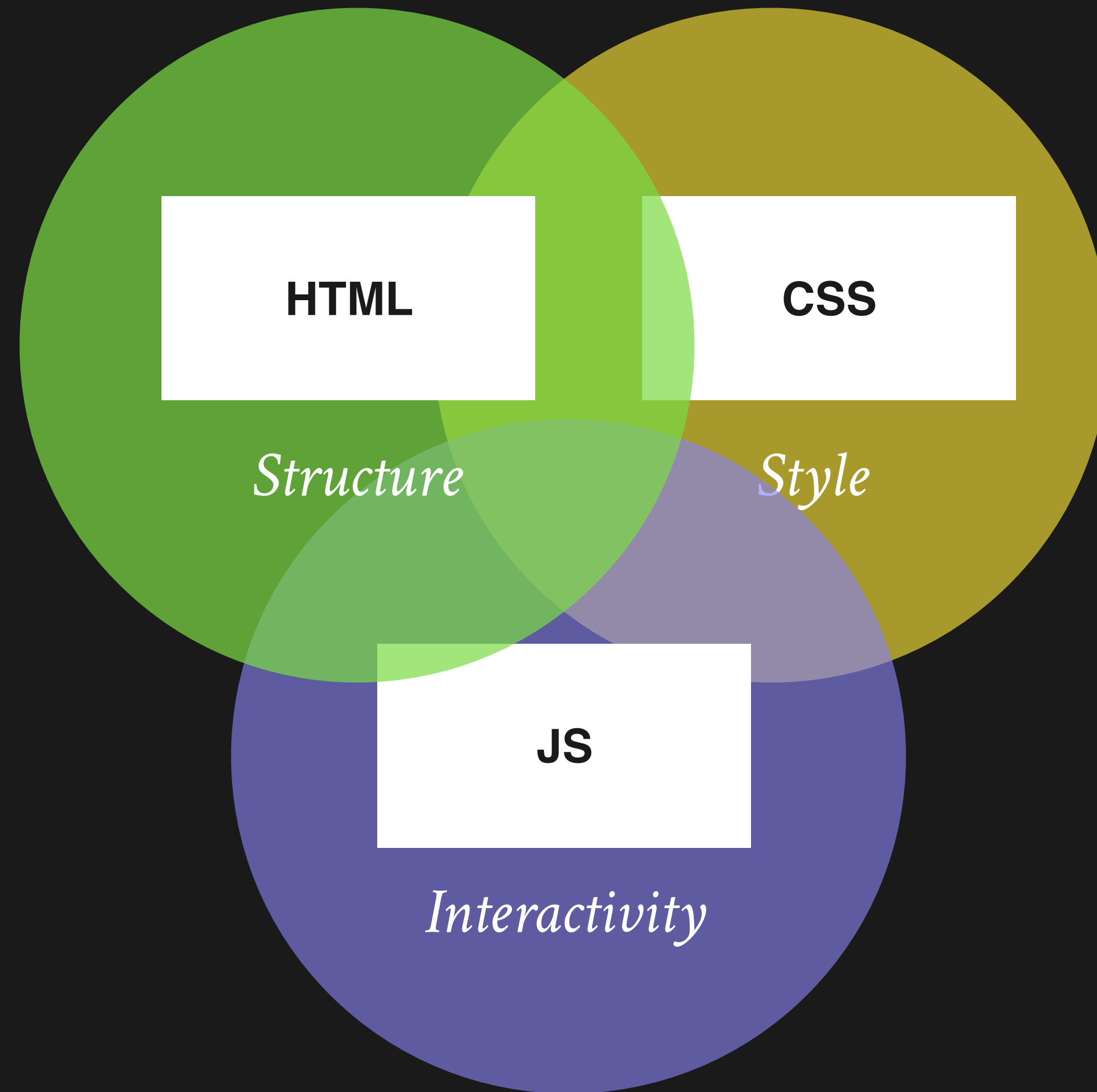




WEB TECHNOLOGIES PROGRAM

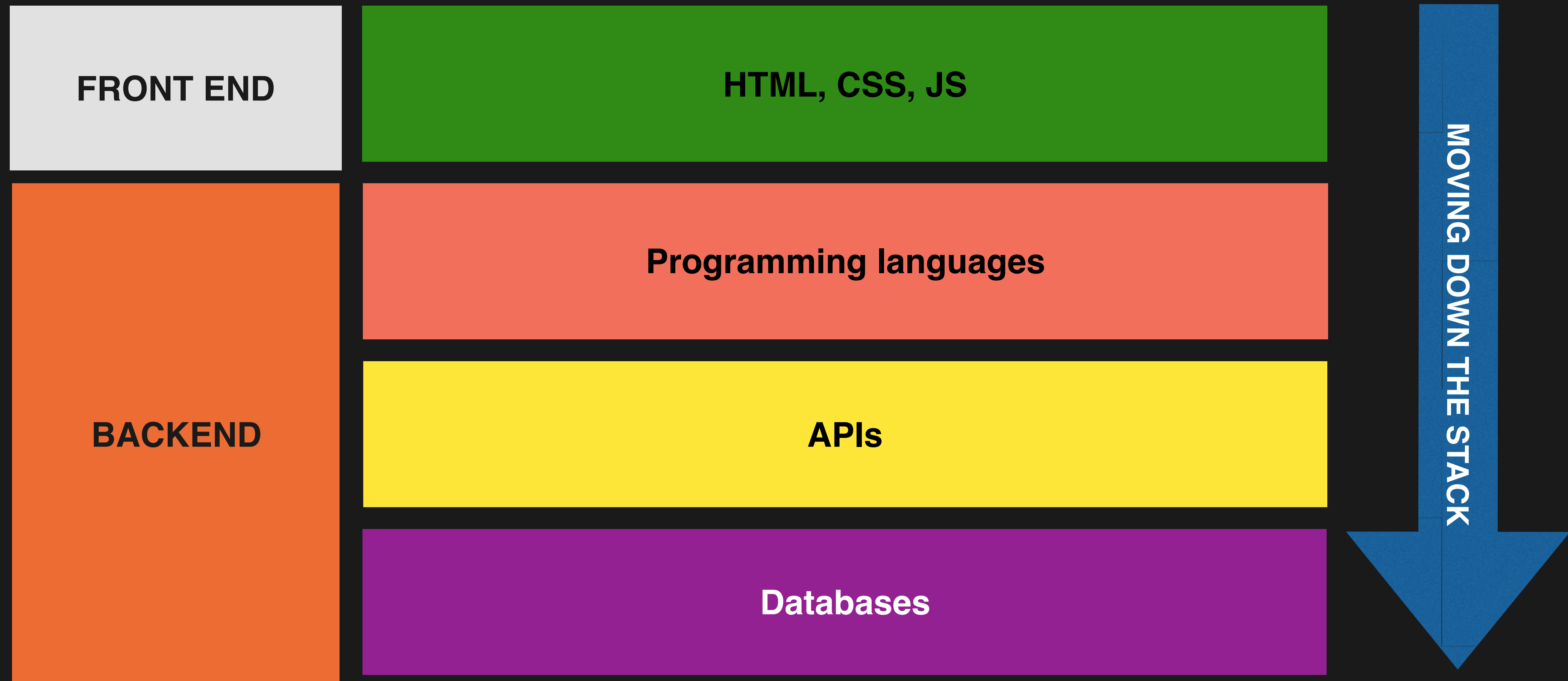
An introduction to CSS

How styles and structure work together



CSS in the full stack

Where does it fit into the picture?



