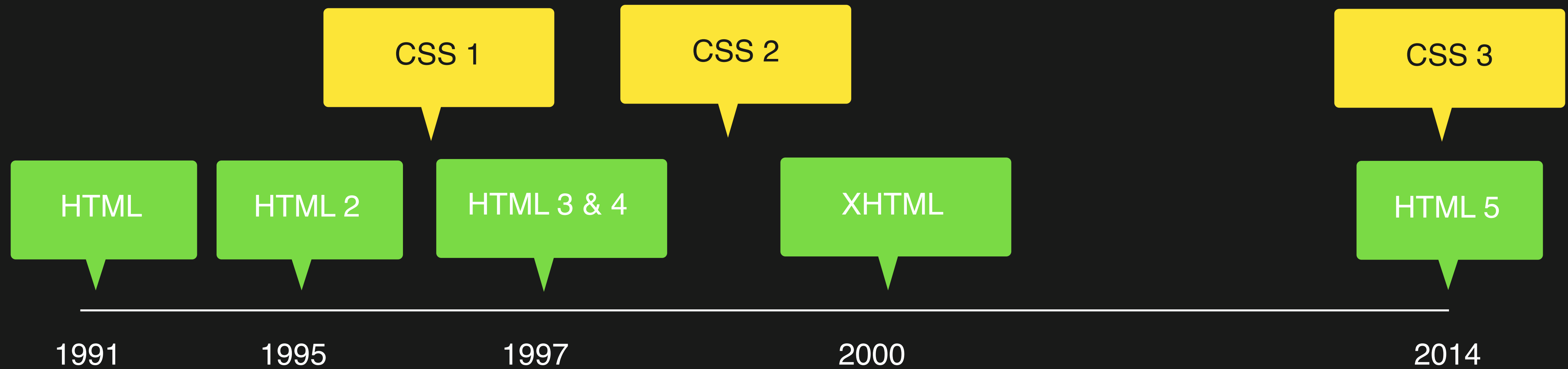


A brief history



CSS



Rounded corners!

A red shadow.

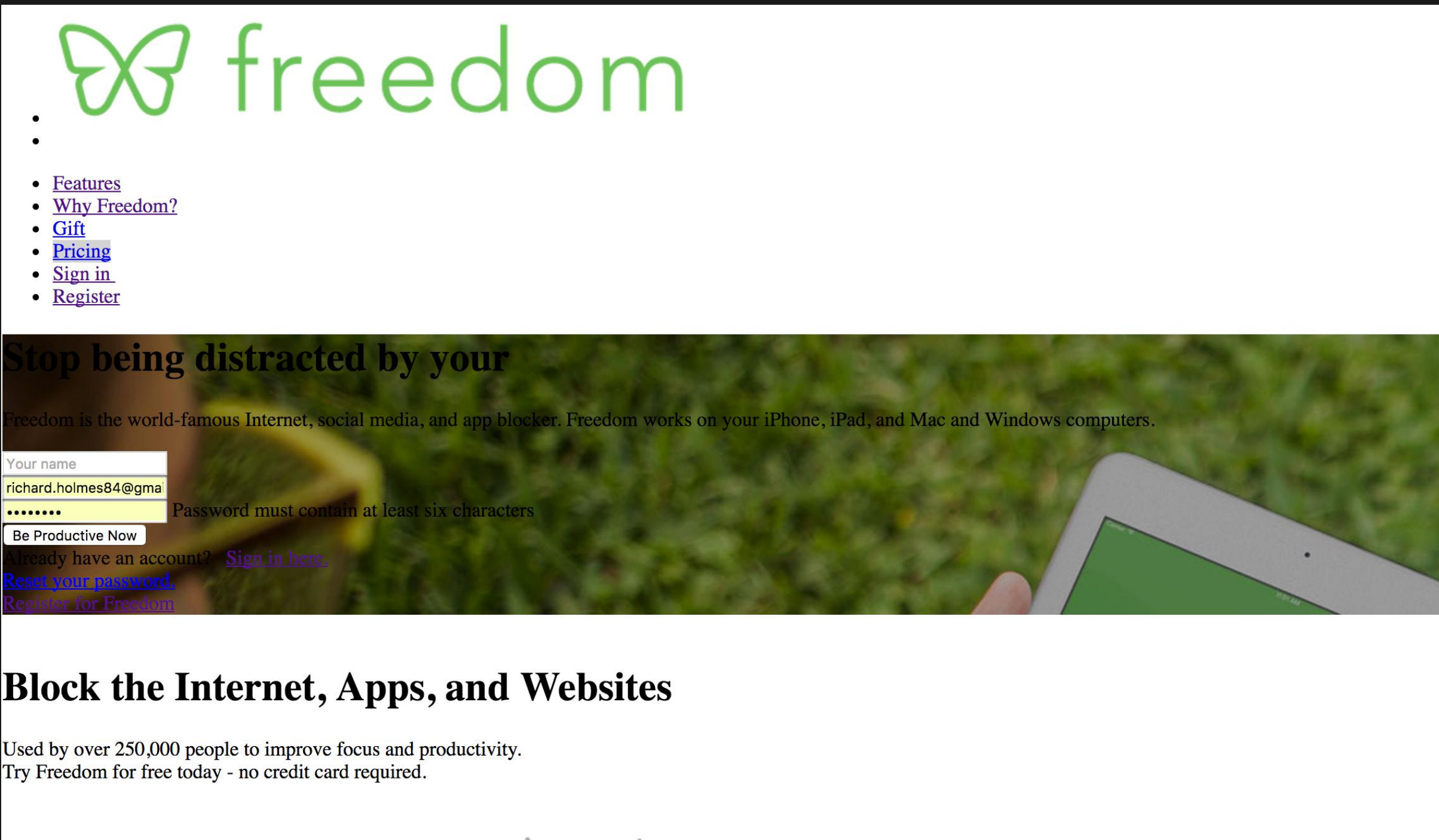
Gradient Background



What can CSS do?



