Web and Mobile App Development Course

WMA LEC # 15

CSS

Cascading Style Sheets

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Introduction to CSS

CSS allows you to create rules that specify how the content of an element should appear.

For example, you can specify that the background of the page is cream, all paragraphs should appear in gray using the Arial typeface, or that all level one headings should be in a blue, italic, Times typeface.

The key to understanding how CSS works is to imagine that there is an invisible box around every HTML element.

The Cottage Garden

The *cottage garden* is a distinct style of garden that uses an informal design, dense plantings, and a mixture of ornamental and edible plants.

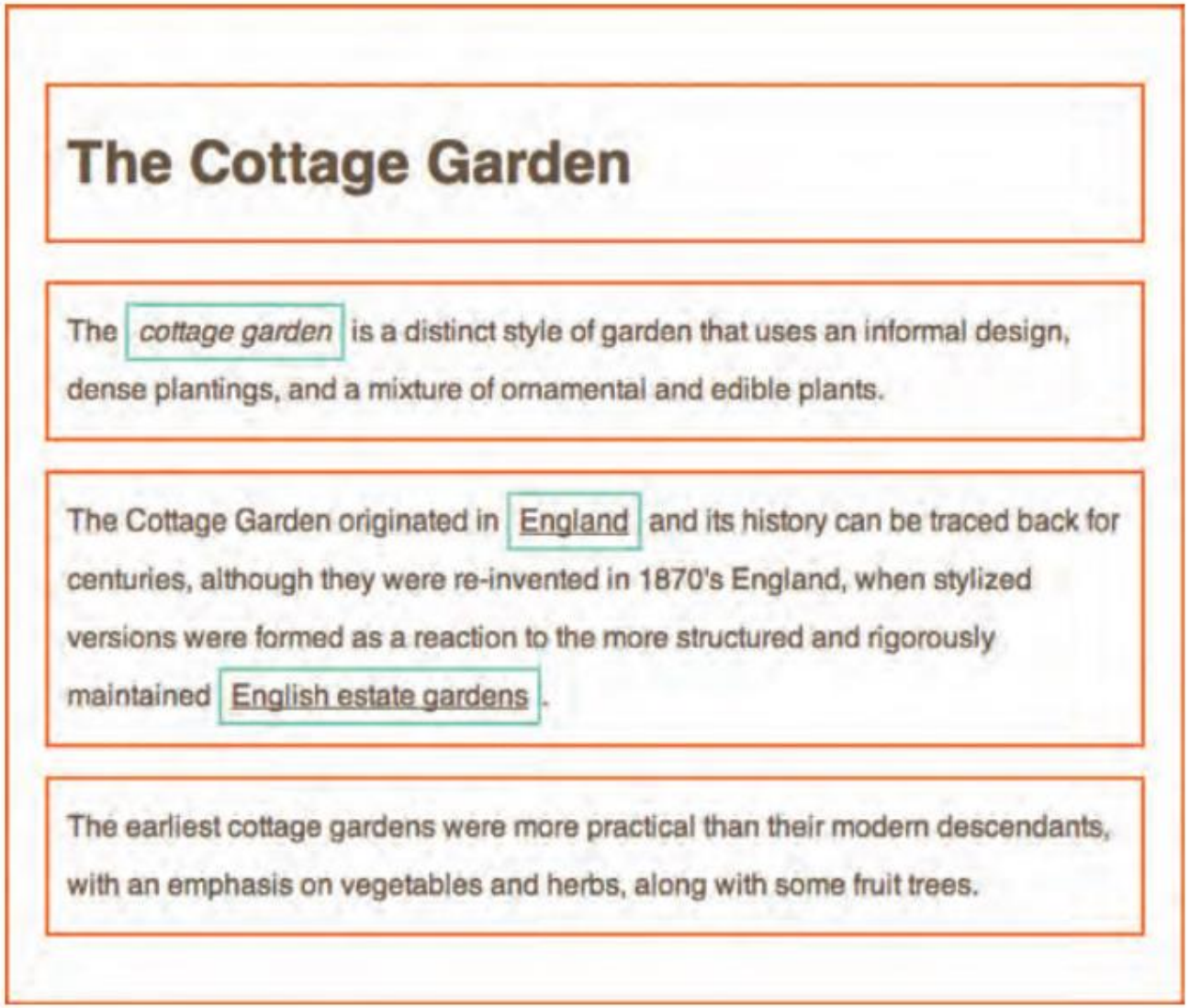
The Cottage Garden originated in England and its history can be traced back for centuries, although they were re-invented in 1870's England, when stylized versions were formed as a reaction to the more structured and rigorously maintained English estate gardens.