C

Cascading

S

Style

S

Sheets



A brief history

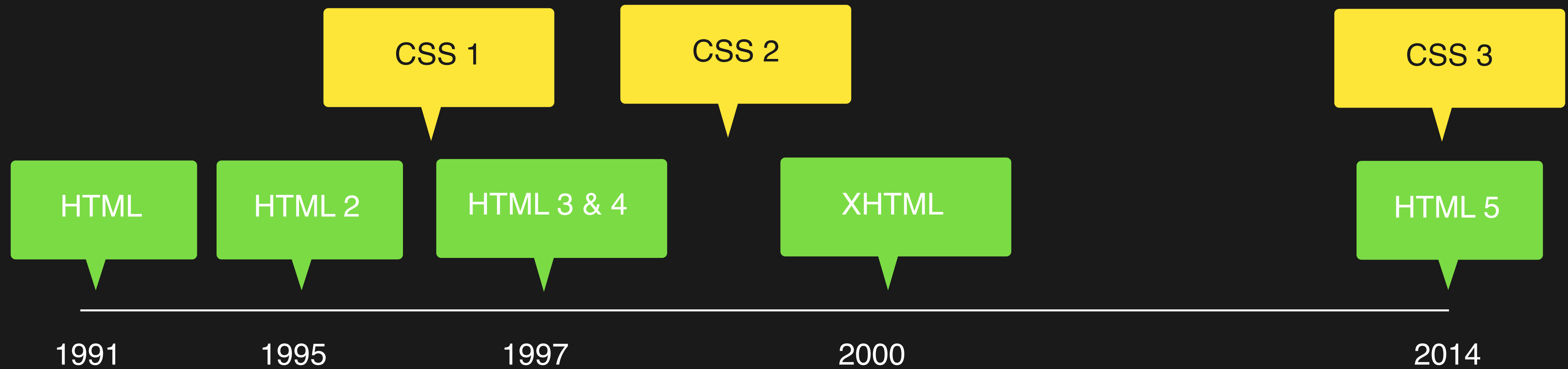
In fact, it has been a constant source of delight for me over the past year to get to continually tell hordes (literally) of people who want to -- strap yourselves in, here it comes -- control what their documents look like in ways that would be trivial in TeX, Microsoft Word, and every other common text processing environment: "Sorry, you're screwed."