HTML only



HTML + CSS

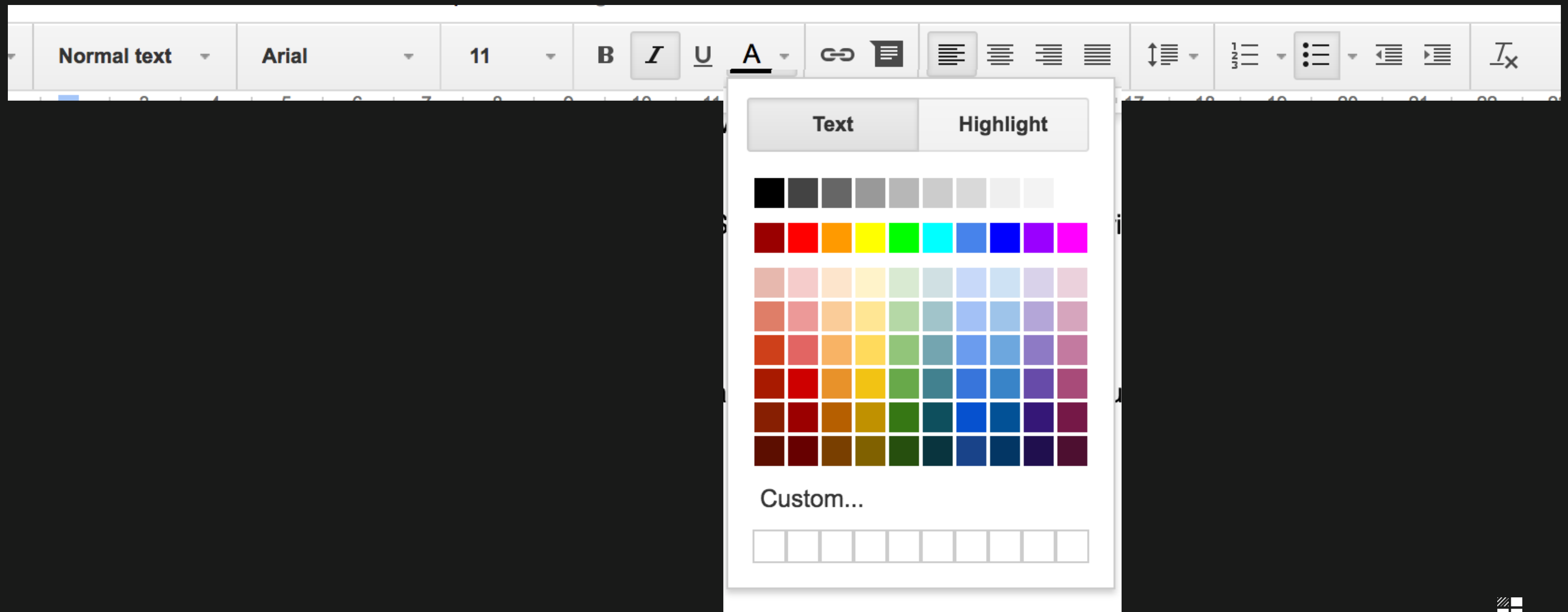


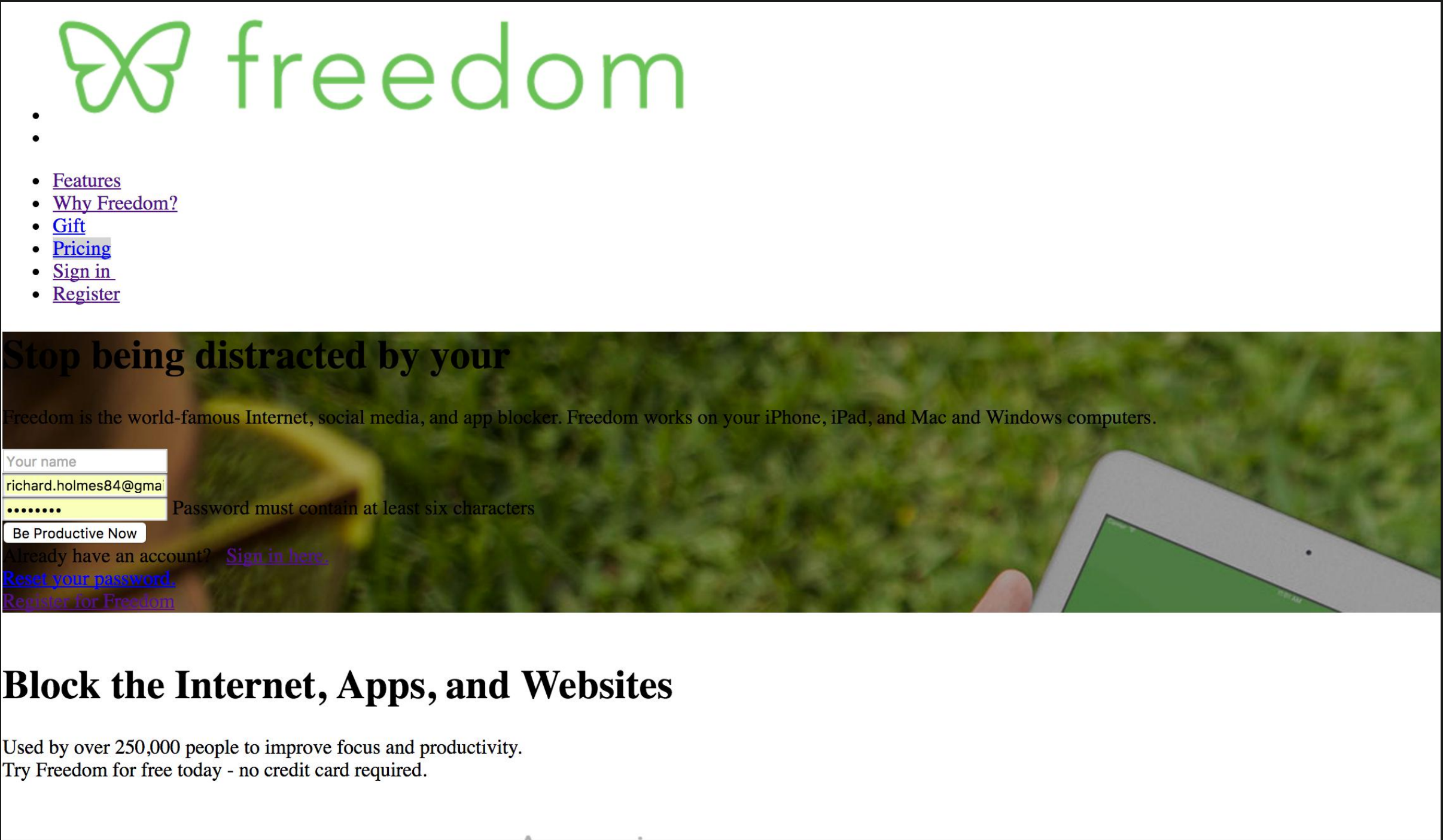
The 2 functions of CSS

Applying styles

**Positioning
elements**

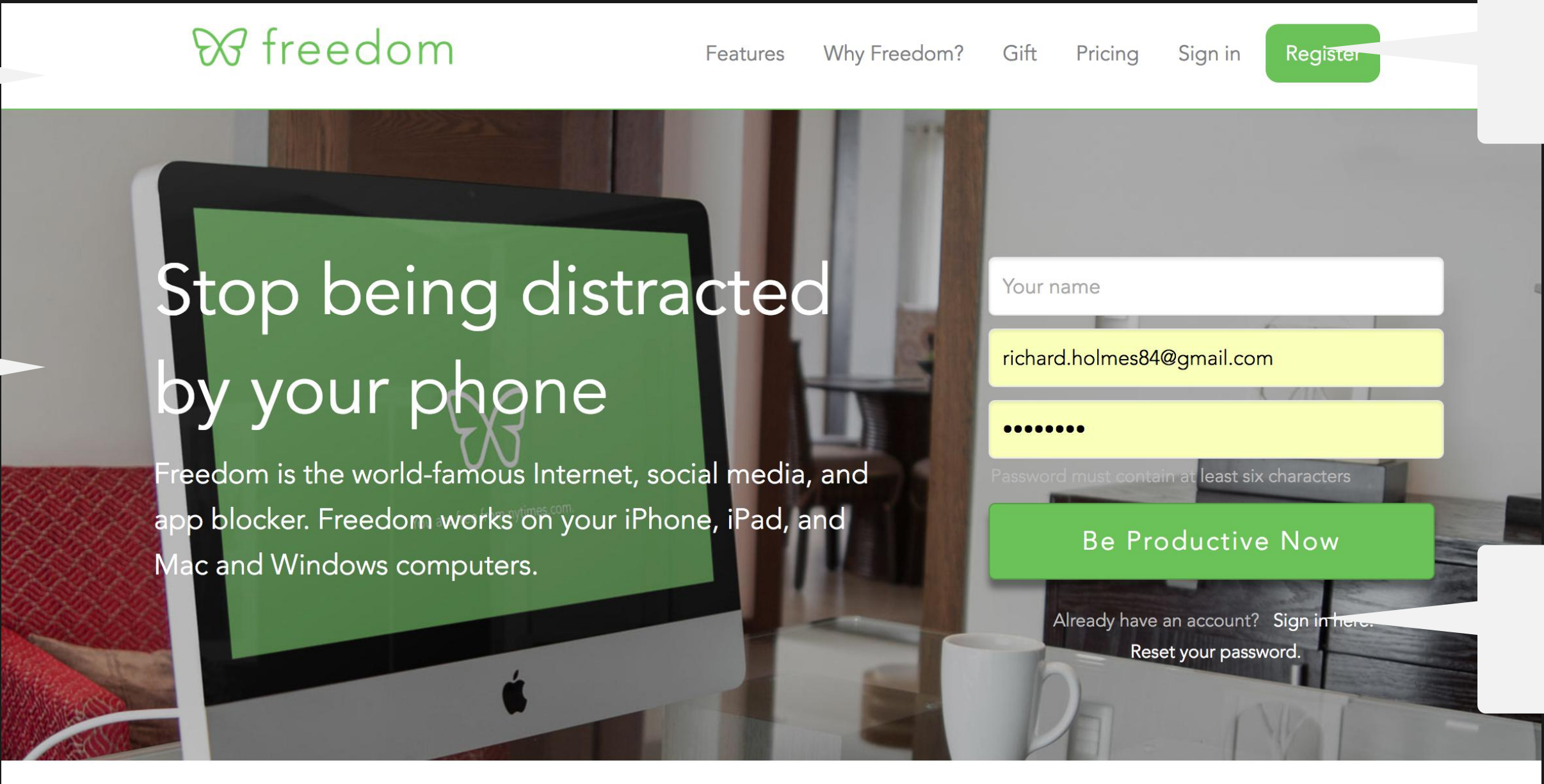






CSS positioning

CSS background



CSS buttons

CSS fonts

Who uses CSS?



How is CSS applied?



The front end development process



How is CSS applied?