The earliest cottage gardens were more practical than their modern descendants, with an emphasis on vegetables and herbs, along with some fruit trees.

BLOCK & INLINE ELEMENTS

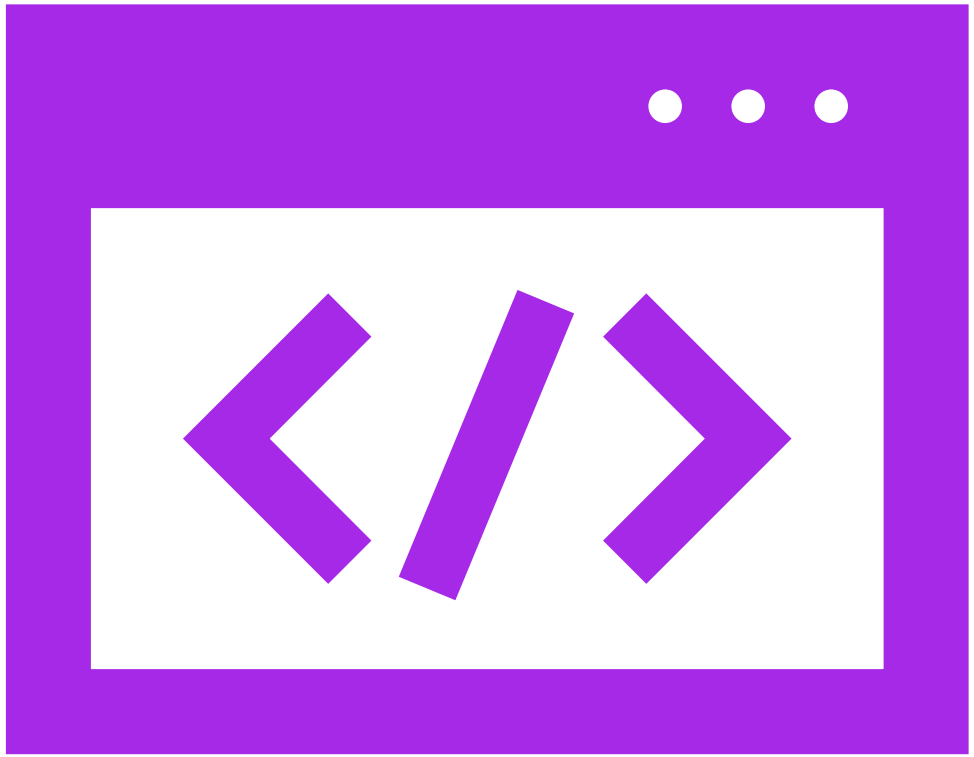
- Block level elements look like they start on a new line.
- Inline elements flow within the text and do not start on a new line.

- In this example, block level elements are shown with red borders, and inline elements have green borders.



