

Modern Responsive Web Design

Source Code CSS and HTML CSS

Grid Design website

Explore how you can create a website, apply CSS to HTML page elements for modern real world website design. Create a basic HTML CSS website template that you can use as a base structure for creating more websites. Setup the HTML page elements, including the header footer and main content area. Add a navigation bar and side menu. The upcoming lessons will help you learn to apply CSS to HTML elements. HTML and CSS are prerequisites as this course is designed to demonstrate applying and practicing CSS skills.

Learn how to create a website from scratch.

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HTML CSS Grid Template Setup for the basic page structure

Plan a basic HTML structure using the semantic tags. Link to a stylesheet and apply display grid to the parent element. `display: grid;`
Setup the row heights within the grid-template-rows
Set the columns for the main and aside within the grid-template-columns
Set a start and end grid column for the elements that go across the entire full width. `grid-column-start: 1; grid-column-end: 3;`



```
<!DOCTYPE html>
<html>
  <head>
    <title>WebSite CSS Grid Laurence Svekis</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
    <div class="wrapper">
      <header>Header</header>
      <nav>Nav</nav>
      <article>Main Content</article>
```

```
    <aside>Sidebar</aside>
    <footer>Footer</footer>
  </div>
</body>
</html>
```

```
* {
  box-sizing: border-box;
}

.wrapper {
  display: grid;
  grid-template-rows: 20% 50px 300px auto;
  grid-template-columns: 3fr 1fr;
  grid-gap: 1em;
}

.wrapper>* {
  border: 1px solid black;
}

.wrapper>header {
  background-color: #ddd;
  grid-column-start: 1;
  grid-column-end: 3;
}

.wrapper>nav {
```

```
background-color: #eee;
grid-column-start: 1;
grid-column-end: 3;
}

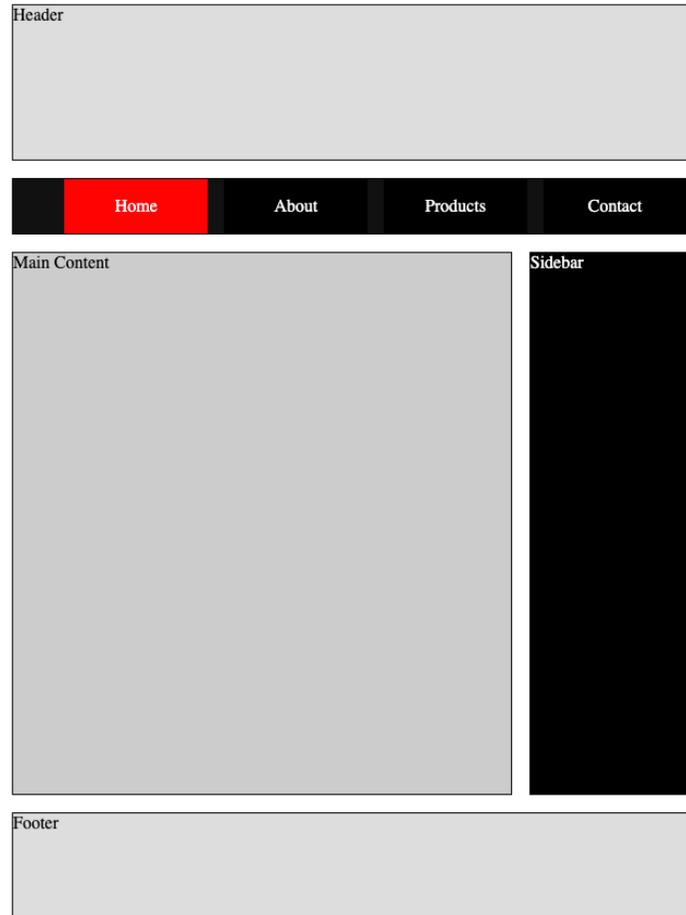
.wrapper>article {
background-color: #ccc
}

.wrapper>aside {
background-color: #000;
color: white;
}

.wrapper>footer {
grid-column-start: 1;
grid-column-end: 3;
background-color: #ddd;
}
```