**CSS
Stylesheets**

Inline CSS



CSS stylesheets



HTML
Structure

Image

Heading

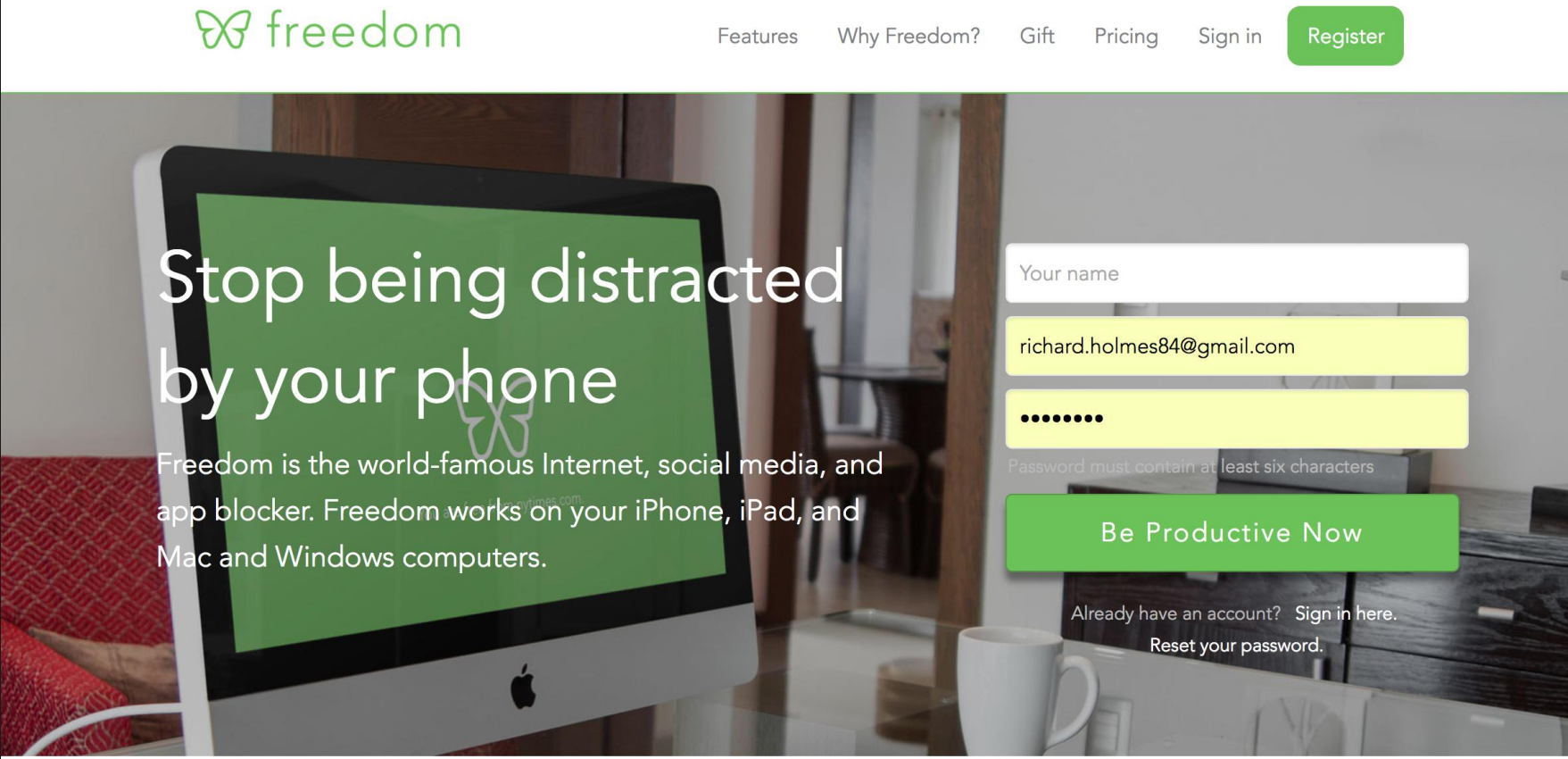
<h1>

Image

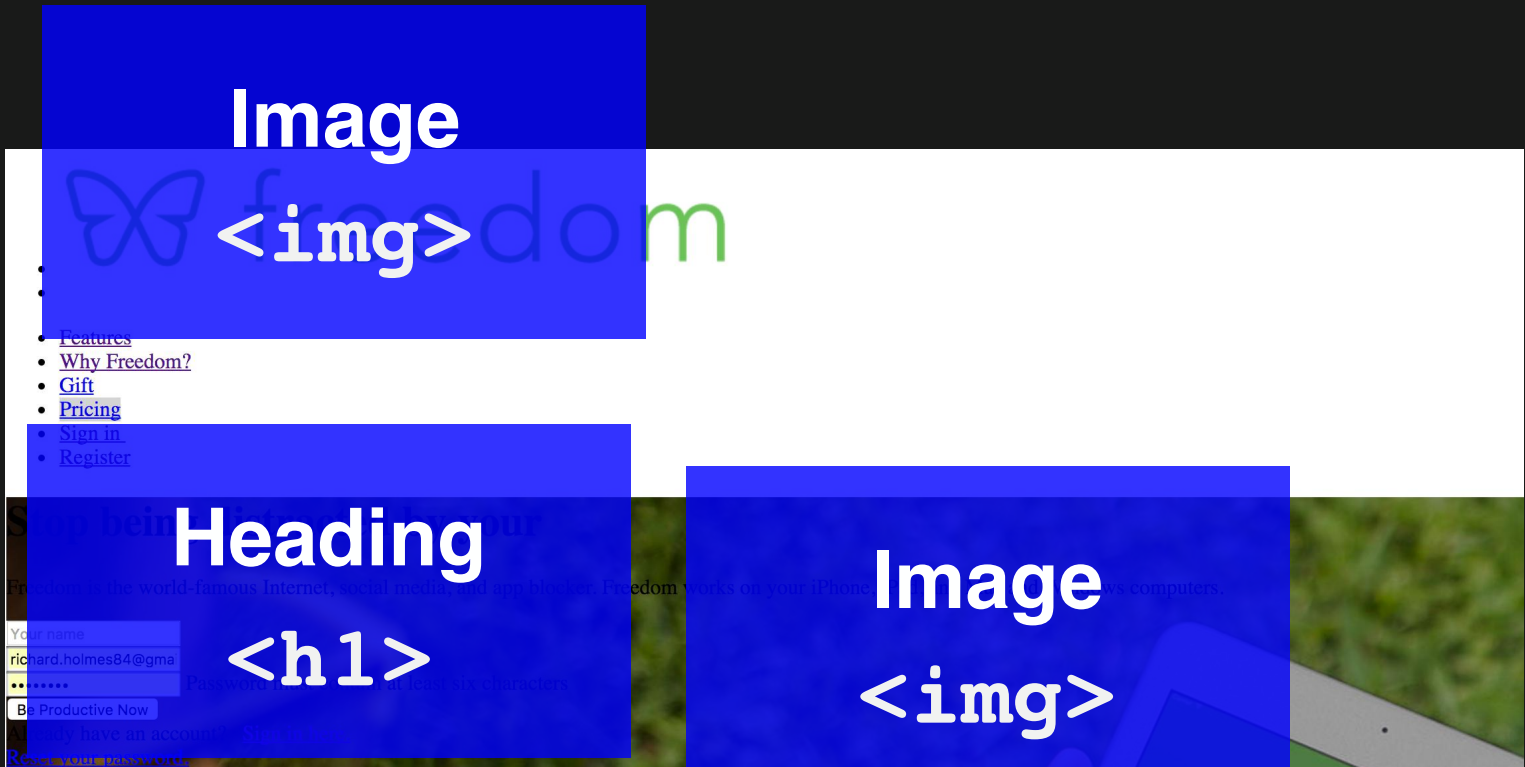
Paragraph

<p>

CSS
Stylesheet



HTML
Structure



```

<!DOCTYPE html> - <!-- appears once, before any HTML tags. It helps the browser to display content correctly. -->
<html>
<head>

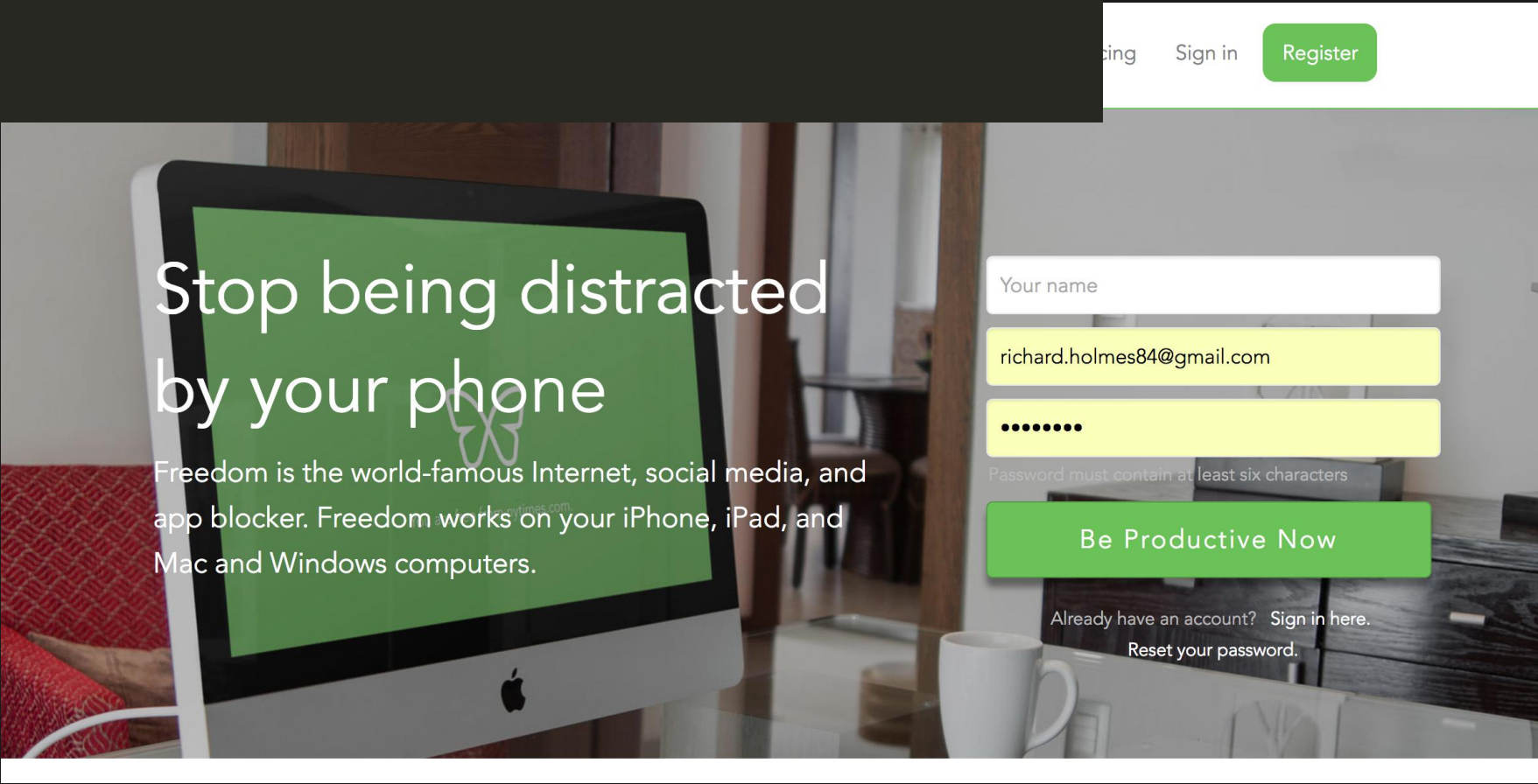
<title>Title of website</title>
<!-- CSS styles are put in the header-->
<link rel="stylesheet" type="text/css" href="styles.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.1.1/jquery.min.js"></script>

</head>
<body>
<!-- the elements of the web page are put inside the body tags. -->
</body>
</html>

```



CSS
Stylesheet



CSS stylesheet

```
/*--This is the finished stylesheet. This is how you add comments in CSS--*/
```

```
#passana-container h1 {  
  font-size: 48px;  
  font-weight: 400;  
}
```

```
#passana-container h2 {  
  font-size: 36px;  
  font-weight: 400;  
}
```

```
.center {  
  text-align: center;  
}
```

```
h1, p, body {  
  font-family: 'Hind';  
}
```

```
.underline {  
  text-decoration: underline;  
}
```

```
p {  
  line-height: normal;  
}
```

```
/*-----Header section-----*/
```

```
.main-logo {  
  display: block;  
  margin: 0 auto;  
}
```

```
nav {  
  padding: 0 5% 0 5%;  
  margin-top: 3%;  
}
```

```
nav li {  
  display: inline;  
  list-style-type: none;  
  padding-right: 3%;  
  font-size: 14px;  
}
```

Make the font size 36px

Center the text

Add space above the navigation



Advantages of stylesheets

1. Increased control
2. SEO benefits
3. Maintainability



HTML Structure

```
<h1 style="color:blue;margin:0px 0px 0px 0px;">Passana</h1>

<h2>What does HTML do? </h2>

<h3>Structure - </h3>
<p>HTML enables you to describe the structure of a document so it can be interpreted and displayed correctly by the browser and styled CSS.
It tells the browser what the page consists of. It tells the browser 'this is an image, this is a table, this is a paragraph and so on'. These are known as elements.</p>

<ul>
<li>Elements - the 'things' on a page are known as elements. </li>
<li>Linking - one of the most important elements in HTML is the anchor tag - this allows documents to be linked together. This was one of the primary reasons for HTML when it was introduced; linking documents together to create a 'network' of documents that scientists could use</li>
</ul>

<h3>Who uses HTML?</h3>
<ul>
<li>Your front end developers work with HTML, primarily to build the structure of web pages. </li>
<li>Backend programmers will sometimes use it but </li>
<li>Marketing folks may using HTML for writing blog posts </li>
<li>Example - tools like WordPress have a 'Visual' editor or a 'Text' editor - https://www.evernote.com/l/AHVsuBQpKP1Hu6lo5x0uErrXWxkr1mFbq-w </li>
<a href="http://www.link.com">Click</a>
</ul>

|
```

CSS Stylesheet

```
/*-This is the finished style:
/*-----Header section-----*/

#passana-container h1 {
  font-size: 48px;
  font-weight: 400;
}

#passana-container h2 {
  font-size: 36px;
  font-weight: 400;
}

.center {
  text-align: center;
}

h1, p, body {
  font-family: 'Hind';
}

.underline {
  text-decoration: underline;
}

p {
  line-height: normal;
}

/*-----Header section-----*/

.main-logo {
  display: block;
  margin: 0 auto;
}


nav {
  padding: 0 5% 0 5%;
  margin-top: 3%;
}

nav li {
  display: inline;
  list-style-type: none;
  padding-right: 3%;
  font-size: 14px;
}
```

Inline CSS







-
-
- [Features](#)
- [Why Freedom?](#)
- [Gift](#)
- [Pricing](#)
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HTML

Structure

CSS

Styles

freedom

Features

Why Freedom?

