + Define whether the text is displayed in an oblique or normal manner.
  + Value: normal | italic | oblique
  + The initial value is normal and can be inherited.
* Font-weight:
  + Define the thickness of the text
  + Value: normal | bold | bolder | lighter | 100 | 200 | ... | 900
  + The initial value is normal and can be inherited
* Line-height:
  + Define the height of the row where the element belongs
  + The initial value is normal (the specific value is determined by the browser), which can be inherited
  + Value: <length> | <number> | <percentage>
  + Paragraph text generally has a value varying from 1.4 to 1.8
* Font abbreviation: a series of font attributes can be written in one attribute, such as:
* **H1 {**
* ***/\* Italic Thickness Size/Line Height Font Family \*/***
* Font**: bold 14px/1.7 Helvetica, sans-serif;**
* **}**
* text-align:
  + Define the alignment of the text within the container
  + Value: left | right | center | justify
  + The initial value is determined by the dir attribute of HTML, which can be inherited.
* Letter-spacing:
  + Define the spacing between specified characters
  + Value: normal | <length>
  + The initial value is normal and can be inherited
* Word-spacing:
  + Define the spacing between specified words
  + Value: normal | <length>
  + The initial value is normal and can be inherited
* Text-indent:
  + Define indentation for specified text
  + Value: normal | <length> | <percentage>
  + Initial value is 0 and can be inherited
* Text-decoration:
  + Define some decorative effects of the text, such as underline, line-through, etc.
  + The initial value is none and can be inherited
  + Other values: underline | line-through | overline
* White-space:
  + Define and specify how to handle the specified whitespace characters
  + Value: normal | nowrap | pre
* Word-break:
  + Define and specify whether to allow line breaks in the middle of the word
  + Value: normal | break-all | keep-all

**Recommendations**

* CSS Font (<http://www.w3school.com.cn/css/css_font.asp>)
* Basic Text and Font Styles (<<https://developer.mozilla.org/en-us/docs/Learn/CSS/%E4%B8%BA%E6%96%87%E6%9C%AC%E6%B7> %BB%E5%8A%A0%E6%A0%B7%E5%BC%8F/Fundamentals>)
* CSS Font Category (<https://www.w3.org/Style/Examples/007/fonts.zh_CN.html>)