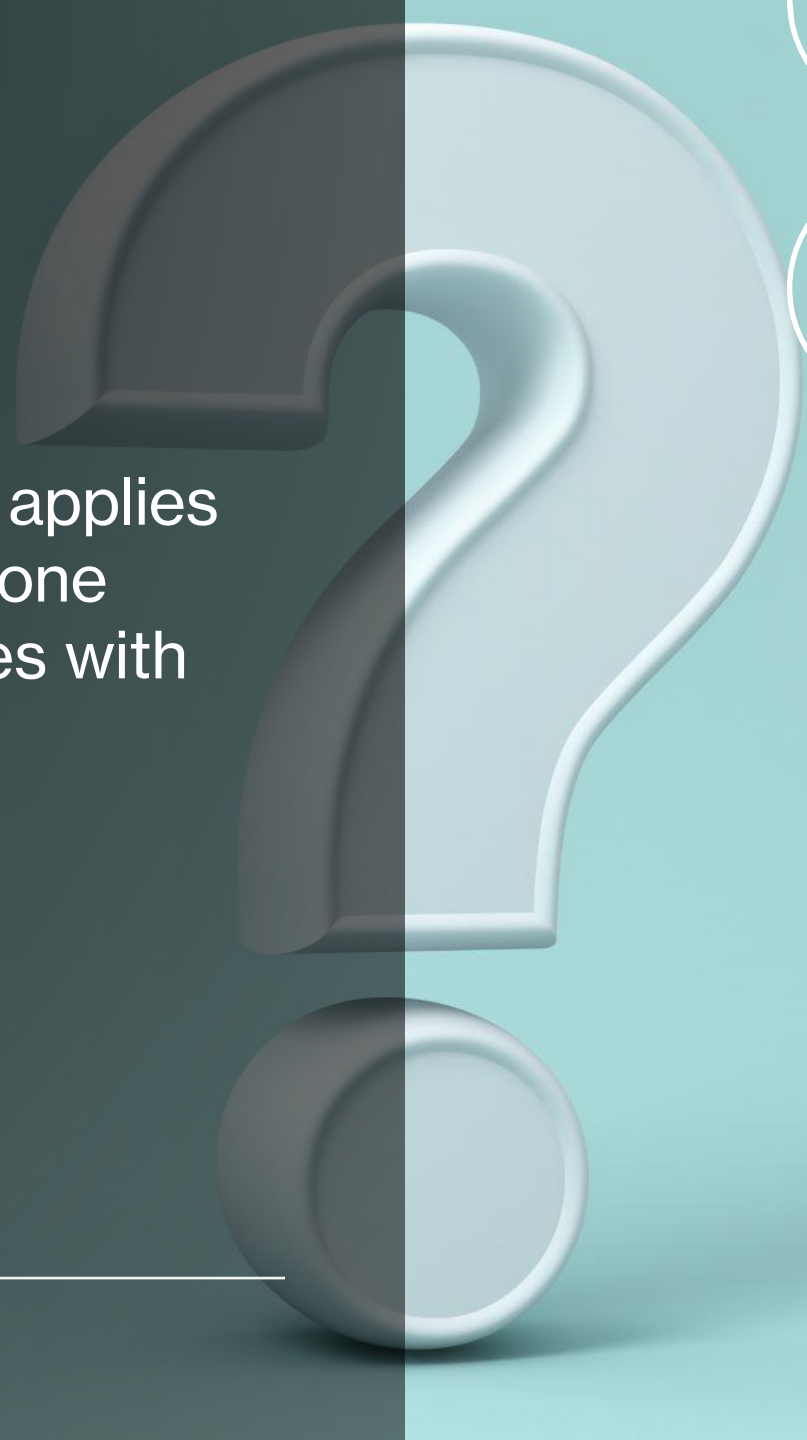
CSS Associates Style rules with HTML elements

A CSS rule contains two parts: **a selector** and **a declaration.**



Selector

Selectors indicate which element the rule applies to. The same rule can apply to more than one element if you separate the element names with commas.



Declaration

Declarations indicate how the elements referred to in the selector should be styled.

Declarations are split into **two parts** (a **property** and a **value**) and are separated by a colon.

Property

Properties indicate the aspects of the element you want to change.

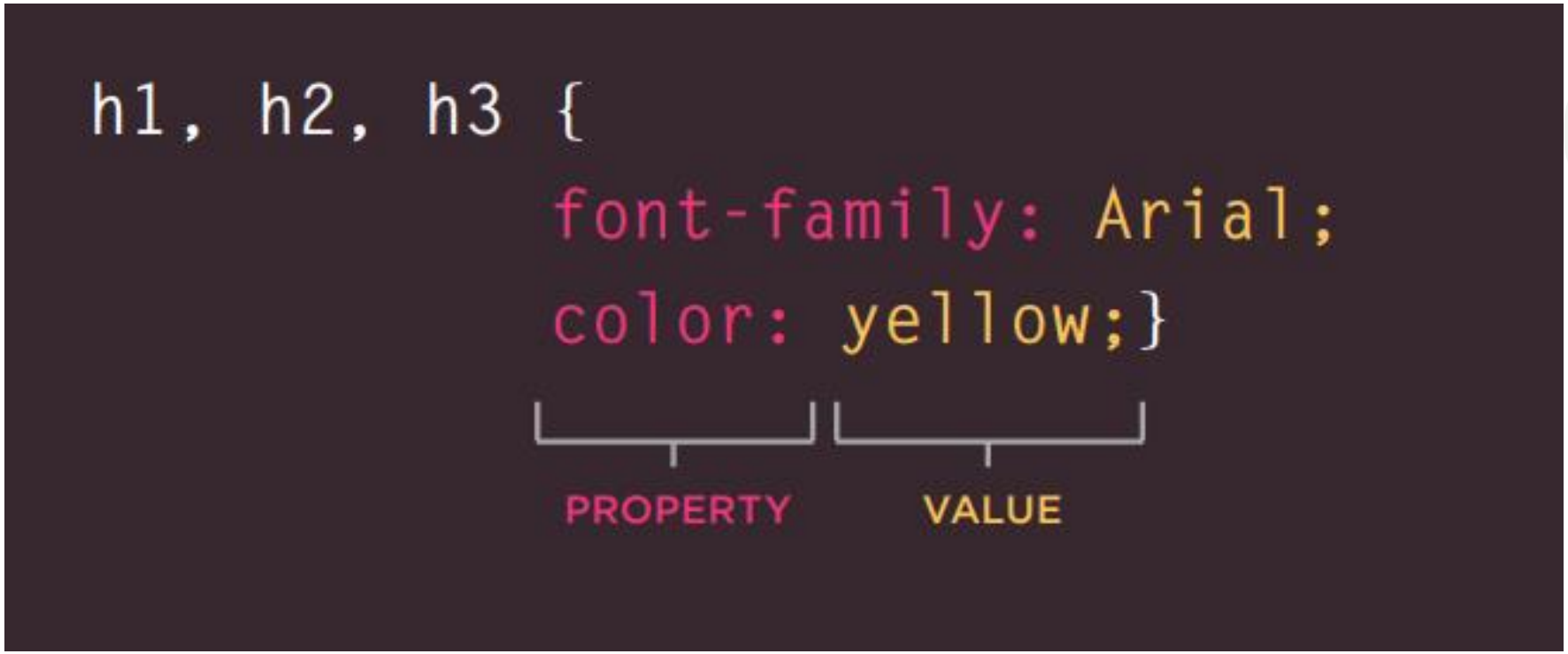
For example, color, font, width, height and border.