MARC ANDREESSEN

Founder, Netscape



A brief history



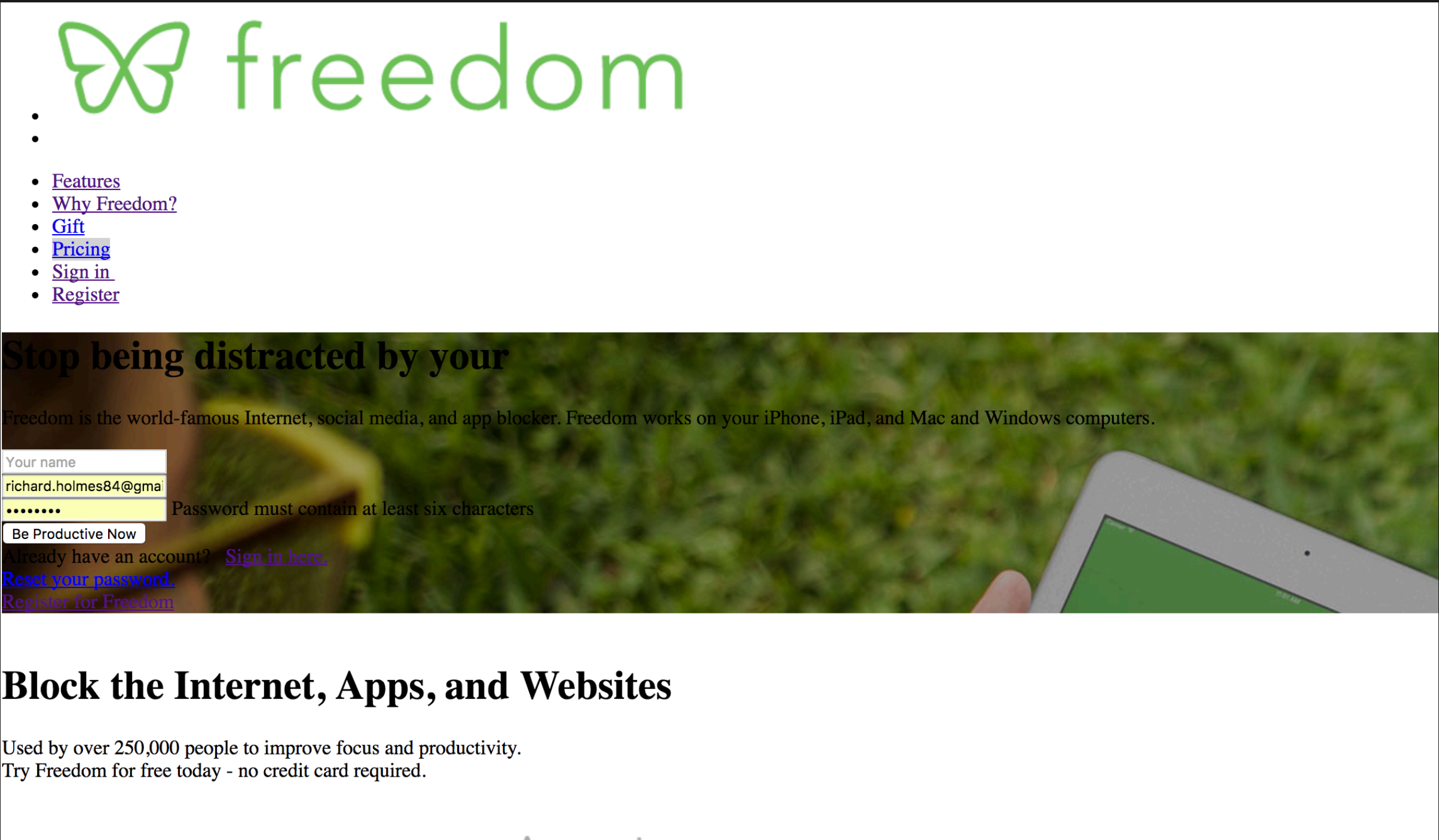
CSS



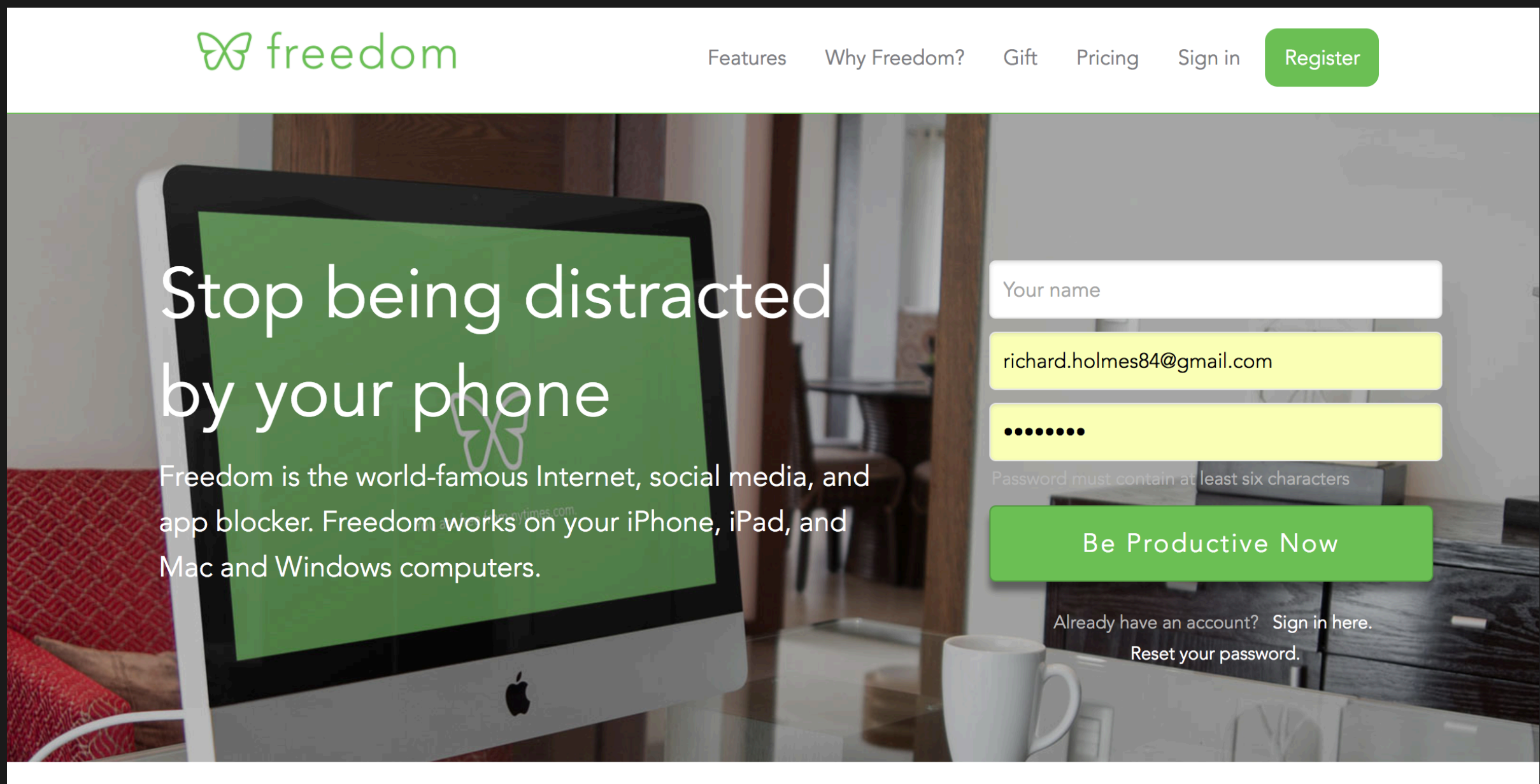
What can CSS do?



