CSS.

We cover these topic today. Practice with hand written code over min 3 times.

Image Sprites

https://www.w3schools.com/css/css_image_sprites.asp

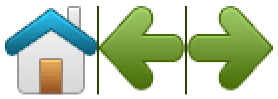
An image sprite is a collection of images put into a single image.

A web page with many images can take a long time to load and generates multiple server requests.

Using image sprites will reduce the number of server requests and save bandwidth.

Image Sprites - Simple Example

Instead of using three separate images, we use this single image ("img_navsprites.gif"):



With CSS, we can show just the part of the image we need.

In the following example the CSS specifies which part of the "img_navsprites.gif" image to show:

Example

```
#home {
  width: 46px;
  height: 44px;
  background: url(img_navsprites.gif) 0 0;
}
```

CSS Forms

https://www.w3schools.com/css/css_form.asp

The look of an HTML form can be greatly improved with CSS:

First Name Last Name Country

Styling Input Fields

Use the `width` property to determine the width of the input field:

First Name

Example

```
input {
  width: 100%;
}
```

CSS Counter

https://www.w3schools.com/css/css_counters.asp

CSS counters are "variables" maintained by CSS whose values can be incremented by CSS rules (to track how many times they are used). Counters let you adjust the appearance of content based on its placement in the document.

Automatic Numbering With Counters

CSS counters are like "variables". The variable values can be incremented by CSS rules (which will track how many times they are used).

To work with CSS counters we will use the following properties:

- `counter-reset` - Creates or resets a counter
- `counter-increment` - Increments a counter value
- `content` - Inserts generated content
- `counter()` or `counters()` function - Adds the value of a counter to an element

To use a CSS counter, it must first be created with `counter-reset`.

The following example creates a counter for the page (in the body selector), then increments the counter value for each <h2> element and adds "Section <*value of the counter*>:" to the beginning of each <h2> element:

Example

```
body {
  counter-reset: section;
}

h2::before {
  counter-increment: section;
  content: "Section " counter(section) ": ";
}
```

Nesting Counters

The following example creates one counter for the page (section) and one counter for each <h1> element (subsection). The "section" counter will be counted for each <h1> element with "Section <*value of the section counter*>.", and the "subsection" counter will be counted for each <h2> element with "<*value of the section counter*>.<*value of the subsection counter*>":

Example

```
body {
  counter-reset: section;
}

h1 {
  counter-reset: subsection;
}

h1::before {
  counter-increment: section;
  content: "Section " counter(section) ". ";
}

h2::before {
  counter-increment: subsection;
  content: counter(section) "." counter(subsect
```

A counter can also be useful to make outlined lists because a new instance of a counter is automatically created in child elements. Here we use the `counters()` function to insert a string between different levels of nested counters:

Example

```
ol {
  counter-reset: section;
  list-style-type: none;
}

li::before {
  counter-increment: section;
  content: counters(section,".") " ";
}
```

CSS Website Layout

https://www.w3schools.com/css/css_website_layout.asp

A website is often divided into headers, menus, content and a footer:

There are tons of different layout designs to choose from. However, the structure above, is one of the most common, and we will take a closer look at it in this tutorial.

Header

A header is usually located at the top of the website (or right below a top navigation menu). It often contains a logo or the website name:

Example

```
.header {
  background-color: #F1F1F1;
  text-align: center;
  padding: 20px;
}
```

Navigation Bar

A navigation bar contains a list of links to help visitors navigating through your website:

Content

The layout in this section, often depends on the target users. The most common layout is one (or combining them) of the following:

- **1-column** (often used for mobile browsers)
- **2-column** (often used for tablets and laptops)
- **3-column layout** (only used for desktops)

Unequal Columns

The main content is the biggest and the most important part of your site.

It is common with **unequal** column widths, so that most of the space is reserved for the main content. The side content (if any) is often used as an alternative navigation or to specify information relevant to the main content. Change the widths as you like, only remember that it should add up to 100% in total:

Example

```
.column {
  float: left;
}
```

```
/* Left and right column */
.column.side {
  width: 25%;
}

/* Middle column */
.column.middle {
  width: 50%;
}

/* Responsive layout - makes the three columns stack on top of each other
instead of next to each other */
@media screen and (max-width: 600px) {
  .column.side, .column.middle {
    width: 100%;
  }
}
```

Footer

The footer is placed at the bottom of your page. It often contains information like copyright and contact info:

Example

```
.footer {
  background-color: #F1F1F1;
  text-align: center;
  padding: 10px;
}
```