Gift

Pricing

Sign in

Register

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by your phone

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richard.holmes84@gmail.com

Password must contain at least six characters

Be Productive Now

Already have an account? Sign in here.

Reset your password.

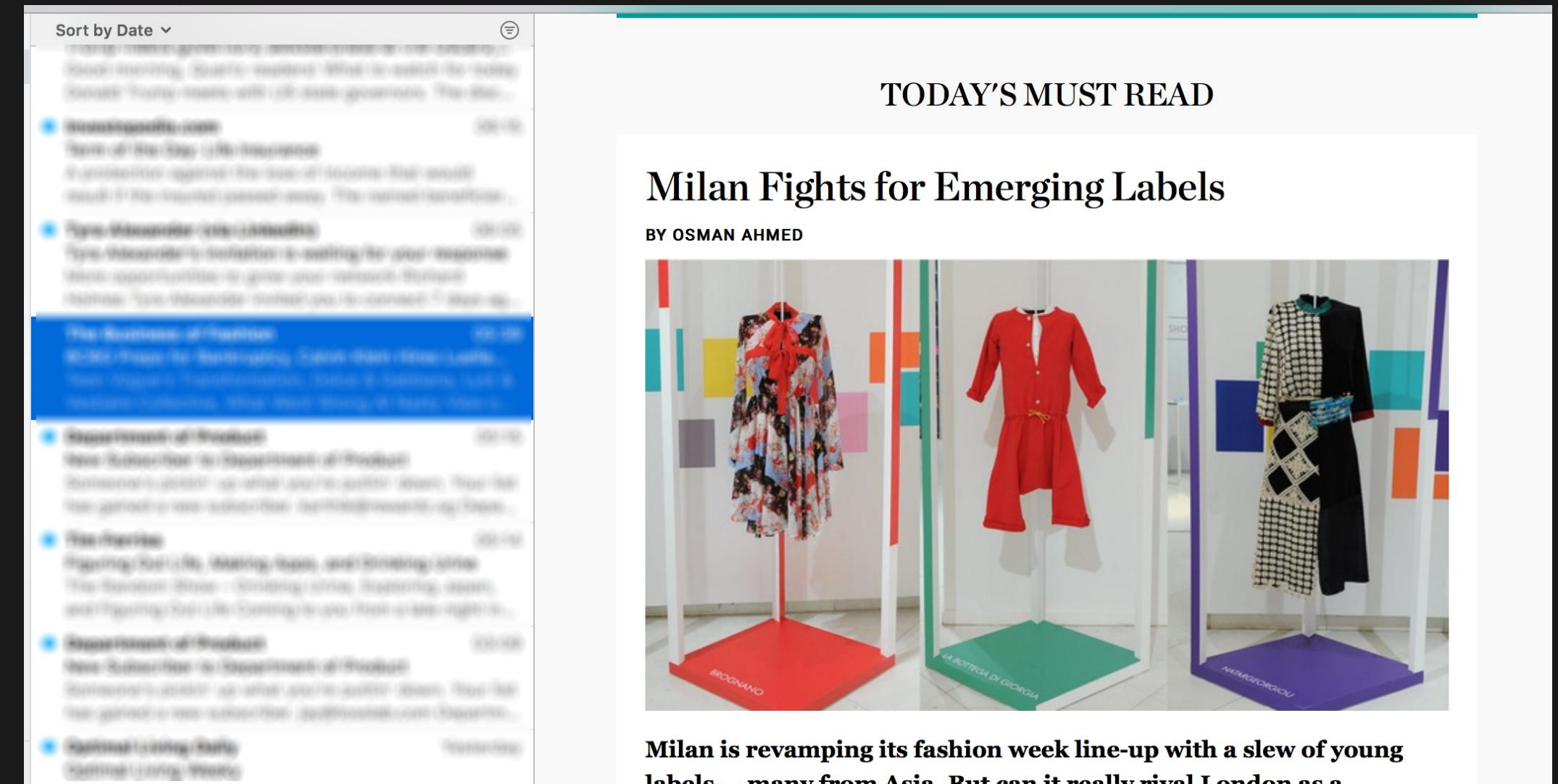
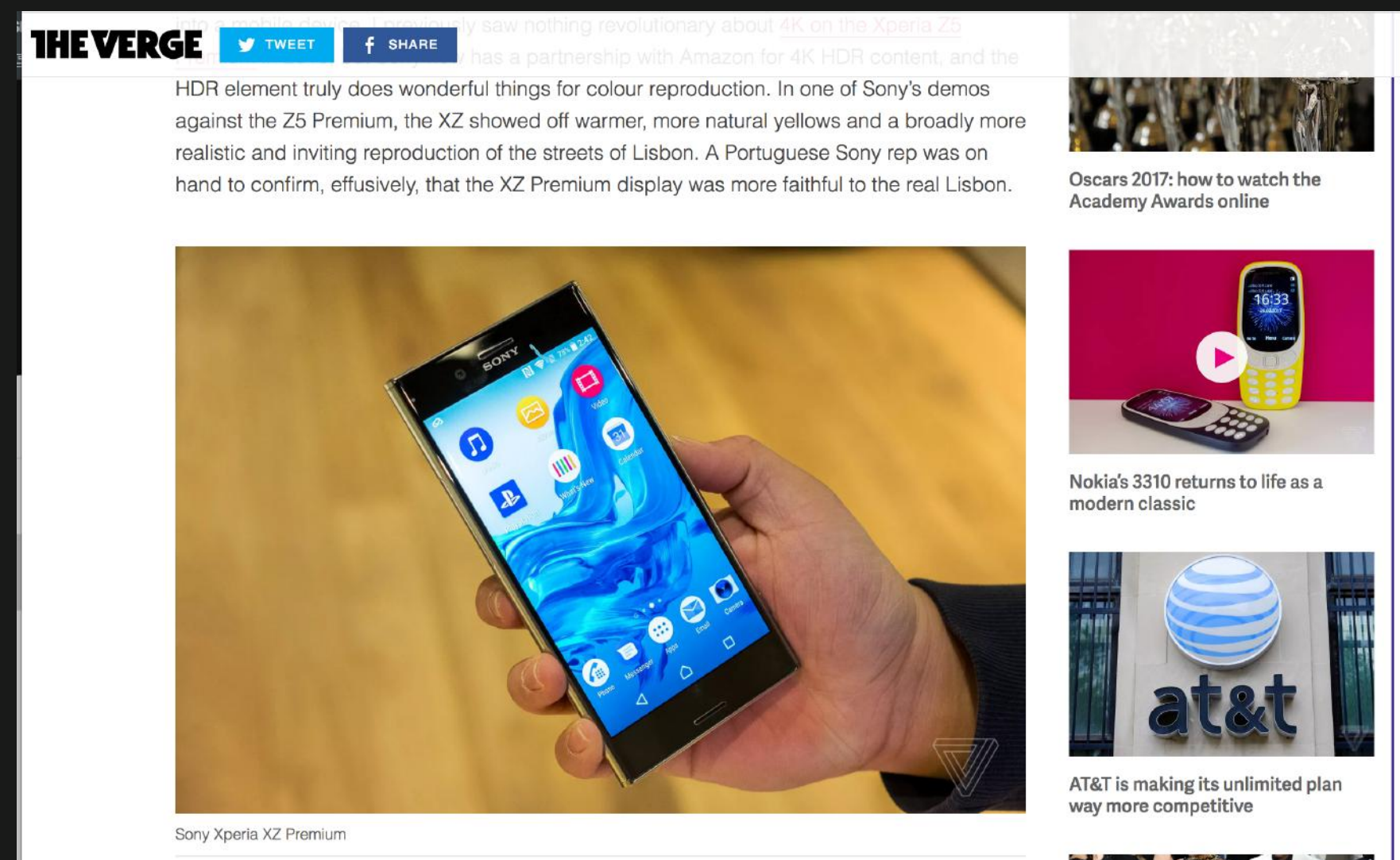
```
1 <h1 style="color:blue;margin-left:30px;">This is a heading</h1>
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```

Why not to use inline CSS

1. Separation of structure and styles
2. *Maintenance*