HTML only



HTML + CSS

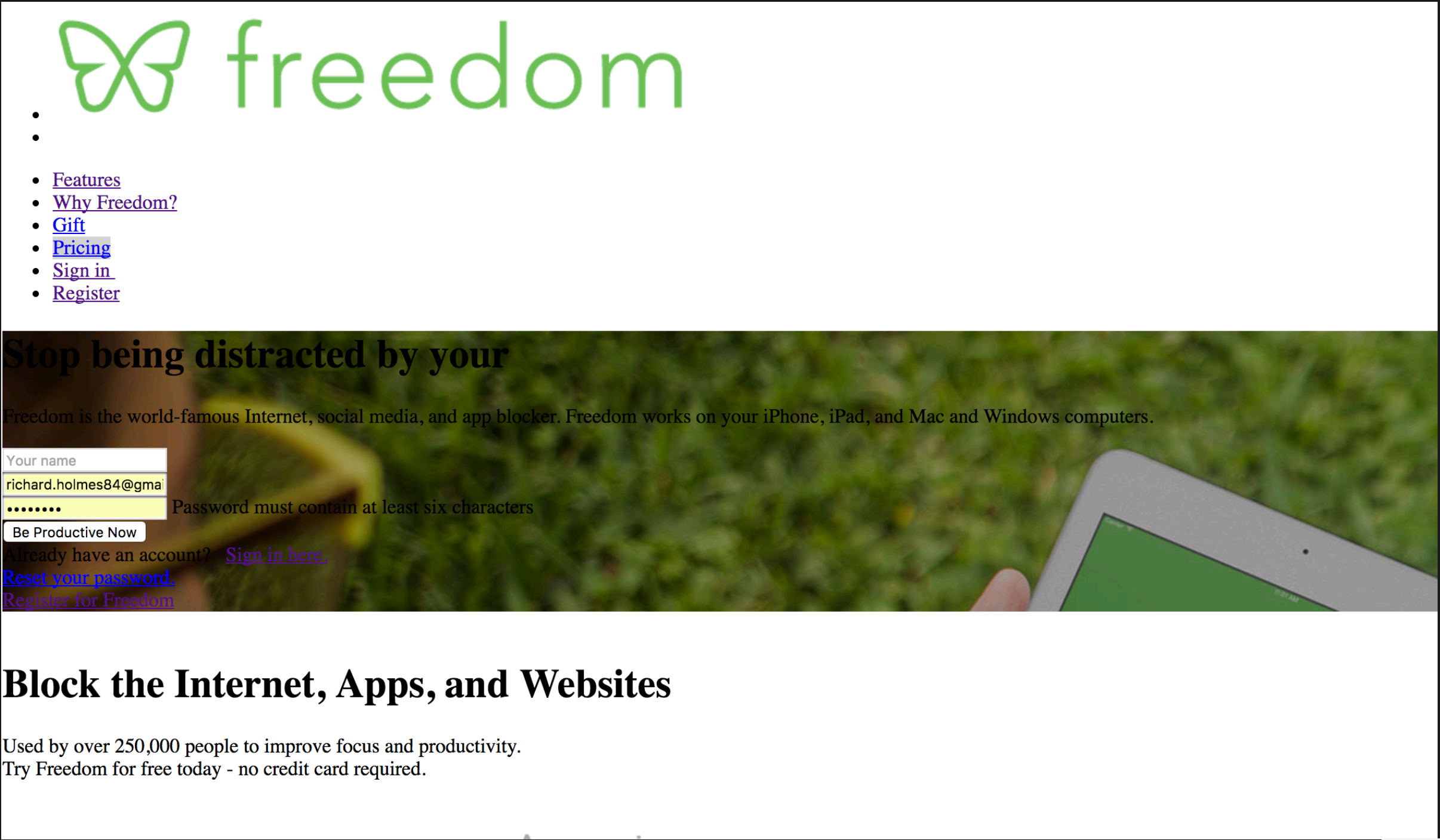


The 2 functions of CSS

Applying styles

**Positioning
elements**





CSS positioning

CSS background

CSS buttons

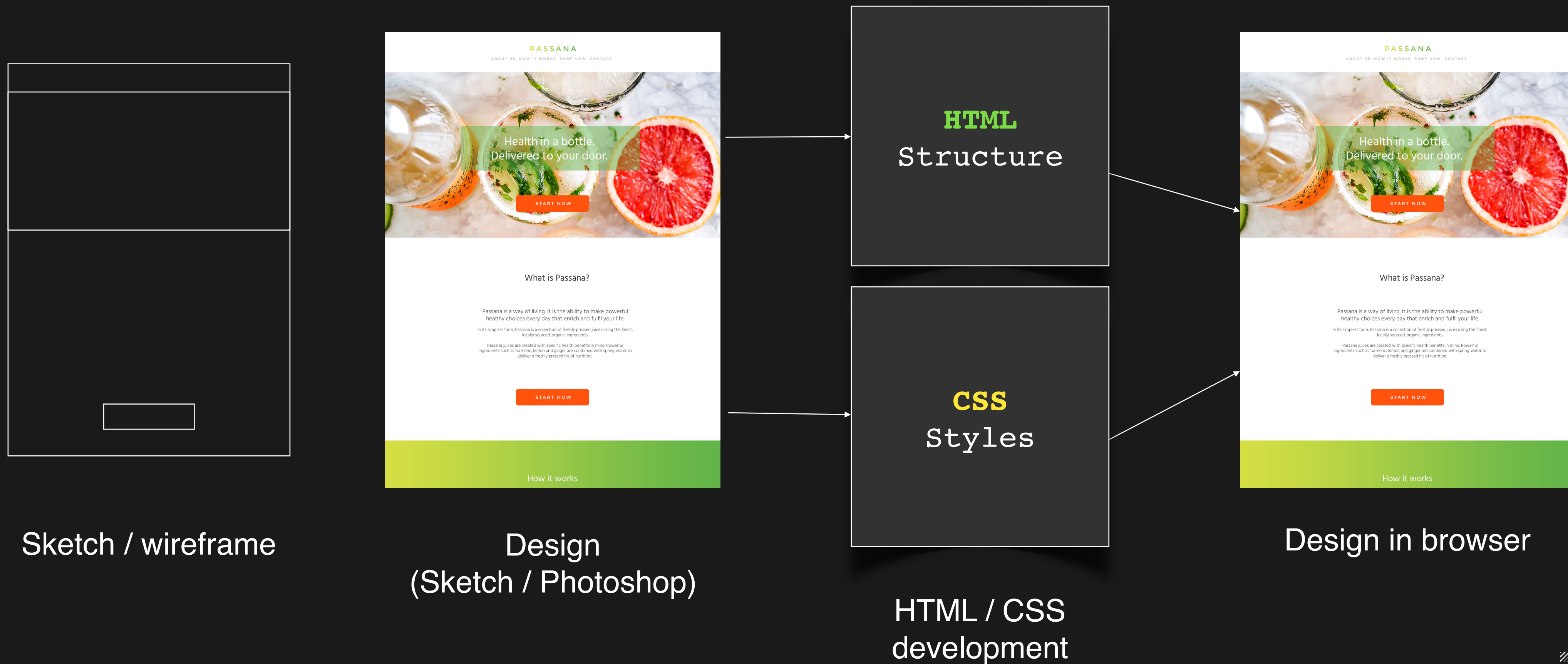


CSS fonts

How is CSS applied?



The front end development process



How is CSS applied?