How to add a responsive CSS NavBar using CSS Grid styling blocks

How to set up a navigation bar using CSS Grid. Apply and set the display to the grid of the parent element. Set the column template to create separate columns for each navigation bar item. Update the list items, remove the default styling of the unordered list items, to create navbar blocks. Add hover effect for the mouse over highlight of the nav bar item blocks.



```
<!DOCTYPE html>
<html>
  <head>
    <title>WebSite CSS Grid Laurence Svekis</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
    <div class="wrapper">
      <header>Header</header>
      <nav>
        <ul>
          <li><a href="#">Home</a></li>
```

```
    <li><a href="#">About</a></li>
    <li><a href="#">Products</a></li>
    <li><a href="#">Contact</a></li>
  </ul>
</nav>
<article>Main Content</article>
<aside>Sidebar</aside>
<footer>Footer</footer>
</div>
</body>
</html>
```

```
* {
  box-sizing: border-box;
}

nav ul {
  display: grid;
  grid-template-columns: repeat(4, 1fr);
  grid-template-rows: 50px;
  justify-content: center;
  justify-items: center;
  list-style-type: none;
  margin: 0;
}

nav ul li {
  background-color: #000;
  width: 90%;
```

```
    text-align:center;
    line-height:50px;
}
nav ul li a{
    text-decoration:none;
    color:white;
}
nav ul li:hover{
    background-color:red;
}

.wrapper {
    display: grid;
    grid-template-rows: 20% auto 500px 100px;
    grid-template-columns: 3fr 1fr;
    grid-gap: 1em;
}

.wrapper>* {
    border: 1px solid black;
}

.wrapper>header {
    background-color: #ddd;
    grid-column: 1/3;
}

.wrapper>nav {
```

```
background-color: #111;
grid-column: 1/3;
}

.wrapper>article {
background-color: #ccc
}

.wrapper>aside {
background-color: #000;
color: white;
}

.wrapper>footer {
grid-column: 1/3;
background-color: #ddd;
}
```

Adding Placeholder content and Web Design styling with CSS

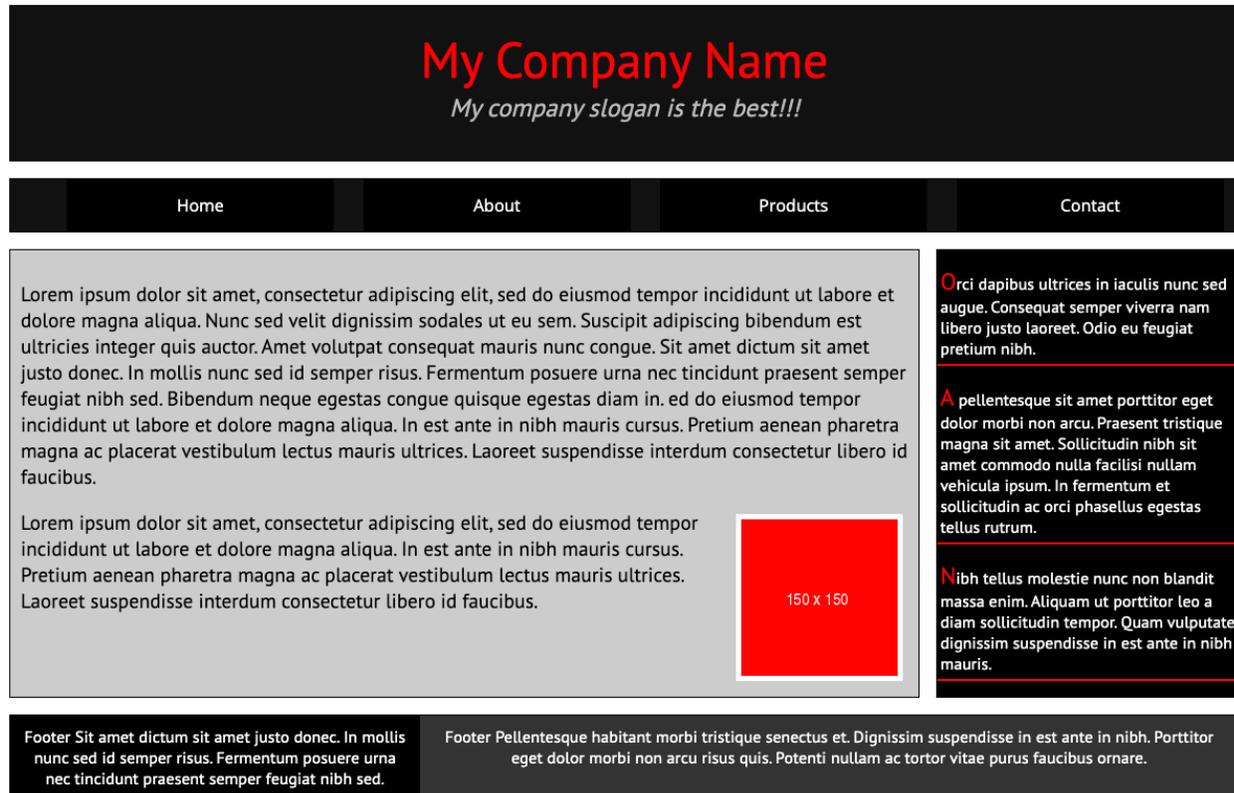
When creating web pages, often the final content is not ready. You can use placeholder content, like images and lorem ipsum text in place of content which can get added later. The placeholder or dummy content can be used while designing your website so that the pages have a real look and feel to them. This is perfect for web design and testing of responsive and positioning of page elements with CSS. Apply CSS styling and make adjustments to fit the content as desired. This lesson will apply styling to the page elements, including the header with titles and slogan. The main