3. However...



Where inline may be acceptable



Quick mockups / demos



Emails

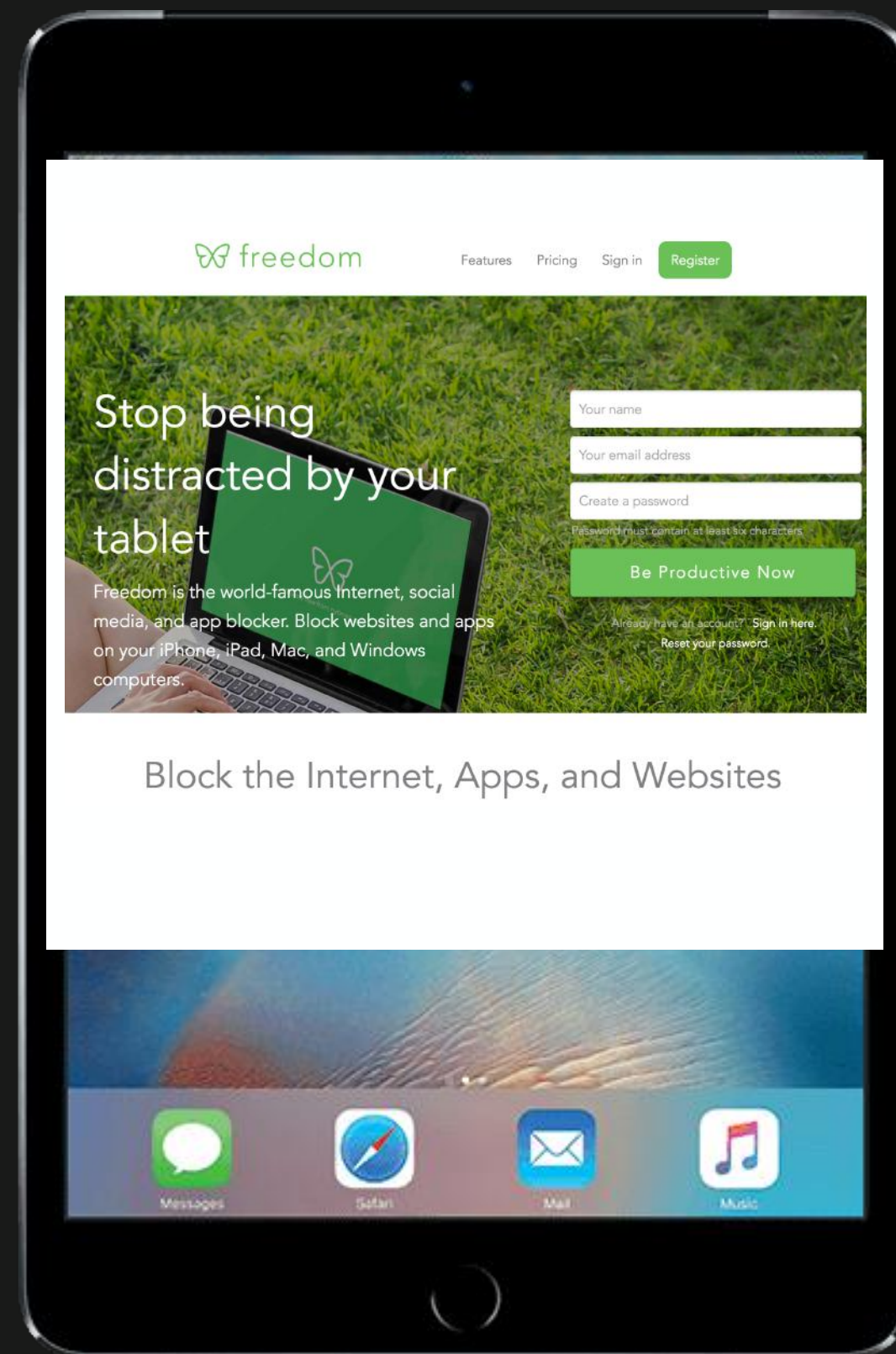


CSS & mobile

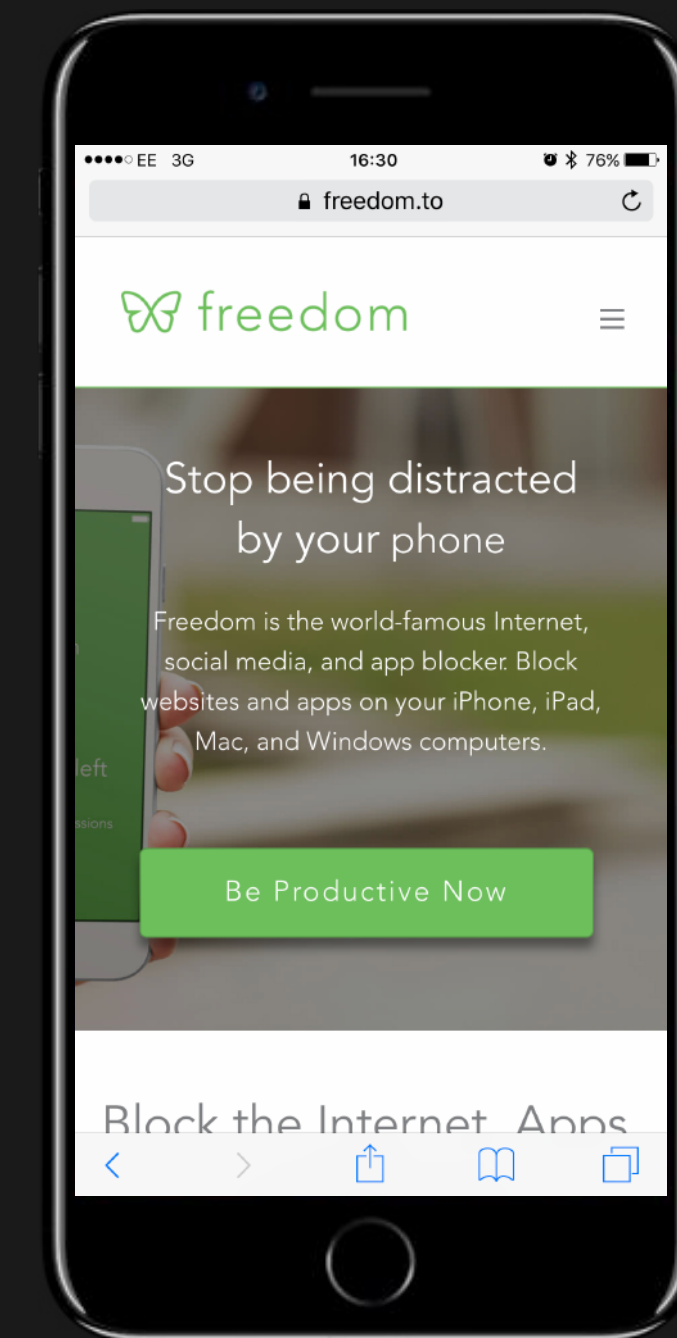




Desktop

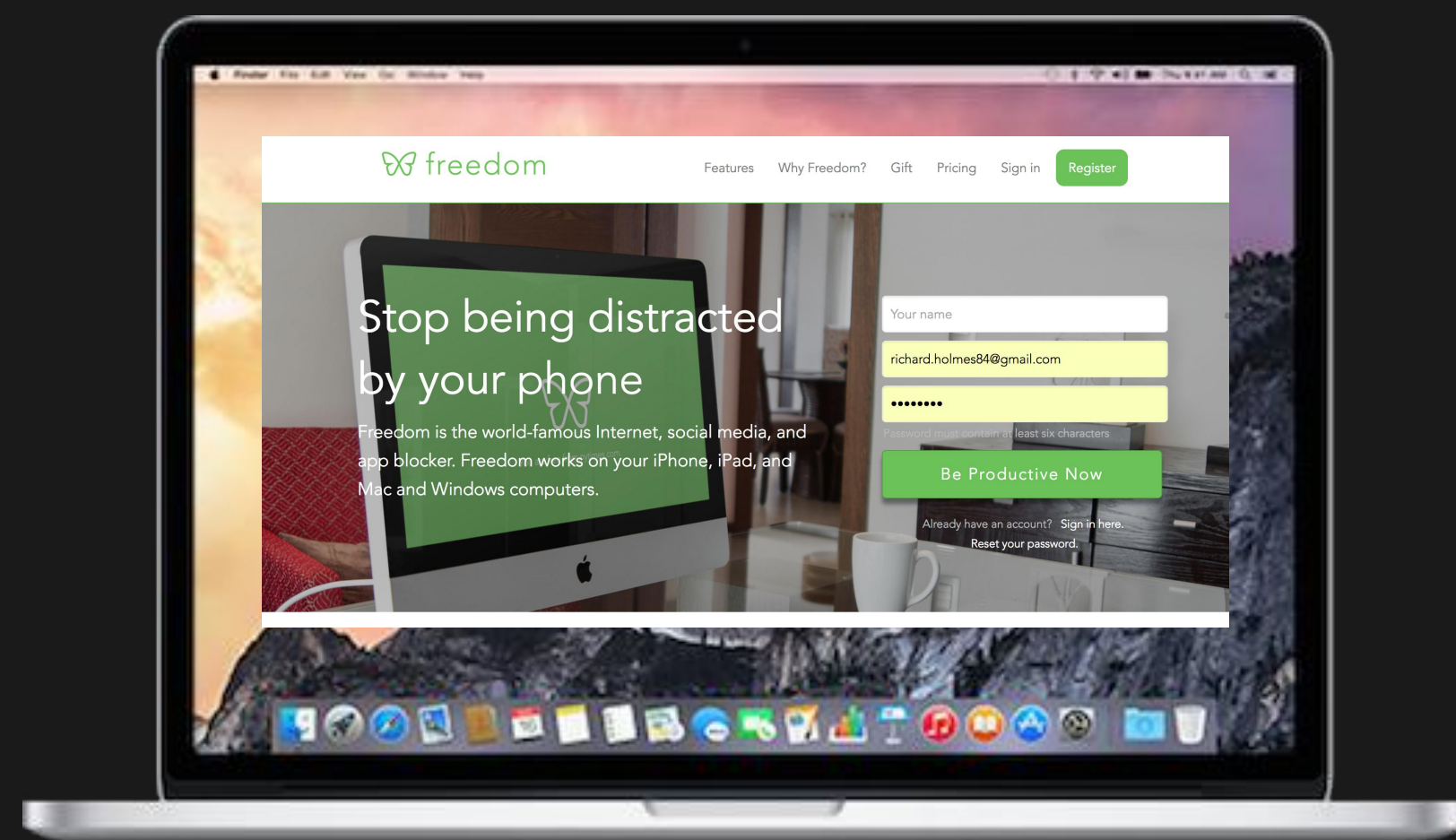


Tablet



Mobile

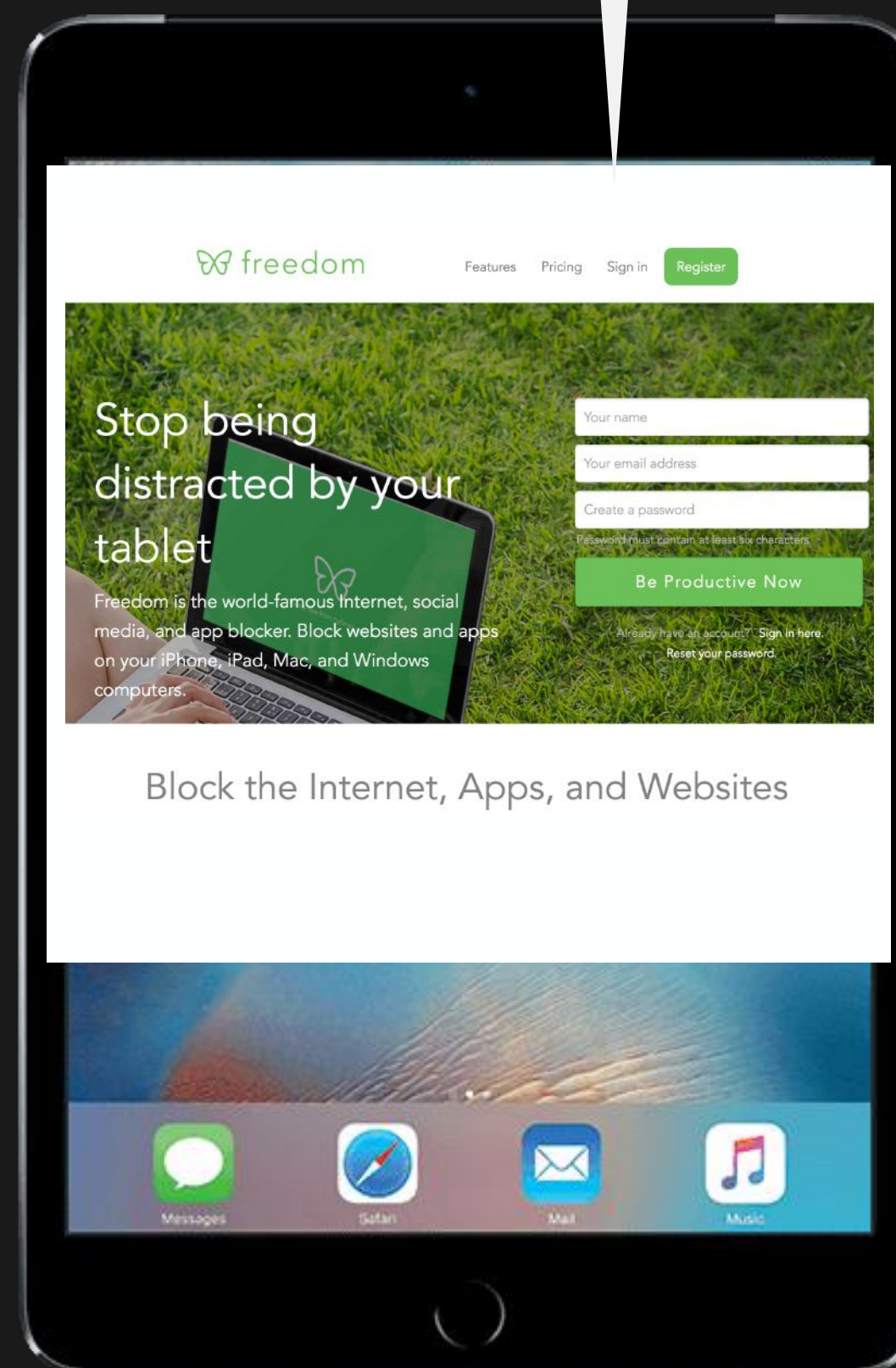




Desktop

If device is desktop,
apply styles 1

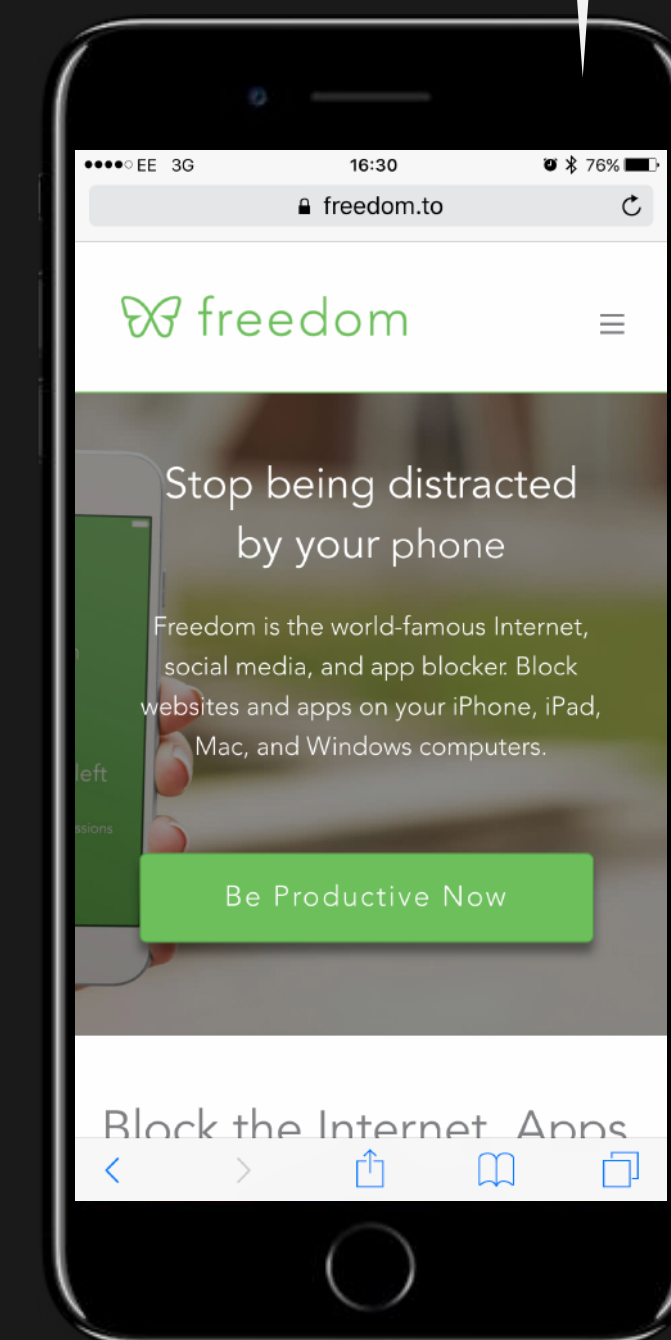
Remove navigation elements



Tablet

If device is tablet,
apply styles 2

Use navigation hamburger

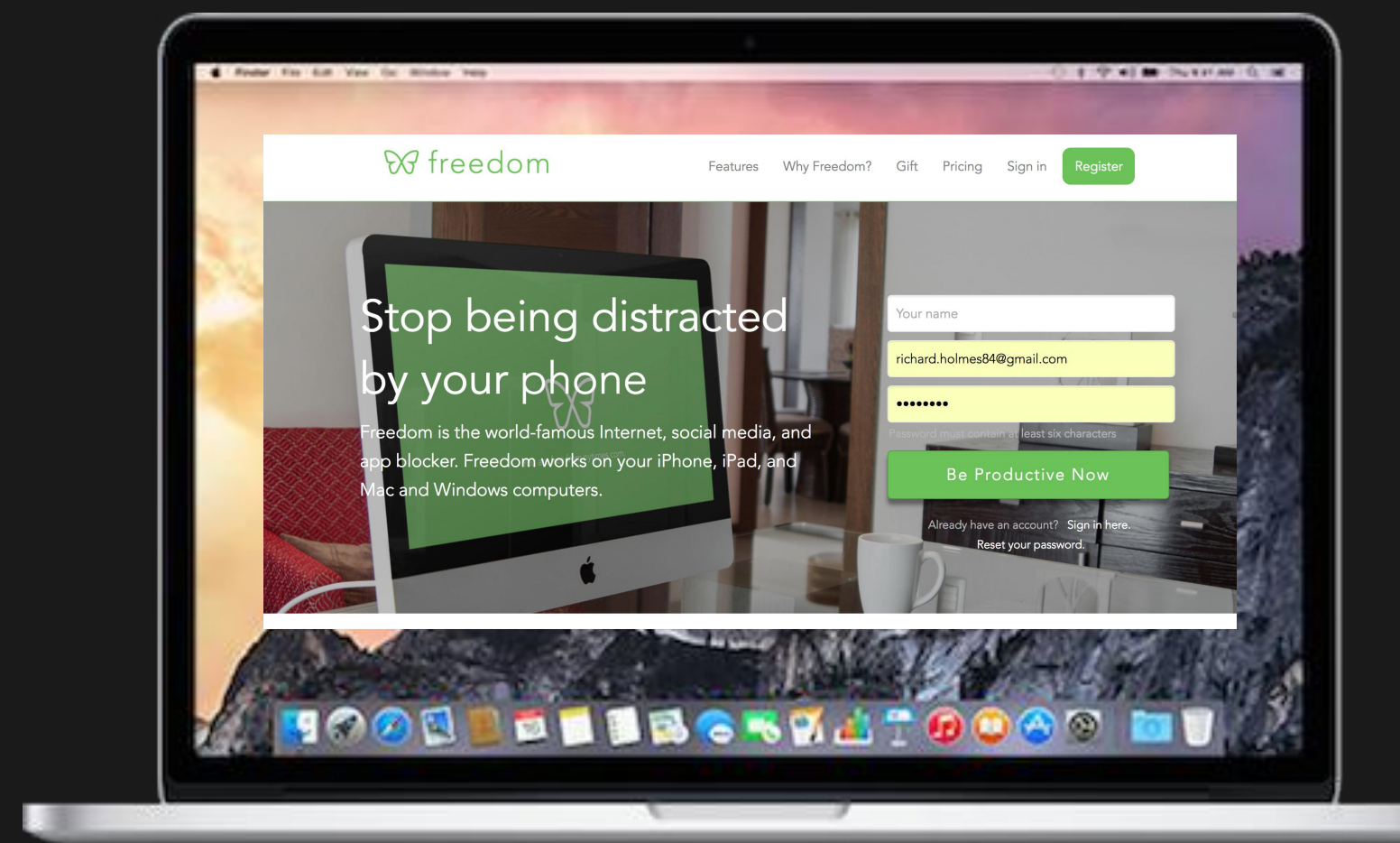


Mobile

If device is phone,
apply styles 3



Examples of media queries



Desktop