**CSS
Stylesheets**

Inline CSS



CSS stylesheets



HTML
Structure

Image

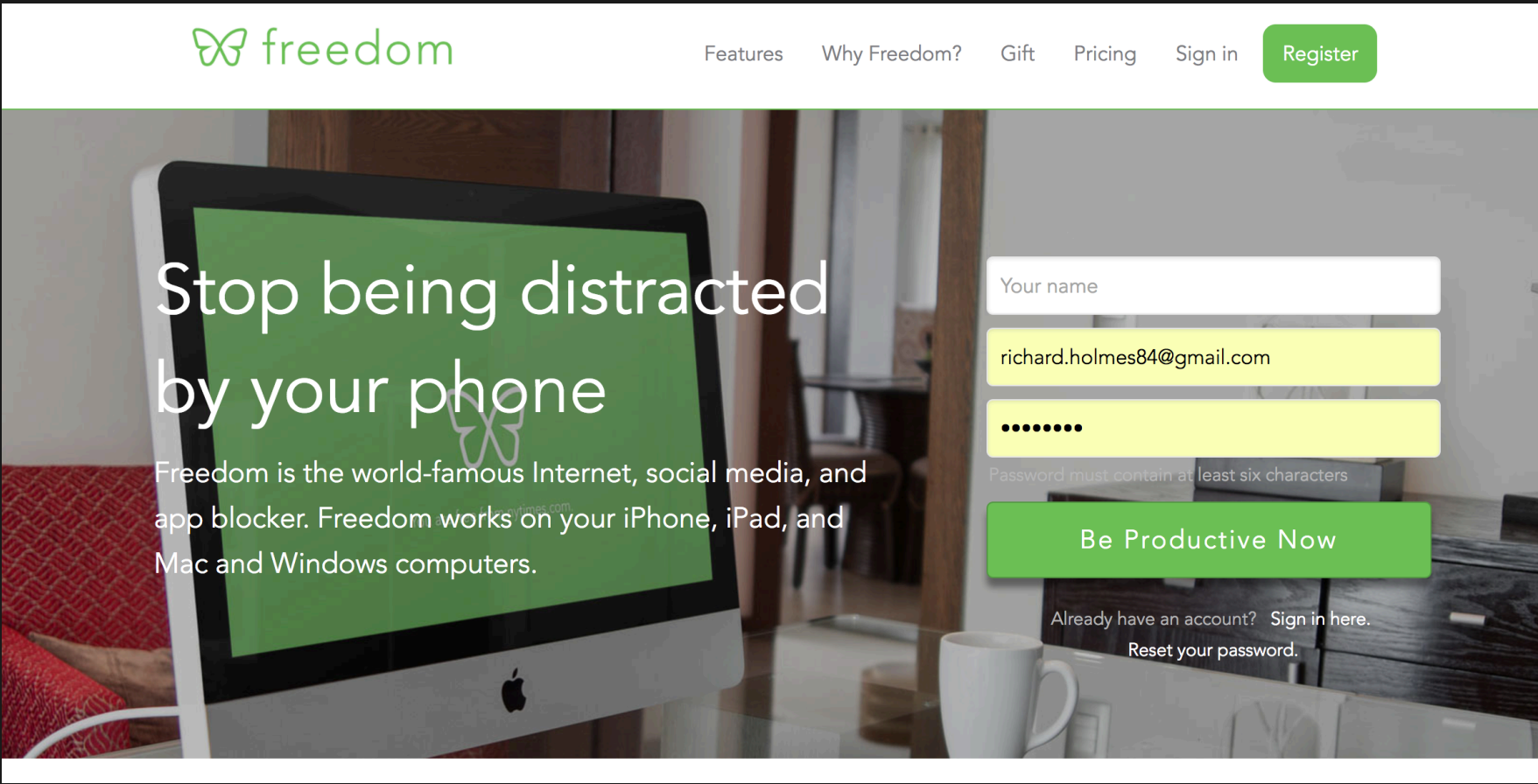
Heading
<h1>

Image

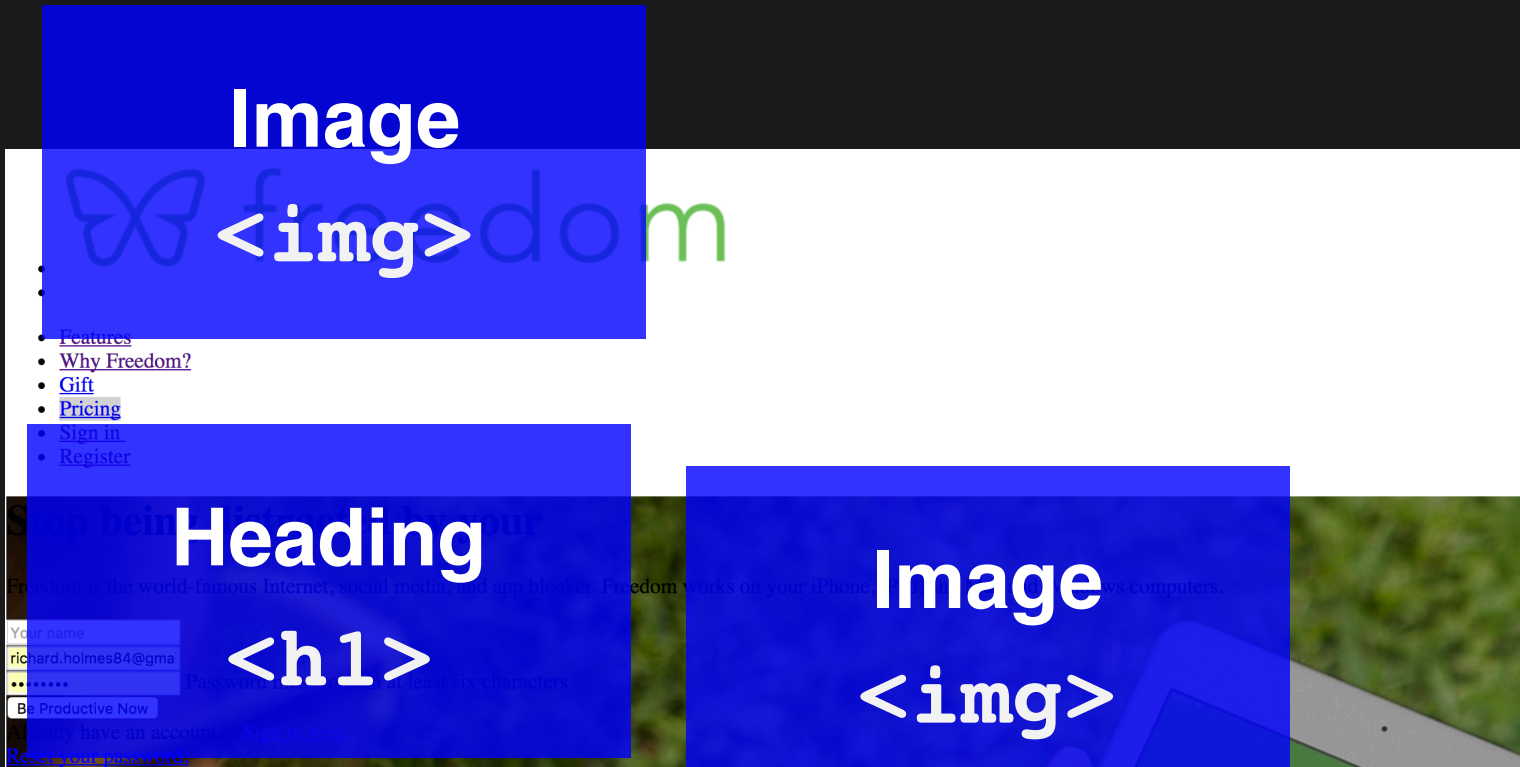
Paragraph
<p>



CSS
Stylesheet



HTML
Structure



