

## 21.3 Use stylesheets

Syllabus 2026 - 2028

### WHAT YOU NEED TO KNOW

- Use CSS in the presentation layer: external styles, inline style attributes, classes, background, font and table properties, comments, saving as .css
- Know and understand: cascading, attached stylesheets versus inline styles, hierarchy, the difference between a style and a class, and why relative paths are used for attached stylesheets

### What is CSS?

Cascading style sheets (CSS) make up the presentation layer. A stylesheet is a text file saved with the extension **.css** that holds the formatting rules for a web page. Each rule has a **selector** (what to format) and **declarations** in braces (how to format it). Comments are written between `/*` and `*/`.

```
/* Main stylesheet for the school website */
h1 {
  font-family: Arial, sans-serif;
  font-size: 24pt;
  color: #2f6fb0;
  text-align: center;
}
p {
  font-size: 12pt;
  font-style: italic;
}
```

### Attaching a stylesheet

```
<head>
  <link rel="stylesheet" href="css/style.css">
</head>
```

- Use a **relative file path** in href so that the stylesheet is still found when the website is copied or uploaded to a server
- An absolute path such as `C:\Site\css\style.css` only exists on one computer, so the styles would be lost elsewhere

### Common properties

| Group               | Properties and examples                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------------------------------|
| Font                | font-family: Arial; font-size: 14pt; color: red; text-align: center; font-weight: bold; font-style: italic;          |
| Background          | background-color: #f5f7fa; background-image: url("../images/bg.png");                                                |
| Table               | width: 80%; height: 40px; background-color: yellow; text-align: center; vertical-align: middle;                      |
| Spacing and padding | padding: 5px (space inside a cell); border-spacing: 2px (space between cells)                                        |
| Borders             | border: 2px solid black; border-collapse: collapse; (merges borders into one line); border: none; (invisible border) |

```
table {
  width: 90%;
  border-collapse: collapse;
}
th, td {
  border: 1px solid #333;
  padding: 6px;
  text-align: left;
  vertical-align: top;
}
th { background-color: #1f2d3d; color: white; }
```

## Styles, classes and inline styles

| Type                        | How it is written                                                        | Applies to                                                                        |
|-----------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Style (tag selector)</b> | h2 { color: blue; }                                                      | Every h2 element on the page that uses the stylesheet.                            |
| <b>Class</b>                | .warning { color: red; font-weight: bold; }<br>used with class="warning" | Only the elements given that class. Can be used with any tag and used many times. |
| <b>Inline style</b>         | <p style="color: green;">                                                | Only that single element.                                                         |

**Difference between a style and a class:** a style (tag selector) is applied automatically to every element of that tag, while a class is applied only where the class name is written in the element's class attribute.

```
<p class="warning">Do not run in the corridor.</p>
<td class="total">120</td>
```

## Hierarchy (cascade)

When more than one rule applies to an element, the browser decides which one wins.

- An **inline style** on an element overrides an attached stylesheet
- With several attached stylesheets, they are applied in the order they appear in the head. If two rules conflict, the one in the stylesheet attached **last** wins
- A class is more specific than a tag selector, so it normally overrides it
- Properties that are not in conflict are all applied, so the styles combine (cascade)

| Advantages                                                                          | Disadvantages                                                                      |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| + An attached stylesheet changes every page that uses it, so the site is consistent | - Inline styles must be repeated on every element, so they take longer to update   |
| + Saves time: formatting is written once                                            | - If the stylesheet is not found (wrong path), the page loses its formatting       |
| + Less code in each page, and pages load faster once the stylesheet is stored       | - Conflicting rules can give unexpected results if the hierarchy is not understood |

### EXAM TIP

Rule of thumb for the order: external stylesheets in the order attached, then inline styles last (inline wins). Also be careful with syntax: property, colon, value, semicolon; and use braces around the declarations.

## Key terms

| Term                       | Meaning                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------|
| <b>CSS</b>                 | Cascading style sheets: the language used for the presentation layer.                                   |
| <b>Selector</b>            | The part of a rule that says which element is formatted.                                                |
| <b>Class</b>               | A named style applied only to the elements that use it.                                                 |
| <b>Inline style</b>        | A style written in the style attribute of a single element.                                             |
| <b>External stylesheet</b> | A .css file attached to one or more pages with a link tag.                                              |
| <b>Relative path</b>       | A file location written from the position of the current page; it keeps working when the site is moved. |