```
/* ----- iPad 3 and 4 ----- */
/* Portrait and Landscape */
@media only screen
  and (min-device-width: 768px)
  and (max-device-width: 1024px)
  and (-webkit-min-device-pixel-ratio: 2) {

}

/* Portrait */
@media only screen
  and (min-device-width: 768px)
  and (max-device-width: 1024px)
  and (orientation: portrait)
  and (-webkit-min-device-pixel-ratio: 2) {

}

/* Landscape */
@media only screen
  and (min-device-width: 768px)
  and (max-device-width: 1024px)
  and (orientation: landscape)
  and (-webkit-min-device-pixel-ratio: 2) {

}
```

Tablet

```
/* ----- iPhone 6 ----- */

/* Portrait and Landscape */
@media only screen
  and (min-device-width: 375px)
  and (max-device-width: 667px)
  and (-webkit-min-device-pixel-ratio: 2) {

}

/* Portrait */
@media only screen
  and (min-device-width: 375px)
  and (max-device-width: 667px)
  and (-webkit-min-device-pixel-ratio: 2)
  and (orientation: portrait) {

}

/* Landscape */
@media only screen
  and (min-device-width: 375px)
  and (max-device-width: 667px)
  and (-webkit-min-device-pixel-ratio: 2)
  and (orientation: landscape) {