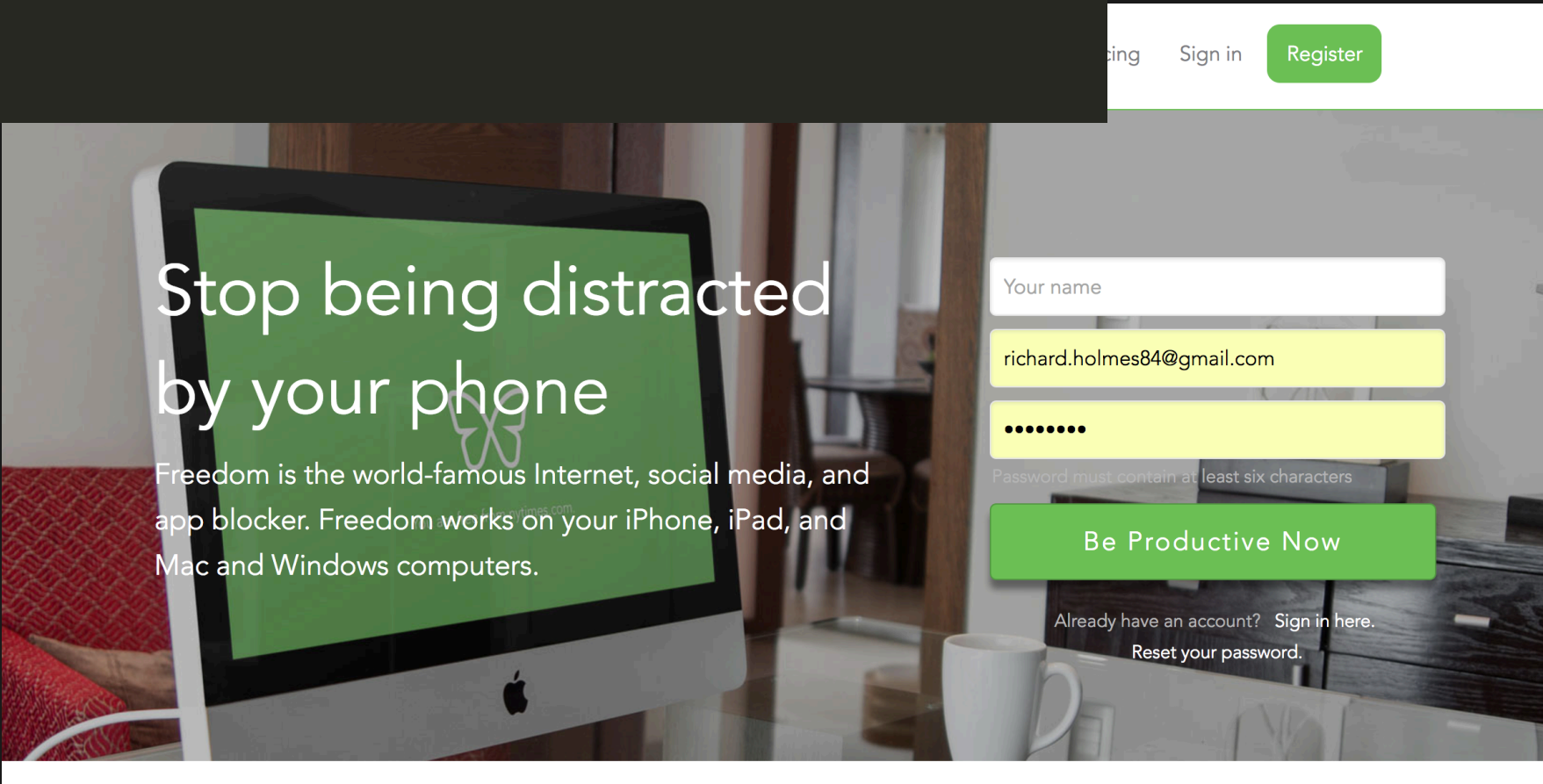
```
<!DOCTYPE html> - <!-- appears once, before any HTML tags. It helps the browser to display content correctly. -->
<html>
<head>

<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



HTML Structure