Value

Values specify the settings you want to use for the chosen properties.

For example, if you want to specify a color property then the value is the color you want the text in these elements to be.

This rule indicates that all elements should be shown in the Arial typeface.



CSS Properties Affect How Elements Are Displayed

You can specify several properties in one declaration, each separated by a semi-colon.

Types of CSS

- Inline CSS
- Internal CSS
- External CSS

Inline CSS

- `<h1 style="background-color: aliceblue; color:red;">From Garden to Plate</h1>`
- Written as attributes in HTML element.
- Have to do it separately for each element.

Not much recommended due to re-work for each element styling.

Internal CSS

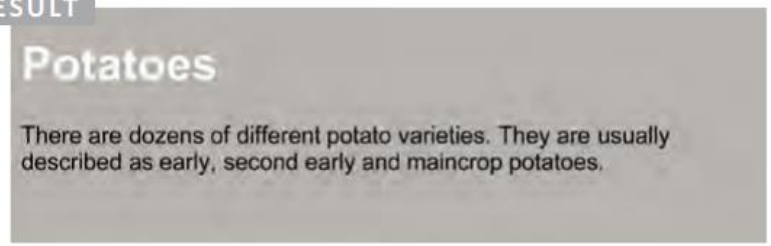
Uses <style> </style> tag in <head> tag of HTML File.

