### Styling with CSS

Cascading
Style
Sheets

### Plan for Today:

#### •A few key points:

- New attributes: id and class
- Elements on a page: block and inline
- •Tags: <div> and <span>

#### Introducing Cascading Style Sheets:

- Basic syntax
- •What's Cascading in CSS?
- Why you should ALWAYS use external CSS files
- Basic styling

#### ID ATTRIBUTE

#### Must be unique: only one element per page

```
Water and air. So very commonplace are
these substances, they hardly attraction
attention and yet they vouchsafe our very
existence.
Every time I view the
sea I feel a sense of calming security, as
if visiting my ancestral home; I embark of
a voyage of seeing.
Mystery of mysteries, water and air are
right there before us in the sea.
```

Water and air. So very commonplace are these substances, they hardly attract attention - and yet they vouchsafe our very existence.

EVERY TIME I VIEW THE SEA I FEEL A CALMING SENSE OF SECURITY, AS IF VISITING MY ANCESTRAL HOME; I EMBARK ON A VOYAGE OF SEEING.

Mystery of mysteries, water and air are right there before us in the sea.

#### CLASS ATTRIBUTE

#### Not unique; can have multiple values

```
For a one-year period
from November 2010, the Marugame
Genichiro-Inokuma Museum of Contemporary
Art (MIMOCA) will host...
Each will showcase works by the artist
thematically contextualised under the
headings...
Hours:
10:00 - 18:00 (No admittance after
17:30)
```

FOR A ONE-YEAR PERIOD FROM NOVEMBER 2010, THE MARUGAME GENICHIRO-INOKUMA MUSEUM OF CONTEMPORARY ART (MIMOCA) WILL HOST A CYCLE OF FOUR HIROSHI SUGIMOTO EXHIBITIONS.

Each will showcase works by the artist thematically contextualized under the headings "Science," "Architecture," "History" and "Religion" so as to present a comprehensive panorama of the artist's oeuvre.

HOURS: 10:00 - 18:00 (NO ADMITTANCE AFTER 17:30)

#### **BLOCK ELEMENTS**

#### Appear on a new line

```
<h1>Hiroshi Sugimoto</h1>
The dates of the ORIGIN OF ART
  exhibition are as follows:
<l
 Science: 21 Nov - 20 Feb 2010
 Architecture: 6 Mar - 15 May
    2010
 History: 29 May - 21 Aug 2010
 Religion: 28 Aug - 6 Nov 2010
```

### Hiroshi Sugimoto

The dates for the ORIGIN OF ART exhibition are as follows:

- Science: 21 Nov 20 Feb 2010/11
- Architecture: 6 Mar 15 May 2011
- History: 29 May 21 Aug 2011
- Religion: 28 Aug 6 Nov 2011

#### INLINE ELEMENTS

#### Appear inline!

Timed to a single revolution of the planet around the sun at a 23.4 degrees tilt that plays out the rhythm of the seasons, this <em>Origins of Art</em> cycle is organized around four themes: <b>science, architecture, history</b> and <b>Religion</b>.

Timed to a single revolution of the planet around the sun at a 23.4 degrees tilt that plays out the rhythm of the seasons, this *Origins of Art* cycle is organized around four themes: science, architecture, history and religion.

# GROUPING TEXT & ELEMENTS IN A BLOCK

```
<div id="header">
<img src="logo.gif" />
<l
 <a href="index.html">Home</a>
 <a href="bio.html">Bio</a>
 <a href="works.html">Works</a>
 <a href="contact.html">Contact</a>
 </div>
```



- Home
- Biography
- Works
- Contact

# GROUPING TEXT & ELEMENTS INLINE

```
Anish Kapoor won the Turner Prize in
  1991 and exhibited at the
  <span class="gallery">Tate Modern</span>
  gallery in London in 2003.
```

Anish Kapoor won the Turner Prize in 1991 and exhibited at the TATE MODERN gallery in London in 2003.

### UNDERSTANDING CSS: THINKING INSIDE THE BOX

#### The Cottage Garden

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

The Cottage Garden originated in <u>England</u> 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 <u>English estate gardens</u>.