```
<h1 style="color:blue;margin: 0 auto; width: 50%; text-align: center;">HTML Structure</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 stylesheet - This is the 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;
}
```

Inline CSS



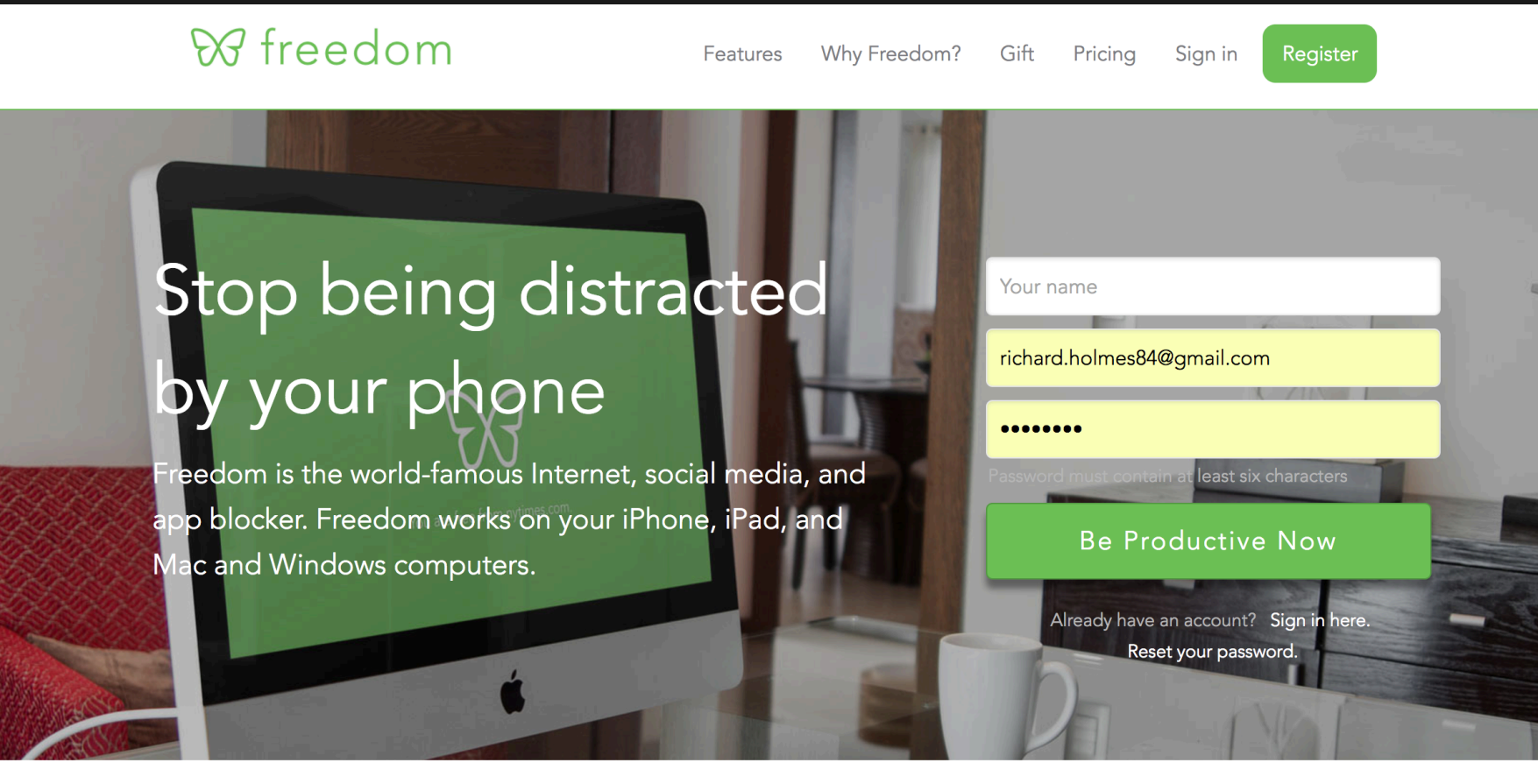


HTML

Structure

CSS

Styles

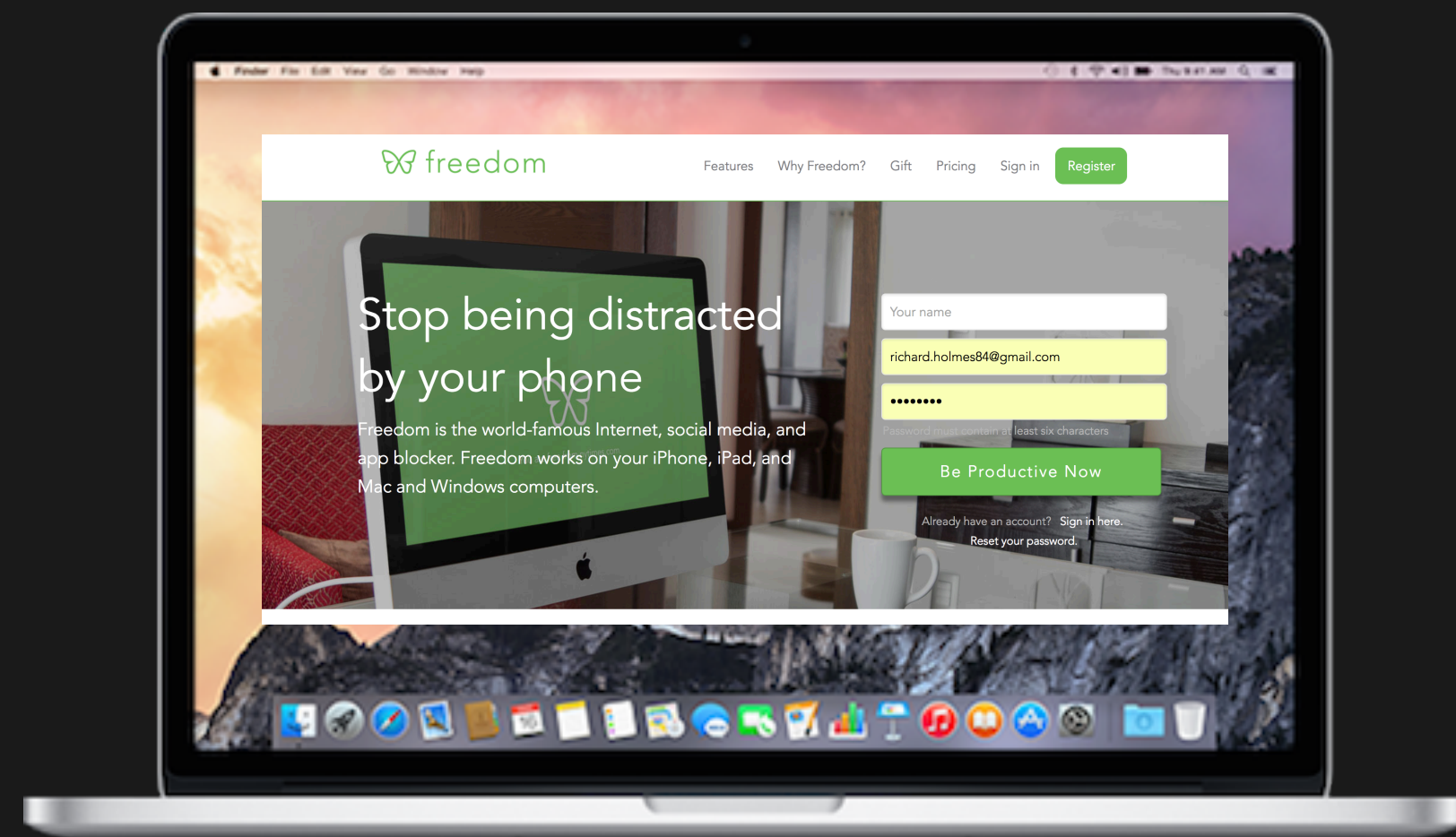