Example

HTML + CSS chapter-10/using-internal-css.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Using Internal CSS</title>
    <style type="text/css">
      body {
          font-family: arial;
          background-color: rgb(185,179,175);}
      h1 {
          color: rgb(255,255,255);}
    </style>
  </head>
  <body>
    <h1>Potatoes</h1>
    <p>There are dozens of different potato
       varieties. They are usually described as
       early, second early and maincrop.</p>
  </body>
</html>
```

RESULT



External CSS

The **<link>** element can be used in an HTML document to tell the browser where to find the CSS file used to style the page.

It is an empty element (meaning it does not need a closing tag), and it lives inside the <head> element

Example

chapter-10/using-external-css.html HTML

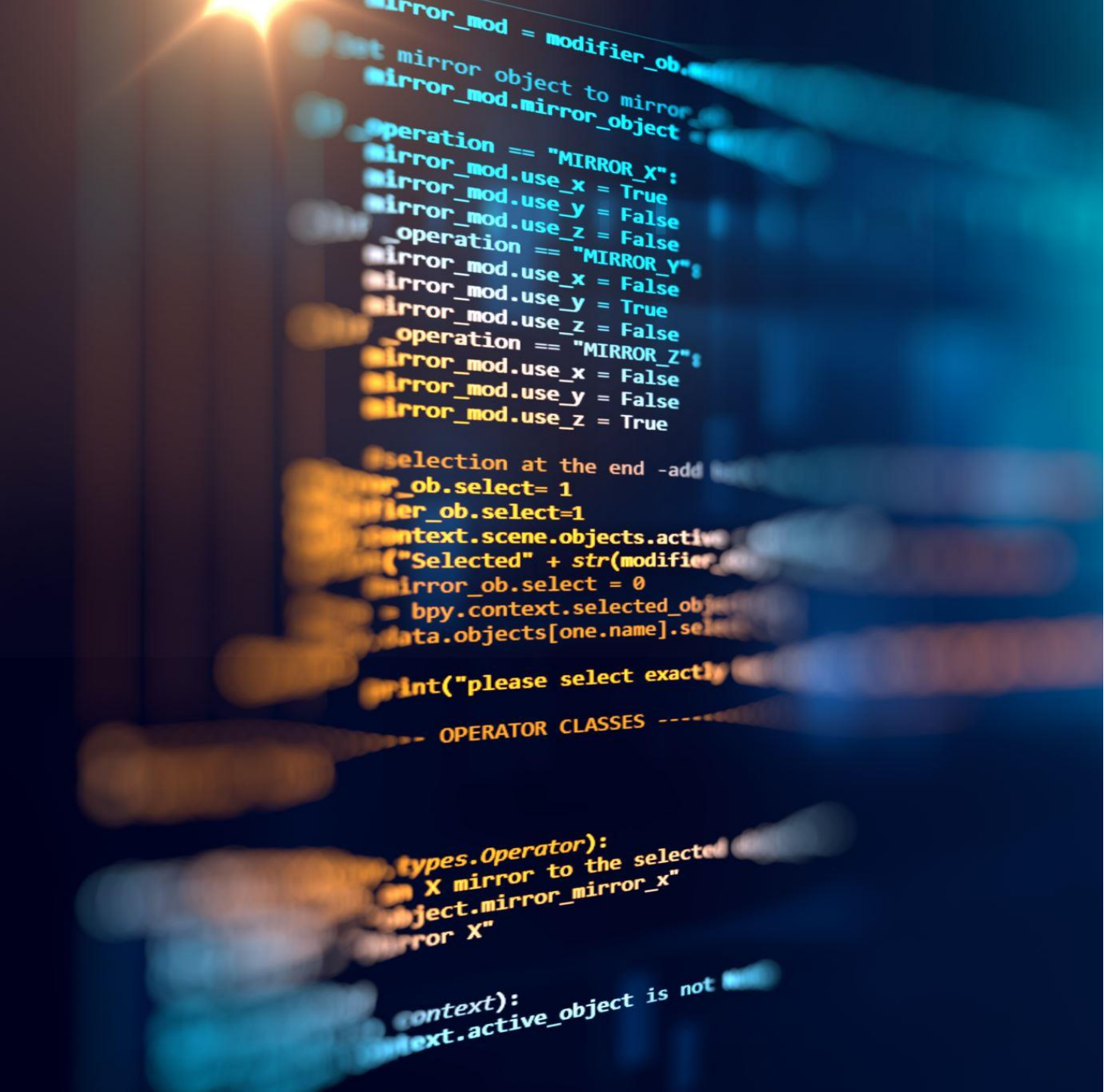
```html
<!DOCTYPE html>
<html>
  <head>
    <title>Using External CSS</title>
    <link href="css/styles.css" type="text/css"
      rel="stylesheet" />
  </head>
  <body>
    <h1>Potatoes</h1>
    <p>There are dozens of different potato
       varieties. They are usually described as
       early, second early and maincrop.</p>
  </body>
</html>
```

chapter-10/styles.css CSS

```css
body {
    font-family: arial;
    background-color: rgb(185,179,175);}
h1 {
    color: rgb(255,255,255);}
```

Href Attribute

This specifies the path to the CSS file (which is often placed in a folder called css or styles).



Rel Attribute

This specifies the relationship between the HTML page and the file it is linked to.

The value should be stylesheet when linking to a CSS file.

Selectors

Internal and External CSS uses Selectors. There are various types of selectors, few of them are:

SELECTOR	MEANING	EXAMPLE
UNIVERSAL SELECTOR	Applies to all elements in the document	`* {}` Targets all elements on the page
TYPE SELECTOR	Matches element names	`h1, h2, h3 {}` Targets the <h1>, <h2> and <h3> elements

CLASS SELECTOR	Matches an element whose `class` attribute has a value that matches the one specified after the period (or full stop) symbol	`.note {}`
		Targets any element whose `class` attribute has a value of `note`
		`p.note {}`
		Targets only <p> elements whose `class` attribute has a value of `note`

ID SELECTOR	Matches an element whose `id` attribute has a value that matches the one specified after the pound or hash symbol	`#introduction {}` Targets the element whose `id` attribute has a value of `introduction`