content area and adding images that appear as a thumbnail type style. Setting the aside content to separate as content blocks. Creating a two column footer using CSS grid styling.

Placeholder images - <https://placeholder.com/>

Lorem Ipsum Generator - <https://loremipsum.io/generator/>

Google Fonts - <https://fonts.google.com/>



```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>WebSite CSS Grid Laurence Svekis</title>
```

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

```
  </head>
```

```
  <body>
```

```
    <div class="wrapper">
```

```
      <header><div>
```

```

    My Company Name
  </div><div>My company slogan is the best!!!</div>
</header>
<nav>
  <ul>
    <li><a href="#">Home</a></li>
    <li><a href="#">About</a></li>
    <li><a href="#">Products</a></li>
    <li><a href="#">Contact</a></li>
  </ul>
</nav>
<article>
  <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed
do eiusmod tempor incididunt ut labore et dolore magna aliqua. Nunc sed
velit dignissim sodales ut eu sem. Suscipit adipiscing bibendum est ultricies
integer quis auctor. Amet volutpat consequat mauris nunc congue. Sit amet
dictum sit amet justo donec. In mollis nunc sed id semper risus. Fermentum
posuere urna nec tincidunt praesent semper feugiat nibh sed. Bibendum
neque egestas congue quisque egestas diam in. ed do eiusmod tempor
incididunt ut labore et dolore magna aliqua. In est ante in nibh mauris
cursus. Pretium aenean pharetra magna ac placerat vestibulum lectus
mauris ultrices. Laoreet suspendisse interdum consectetur libero id
faucibus.</p>
  
  <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed
do eiusmod tempor incididunt ut labore et dolore magna aliqua. In est ante
in nibh mauris cursus. Pretium aenean pharetra magna ac placerat

```

vestibulum lectus mauris ultrices. Laoreet suspendisse interdum consectetur libero id faucibus.</p>

</article>

<aside>

<div>

Orci dapibus ultrices in iaculis nunc sed augue. Consequat semper viverra nam libero justo laoreet. Odio eu feugiat pretium nibh.

</div>

<div>

A pellentesque sit amet porttitor eget dolor morbi non arcu. Praesent tristique magna sit amet. Sollicitudin nibh sit amet commodo nulla facilisi nullam vehicula ipsum. In fermentum et sollicitudin ac orci phasellus egestas tellus rutrum.

</div>

<div>

Nibh tellus molestie nunc non blandit massa enim. Aliquam ut porttitor leo a diam sollicitudin tempor. Quam vulputate dignissim suspendisse in est ante in nibh mauris.

</div>

</aside>

<footer>

<div>Footer Sit amet dictum sit amet justo donec. In mollis nunc sed id semper risus. Fermentum posuere urna nec tincidunt praesent semper feugiat nibh sed.</div>

<div>Footer Pellentesque habitant morbi tristique senectus et. Dignissim suspendisse in est ante in nibh. Porttitor eget dolor morbi non arcu risus quis. Potenti nullam ac tortor vitae purus faucibus ornare. </div>