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

# CSS ASSOCIATES STYLE RULES WITH HTML ELEMENTS

```
p {
   font-family:
Arial;}
```

# CSS ASSOCIATES STYLE RULES WITH HTML ELEMENTS

# SELECTOR font-family:

Arial; }

# CSS ASSOCIATES STYLE RULES WITH HTML ELEMENTS

```
SELECTOR

p {
    font-family: Arial;}

    DECLARATION
```

# CSS PROPERTIES AFFECT HOW ELEMENTS ARE DISPLAYED

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HTML

```
<h1>From Garden to Plate</h1>
A <i>potager</i> is a French term for
   an ornamental vegetable or kitchen
   garden...
<h2>What to Plant</h2>
Plants are chosen as much for their
   functionality as for their color and
   form...
```

#### From Garden to Plate

A potager is a French term for an ornamental vegetable or kitchen garden. Often flowers (edible and non-edible) and herbs are planted with the vegetables to enhance the garden's beauty. The goal is to make the function of providing food aesthetically pleasing.

#### What to Plant

Plants are chosen as much for their functionality as for their color and form. Many are trained to grow upward. A well-designed potager can provide food, cut flowers and herbs for the home with very little maintenance. Potagers can disguise their function of providing for a home in a wide array of forms - from the carefree style of the cottage garden to the formality of a knot garden.

**CSS** 

```
body {
 font-family: Arial, Verdana, sans-serif;}
h1, h2 {
 color: #ee3e80;}
 color: #665544;}
```

#### Change the font used

body {

```
CSS
```

```
font-family: Arial, Verdana, sans-serif;}
h1, h2 {
 color: #ee3e80;}
 color: #665544;}
```

CSS

```
body {
  font-family: Arial, Verdana, sans-serif;}
```

#### Change the color of the headings

```
h1, h2 {
  color: #ee3e80;}

p {
  color: #665544;}
```

CSS

```
body {
  font-family: Arial, Verdana, sans-serif;}
h1, h2 {
  color: #ee3e80;}
```

#### Change the color of the paragraphs

```
p {
  color: #665544;}
```

#### From Garden to Plate

A potager is a French term for an ornamental vegetable or kitchen garden. Often flowers (edible and non-edible) and herbs are planted with the vegetables to enhance the garden's beauty. The goal is to make the function of providing food aesthetically pleasing.

#### What to Plant

Plants are chosen as much for their functionality as for their color and form. Many are trained to grow upward. A well-designed potager can provide food, cut flowers and herbs for the home with very little maintenance. Potagers can disguise their function of providing for a home in a wide array of forms - from the carefree style of the cottage garden to the formality of a knot garden.

### Common Selectors

```
universal select all elements
0
   h1
           element select all h1 elements
   h1, h2, h3 group
                         select h1, h2, and h3 elements
              class select all elements that have an attribute
   .foo
                 class="foo"
                   select the one element that has an attribute
   #bar
          ID
                 id="bar"
              pseudo select all elements foo when the mouse
   foo:hover
   cursor
                 is "hovering" over them (often used for links)
            contextual select all paragraphs which are descendents
   div p
   of
                 a div element
```

### The Cascade and Inheritance

#### How the CSS rules are applied:

- Importance
  - !important
- Specificity
  - A measure of how specific a selector is
- Source order
  - Later rules have more weight
- Inheritance
  - o font size, color versus margin, padding, border

#### More info:

https://developer.mozilla.org/en-US/docs/Learn/CSS/Introduction to CSS/Cascade and inheritance

#### HOW CSS RULES CASCADE

```
font-family: Arial;
  color: darkgrey;
h1 {
  font-family: "Courier New", monospace;
i {color: blue;}
i {color: red;}
 b {color: blue !important;}
p b {color: yellow;}
```

**CSS** 

#### Potatoes

There are *dozens* of different **potato** varieties.

They are usually described as early, second early and maincrop potatoes.

```
<h1>Potatoes</h1>
There are <i>dozens</i> of different <b>potato</b> varieties.
They are usually described as early, second early and maincrop potatoes
```

#### USING EXTERNAL CSS

```
<html>
<head>
  <title>Using External CSS</title>
 <link href="css/styles.css"</pre>
    type="text/css"
    rel="stylesheet">
</head>
<body>
 <h1>Potatoes</h1>
 There are dozens of ...
</body>
</html>
```

HTML

#### USING INTERNAL CSS

**CSS** 

```
<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>
```

# Why we almost always use external style sheets

No need to copy style code into each web page

We don't violate the **DRY** principle: **D**on't **R**epeat **Y**ourself

Code easier to maintain

Less chance of human error

Changes to CSS automatically apply to the entire website

Easier for many people to create new pages in same style

etc...