}
```

Mobile



CSS syntax



CSS syntax

1. Selector

What are you selecting? What element do you want to apply CSS to e.g. H1.

h1 {

color: red;

2. Property

*What's the property?
What are you trying to change?
E.g. 'color'*

3. Value

*What's the value?
Properties have specific values that are applicable e.g. red.*

}



1. Selectors



Selectors

| Selector | Example |
|----------|--|
| Element | <pre>h1 { property: value }</pre> |
| ID | <pre>#box { property: value }</pre> |
| Class | <pre>.center { text-align: center; }</pre> |



Live example

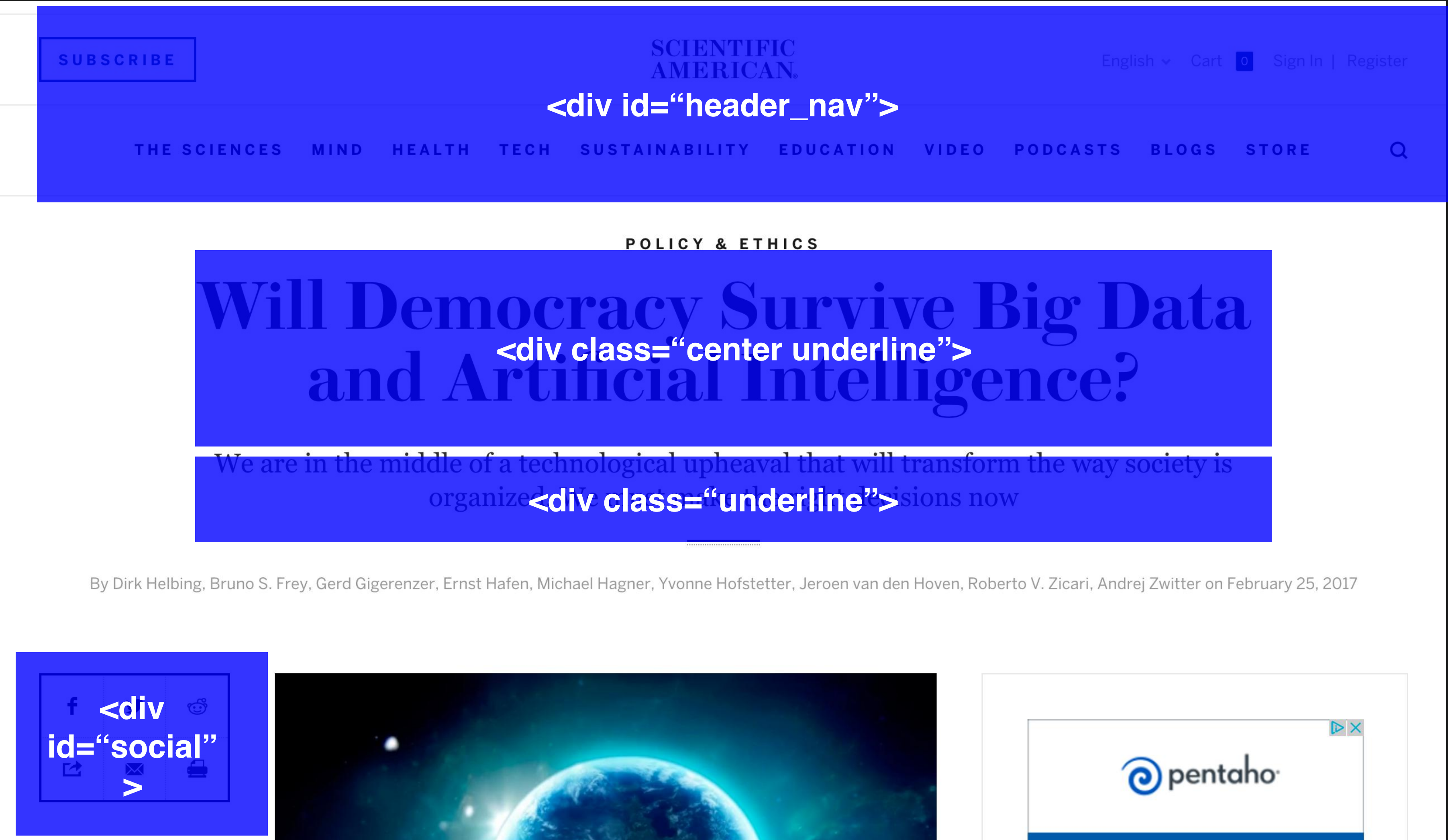
Using element selectors to make elements red



Divs & CSS



Divs & CSS



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<div id="header_nav">

THE SCIENCES MIND HEALTH TECH SUSTAINABILITY EDUCATION VIDEO PODCASTS BLOGS STORE



POLICY & ETHICS

Will Democracy Survive Big Data and Artificial Intelligence?

<div class="center underline">

We are in the middle of a technological upheaval that will transform the way society is organized...<div class="underline">

By Dirk Helbing, Bruno S. Frey, Gerd Gigerenzer, Ernst Hafen, Michael Hagner, Yvonne Hofstetter, Jeroen van den Hoven, Roberto V. Zicari, Andrej Zwitter on February 25, 2017




<div
id="social">



pentaho



ID selectors



The diagram shows a white rectangular box representing an HTML document. Inside this box, there is a smaller blue rectangular box. Centered within the blue box is the text `<div id =“box”>` in white.

```
<div id =“box”>
```

HTML



The diagram shows a dark gray rectangular box representing a CSS stylesheet. Inside this box, the text `#box` is displayed in a reddish-orange color. Above it, the word 'Stylesheet' is written in white.

Stylesheet

```
#box
```

CSS stylesheet



Class selectors

For re-usable styles



Class selectors