</footer>

</div>

```
</body>
</html>
```

```
@import
url('https://fonts.googleapis.com/css2?family=Open+Sans&family=PT+Sans
&display=swap');
body{
  font-family: 'PT Sans', sans-serif;
}
* {
  box-sizing: border-box;
}
```

```
nav ul {
  font-family: 'Open Sans', sans-serif;
  display:grid;
  grid-template-columns: repeat(4,1fr);
  grid-template-rows: 50px;
  justify-content:center;
  justify-items:center;
  list-style-type:none;
  margin:0;
}
```

```
nav ul li{
  background-color:#000;
  width:90%;
  text-align:center;
  line-height:50px;
```

```

}
nav ul li a{
  text-decoration:none;
  color:white;
}
nav ul li:hover{
  background-color:red;
}

.wrapper {
  display: grid;
  grid-template-rows: 150px repeat(3,auto);
  grid-template-columns: 3fr 1fr;
  grid-gap: 1em;
}

.wrapper>* {
  border: 1px solid black;
}

.wrapper>header {
  text-align:center;
  background-color:#111;
  grid-column: 1/3;
}
.wrapper>header>div:first-child{
  font-size:3em;
  padding-top:20px;
}

```

```
    color:red;
}
.wrapper>header>div:last-child{
  font-size:1.5em;
  color:#bbb;
  font-style:italic;
}

.wrapper>nav {
  background-color: #111;
  grid-column: 1/3;
}

.wrapper>article {
  padding:10px;
  background-color: #ccc;
  font-size:1.2em;
}

.wrapper>article img{
  float:right;
  border:5px solid white;
  margin:5px;
}

.wrapper>article img:after {
  content:"";
  display:table;
  clear:both;
}

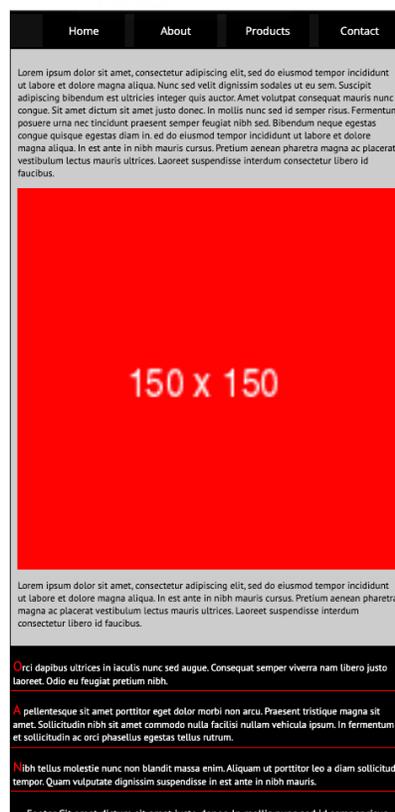
.wrapper>aside {
```

```
background-color: #000;
color: white;
}
.wrapper>aside>div{
margin:10px 0;
border-bottom:red 2px solid;
padding:5px 3px;
}
.wrapper>aside>div::first-letter{
color:red;
font-size:1.4em;
}
.wrapper>footer {
display:grid;
grid-template-columns: 1fr 2fr;
grid-column: 1/3;
background-color: #000;
color:white;
}
.wrapper>footer>div{
padding:10px;
text-align:center;
}

.wrapper>footer>div:last-child {
background-color:#333;
}
```

CSS setting Media Query with Final CSS style Updates

Resize and stack columns as rows on screen sizes less than 640px. Add the media query and make adjustments to the look and feel of the website on smaller screens. Test out the styling and preview how it adjusts to different size screens. Use the placeholder content to simulate real website content to be added afterwards.



```
<!DOCTYPE html>
<html>
  <head>
    <title>WebSite CSS Grid Laurence Svekis</title>
    <link rel="stylesheet" href="style.css">
  </head>
```

```

<body>
  <div class="wrapper">
    <header><div>
      My Company Name
    </div><div>My company slogan is the best!!!</div>
  </header>
  <nav>
    <ul>
      <li><a href="#">Home</a></li>
      <li><a href="#">About</a></li>
      <li><a href="#">Products</a></li>
      <li><a href="#">Contact</a></li>
    </ul>
  </nav>
  <article>
    <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed
do eiusmod tempor incididunt ut labore et dolore magna aliqua. Nunc sed
velit dignissim sodales ut eu sem. Suscipit adipiscing bibendum est ultricies
integer quis auctor. Amet volutpat consequat mauris nunc congue. Sit amet
dictum sit amet justo donec. In mollis nunc sed id semper risus. Fermentum
posuere urna nec tincidunt praesent semper feugiat nibh sed. Bibendum
neque egestas congue quisque egestas diam in. ed do eiusmod tempor
incidunt ut labore et dolore magna aliqua. In est ante in nibh mauris
cursus. Pretium aenean pharetra magna ac placerat vestibulum lectus
mauris ultrices. Laoreet suspendisse interdum consectetur libero id
faucibus.</p>
    

```

`<p>` Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. In est ante in nibh mauris cursus. Pretium aenean pharetra magna ac placerat vestibulum lectus mauris ultrices. Laoreet suspendisse interdum consectetur libero id faucibus.`</p>`

`</article>`

`<aside>`

`<div>`

Orci dapibus ultrices in iaculis nunc sed augue. Consequat semper viverra nam libero justo laoreet. Odio eu feugiat pretium nibh.

`</div>`

`<div>`

A pellentesque sit amet porttitor eget dolor morbi non arcu. Praesent tristique magna sit amet. Sollicitudin nibh sit amet commodo nulla facilisi nullam vehicula ipsum. In fermentum et sollicitudin ac orci phasellus egestas tellus rutrum.

`</div>`

`<div>`

Nibh tellus molestie nunc non blandit massa enim. Aliquam ut porttitor leo a diam sollicitudin tempor. Quam vulputate dignissim suspendisse in est ante in nibh mauris.

`</div>`

`</aside>`

`<footer>`

`<div>` Footer Sit amet dictum sit amet justo donec. In mollis nunc sed id semper risus. Fermentum posuere urna nec tincidunt praesent semper feugiat nibh sed.`</div>`

```
<div>Footer Pellentesque habitant morbi tristique senectus et.
Dignissim suspendisse in est ante in nibh. Porttitor eget dolor morbi non
arcu risus quis. Potenti nullam ac tortor vitae purus faucibus ornare. </div>
</footer>
</div>
</body>
</html>
```

```
@import
url('https://fonts.googleapis.com/css2?family=Open+Sans&family=PT+Sans
&display=swap');
body{
  font-family: 'PT Sans', sans-serif;
}
* {
  box-sizing: border-box;
}

nav ul {
  font-family: 'Open Sans', sans-serif;
  display:grid;
  grid-template-columns: repeat(4,1fr);
  grid-template-rows: 50px;
  justify-content:center;
  justify-items:center;
  list-style-type:none;
  margin:0;
}
```

```
nav ul li{
  background-color:#000;
  width:90%;
  text-align:center;
  line-height:50px;
}
nav ul li a{
  text-decoration:none;
  color:white;
}
nav ul li:hover{
  background-color:red;
}

.wrapper {
  display: grid;
  grid-template-rows: 150px repeat(3,auto);
  grid-template-columns: 3fr 1fr;
  grid-gap: 1em;
}

.wrapper>* {
  border: 1px solid black;
}

.wrapper>header {
  text-align:center;
  background-color:#111;
```

```
    grid-column: 1/3;
    padding:10px;
}
.wrapper>header>div:first-child{
    font-size:3em;
    padding-top:20px;
    color:red;
}
.wrapper>header>div:last-child{
    font-size:1.5em;
    color:#bbb;
    font-style:italic;
}

.wrapper>nav {
    background-color: #111;
    grid-column: 1/3;
}

.wrapper>article {
    padding:10px;
    background-color: #ccc;
    font-size:1.2em;
}
.wrapper>article img{
    float:right;
    border:5px solid white;
    margin:5px;
}
```

```
.wrapper>article img:after {
  content:"";
  display:table;
  clear:both;
}
.wrapper>aside {
  background-color: #000;
  color: white;
}
.wrapper>aside>div{
  margin:10px 0;
  border-bottom:red 2px solid;
  padding:5px 3px;
}
.wrapper>aside>div::first-letter{
  color:red;
  font-size:1.4em;
}
.wrapper>footer {
  display:grid;
  grid-template-columns: 1fr 2fr;
  grid-column: 1/3;
  background-color: #000;
  color:white;
}
.wrapper>footer>div{
  padding:10px;
  text-align:center;
}
```

```
.wrapper>footer>div:last-child {
  background-color: #333;
}

@media only screen and (max-width:640px){
  .wrapper {
    grid-template-rows: repeat(4,auto);
    grid-gap: 0;
  }
  .wrapper>article img{
    float:none;
    display:block;
    width:100%;
    border:0px;
    margin:0px;
  }
  .wrapper>aside, .wrapper>article {
    font-size:0.9em;
    grid-column: 1/3;
  }
  .wrapper>footer {
    display:grid;
    grid-template-columns: 1fr;
  }
}
```