```
<div class =“center”>
```

```
<h2 class =“center  
underline blue”>
```

HTML

Stylesheet

```
.center {  
text-align: center;  
}  
  
.underline {  
text-decoration: underline;  
}  
  
.blue {  
color: blue;  
}
```

CSS stylesheet



Live examples

Divs & CSS working together



2. Property



CSS syntax

1. Selector

What are you selecting? What element do you want to apply CSS to e.g. H1.

h1 {

color: red;

2. Property

*What's the property?
What are you trying to change?
E.g. 'color'*

3. Value

*What's the value?
Properties have specific values that are applicable e.g. red.*

}



CSS properties

What's useful to learn?

`Font-family` (*chooses the font*)

`Font-size` (*chooses the font size*)

`Text-align` (*chooses text orientation*)

`Background-color` (*sets the background color*)



3. Value



CSS syntax

1. Selector

What are you selecting? What element do you want to apply CSS to e.g. H1.

h1 {

color: red;

2. Property

*What's the property?
What are you trying to change?
E.g. 'color'*

3. Value

*What's the value?
Properties have specific values that are applicable e.g. red.*

}



Resources

| Property | Description | Values | Example |
|-----------------|---|--|---|
| color | The color of the element | #RRGGBB (Red, Green, Blue hex values) | <pre>h1 { color: red; }</pre> |
| text-align | The alignment of an element, usually text | left right center justify | <pre>p { text-align: center; }</pre> |
| text-decoration | Decorates the text with a variety of funky decorations. Most common is underline. | none underline overline line-through blink inherit | <pre>p { text-decoration: underline; }</pre> |
| text-transform | Transforms text - often into uppercase. | none capitalize uppercase lowercase | <pre>h2 { text-transform: uppercase; }</pre> |
| line-height | The height between lines in text | px, % | <pre>p { line-height: 1%; }</pre> |
| letter-spacing | Defines the space between letters in text | normal or px value | <pre>p { letter-spacing: 2px; }</pre> |
| font-family | Defines the font family for text | font or font-family [, font or font-family ...] | <pre>p { font-family: Arial, Helvetica, Sans Serif; }</pre> |
| font-size | Defines the size of a font for text | px or em value | <pre>p { font-size: 12px; }</pre> |
| | | | <pre>p { font-weight: normal; }</pre> |

CSS cheat sheet



Live examples

CSS properties and values

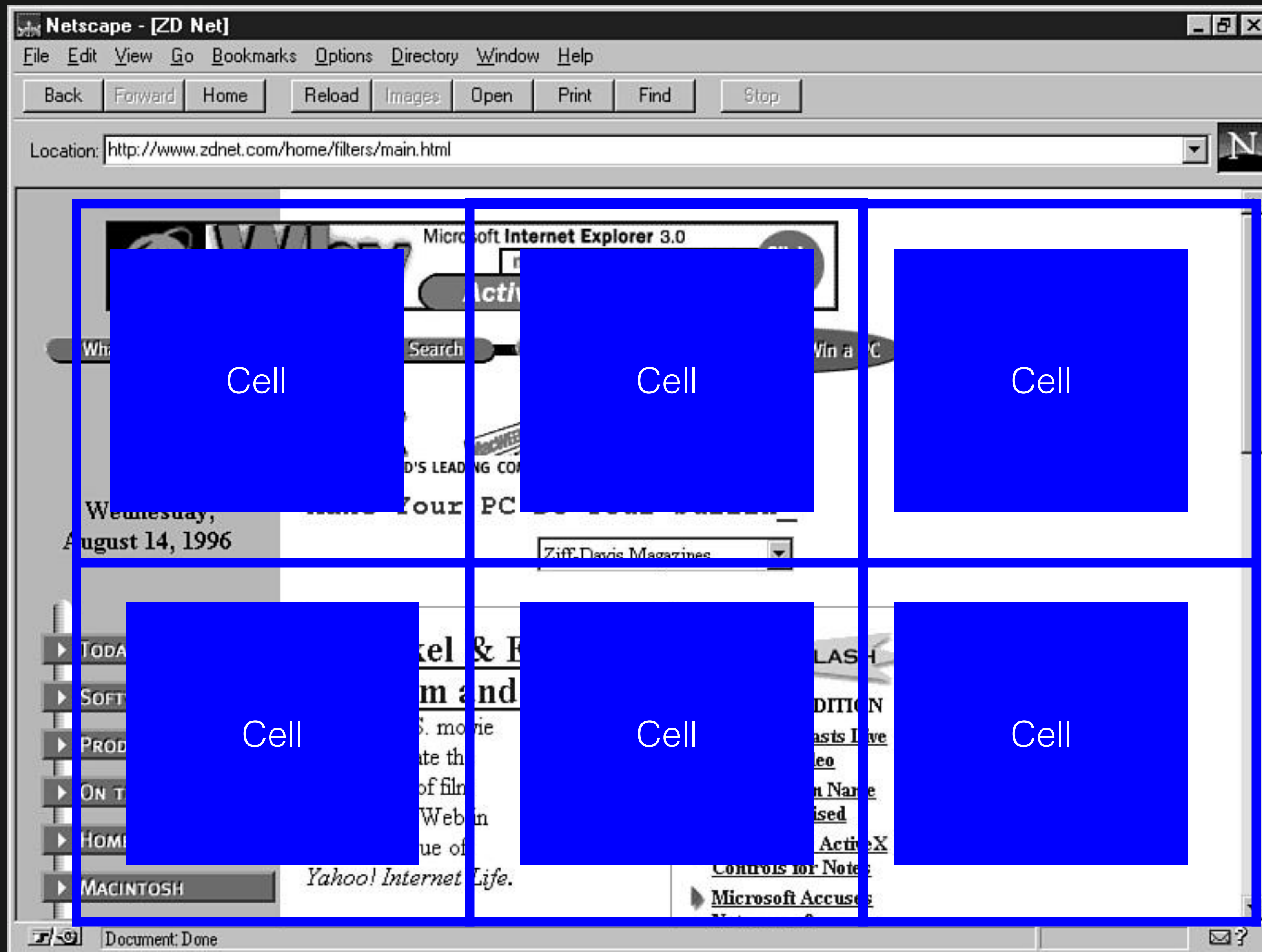


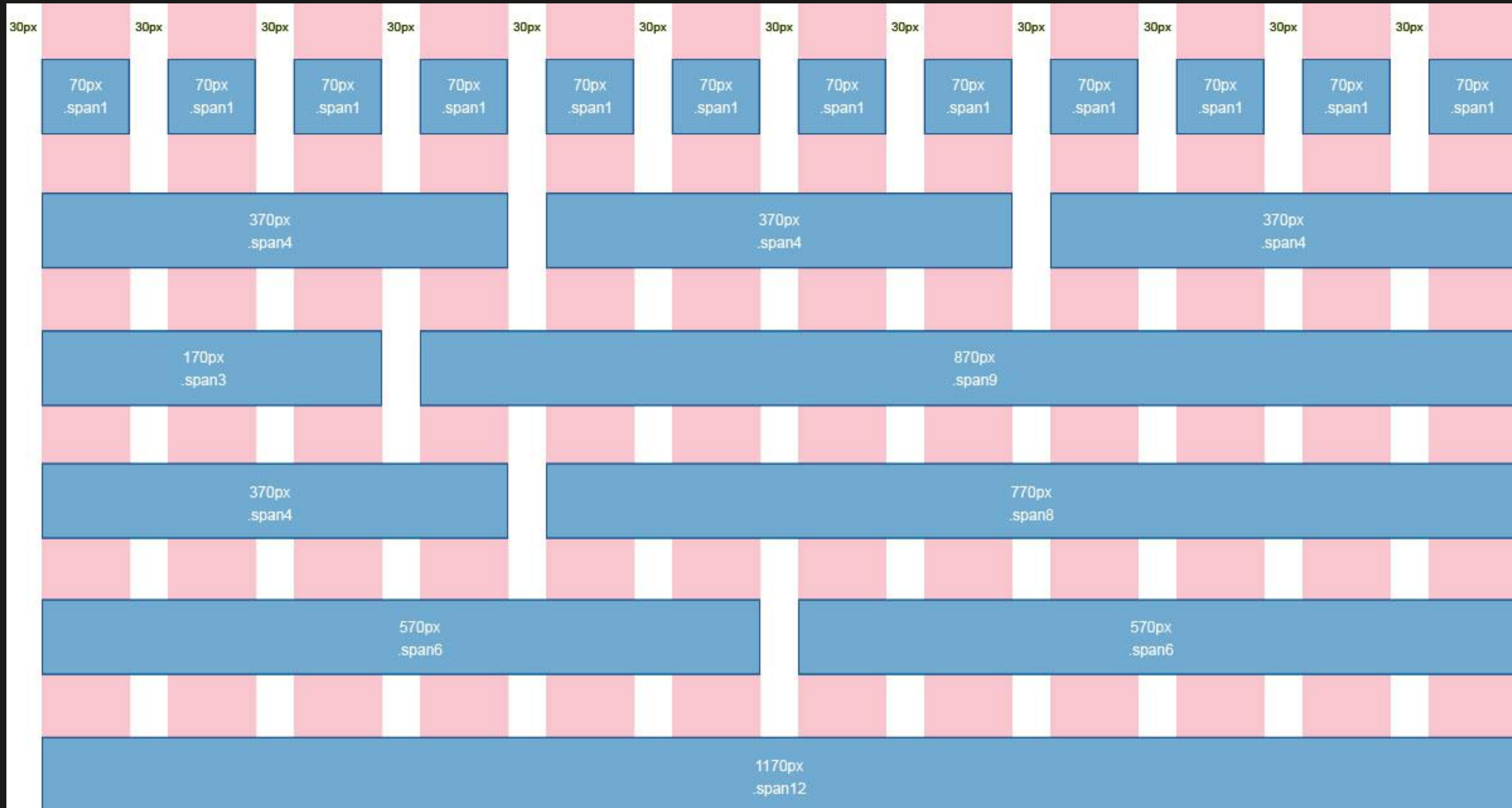
The 2 functions of CSS

Applying styles

**Positioning
elements**



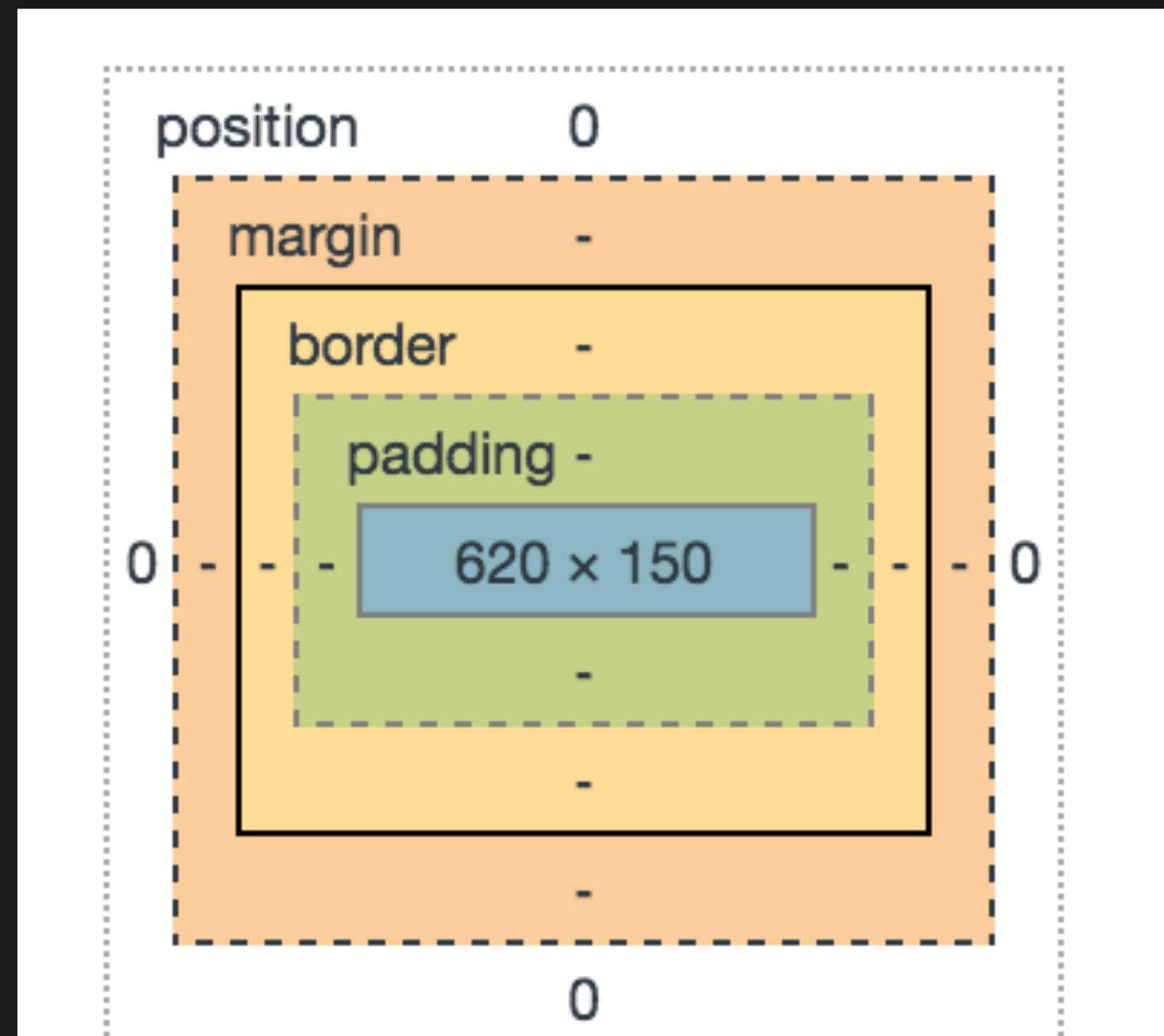




The box model

[illegible]

The box model



Live examples

The box model in action



CSS grids and frameworks

Shiny, new toys = shiny, happy developers







Bootstrap Grid System

Bootstrap's grid system allows up to 12 columns across the page.

If you do not want to use all 12 columns individually, you can group the columns together to create wider columns:

| | | | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| span 1 | span 1 | span 1 | span 1 | span 1 | span 1 | span 1 | span 1 | span 1 | span 1 | span 1 | span 1 |
| span 4 | | | | span 4 | | | | span 4 | | | |
| span 4 | | | | span 8 | | | | | | | |
| span 6 | | | | | | span 6 | | | | | |
| span 12 | | | | | | | | | | | |

Bootstrap's grid system is responsive, and the columns will re-arrange depending on the screen size: On a big screen it might look better with the content organized in three columns, but on a small screen it would be better if the content items were stacked on top of each other.





Contextual backgrounds

Similar to the contextual text color classes, easily set the background of an element to any contextual class. Anchor components will darken on hover, just like the text classes.

EXAMPLE

Nullam id dolor id nibh ultricies vehicula ut id elit.

Duis mollis, est non commodo luctus, nisi erat porttitor ligula.

Maecenas sed diam eget risus varius blandit sit amet non magna.

Etiam porta sem malesuada magna mollis euismod.

Donec ullamcorper nulla non metus auctor fringilla.

```
<p class="bg-primary">...</p>
<p class="bg-success">...</p>
<p class="bg-info">...</p>
<p class="bg-warning">...</p>
<p class="bg-danger">...</p>
```

Single button dropdowns

Turn a button into a dropdown toggle with some basic markup changes.

EXAMPLE

Default ▾

Primary ▾

Success ▾

Info ▾

Warning ▾

Danger ▾

```
<!-- Single button -->
<div class="btn-group">
  <button type="button" class="btn btn-default dropdown-toggle" data-toggle="dropdown" aria-
haspopup="true" aria-expanded="false">
    Action <span class="caret"></span>
  </button>
  <ul class="dropdown-menu">
    <li><a href="#">Action</a></li>
    <li><a href="#">Another action</a></li>
    ... <a href="#">Something else here</a></li>
    <li role="separator" class="divider"></li>
    <a href="#">Separated link</a></li>
```

Copy