```
1 <h1 style="color:blue;margin-left:30px;">This is a heading</h1>
2
3
4
5 <h2>What does HTML do? </h2>
6
7
8 <h3>Structure - </h3>
9 <p>HTML enables you to describe the structure of a document so it can be interpreted and displayed correctly by the browser and styled CSS.
10 It tells the browser what the page consists of. It tells the browser 'this is an image, this is a table, this is a paragraph and so on'.
11 These are known as elements.</p>
12
13
14 <ul>
15 <li>Elements - the 'things' on a page are known as elements. </li>
16 <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
17 primary reasons for HTML when it was introduced; linking documents together to create a 'network' of documents that scientists could use</li>
18 </ul>
19
20
21 <h3>Who uses HTML?</h3>
22
23 <ul>
24 <li>Your front end developers work with HTML, primarily to build the structure of web pages. </li>
25 <li>Backend programmers will sometimes use it but </li>
26 <li>Marketing folks may using HTML for writing blog posts </li>
27 <li>Example - tools like WordPress have a 'Visual' editor or a 'Text' editor - https://www.evernote.com/l/AHVsuBQpKP1Hu6lo5x0uErrXWxkr1mFbq-w
28 </li>
29 <a href="http://www.link.com">Click</a>
30 </ul>
31
32
33 
```

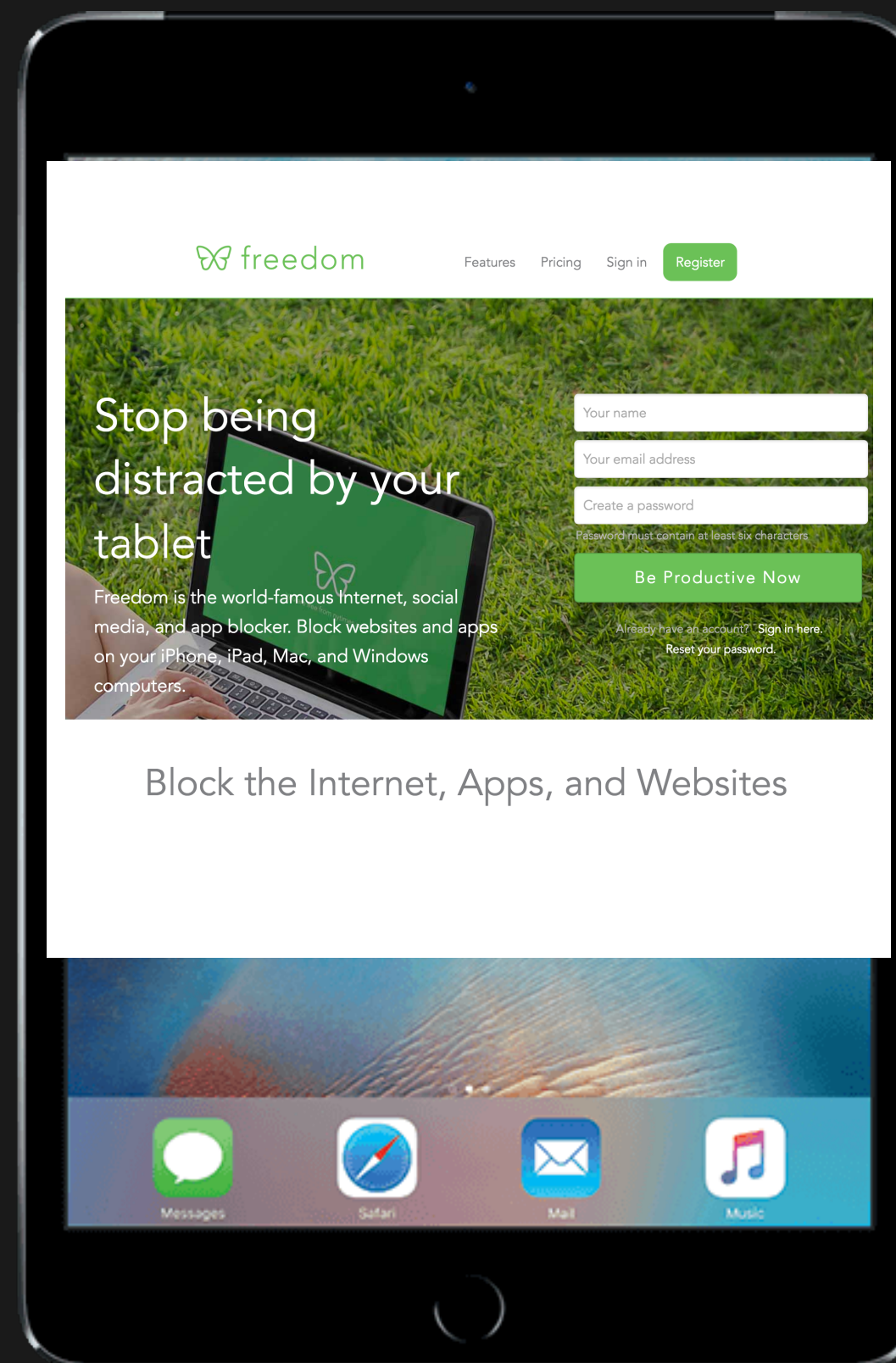


CSS & mobile

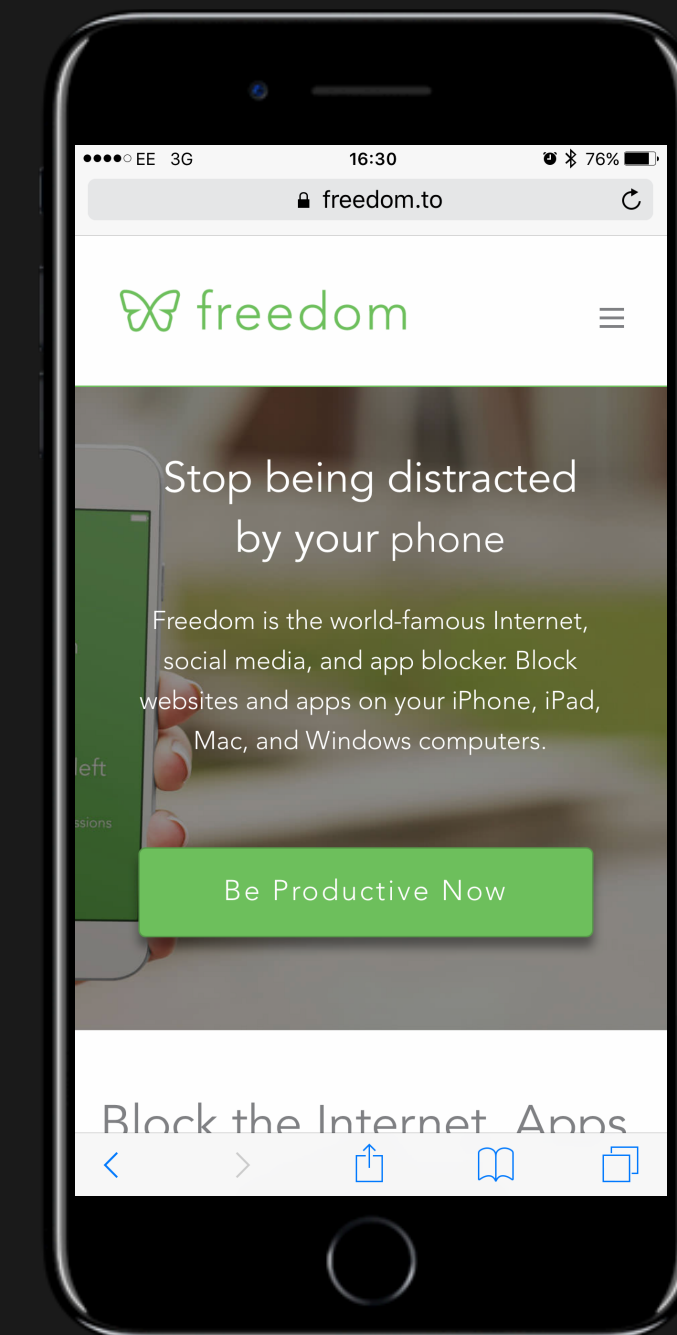




Desktop



Tablet



Mobile

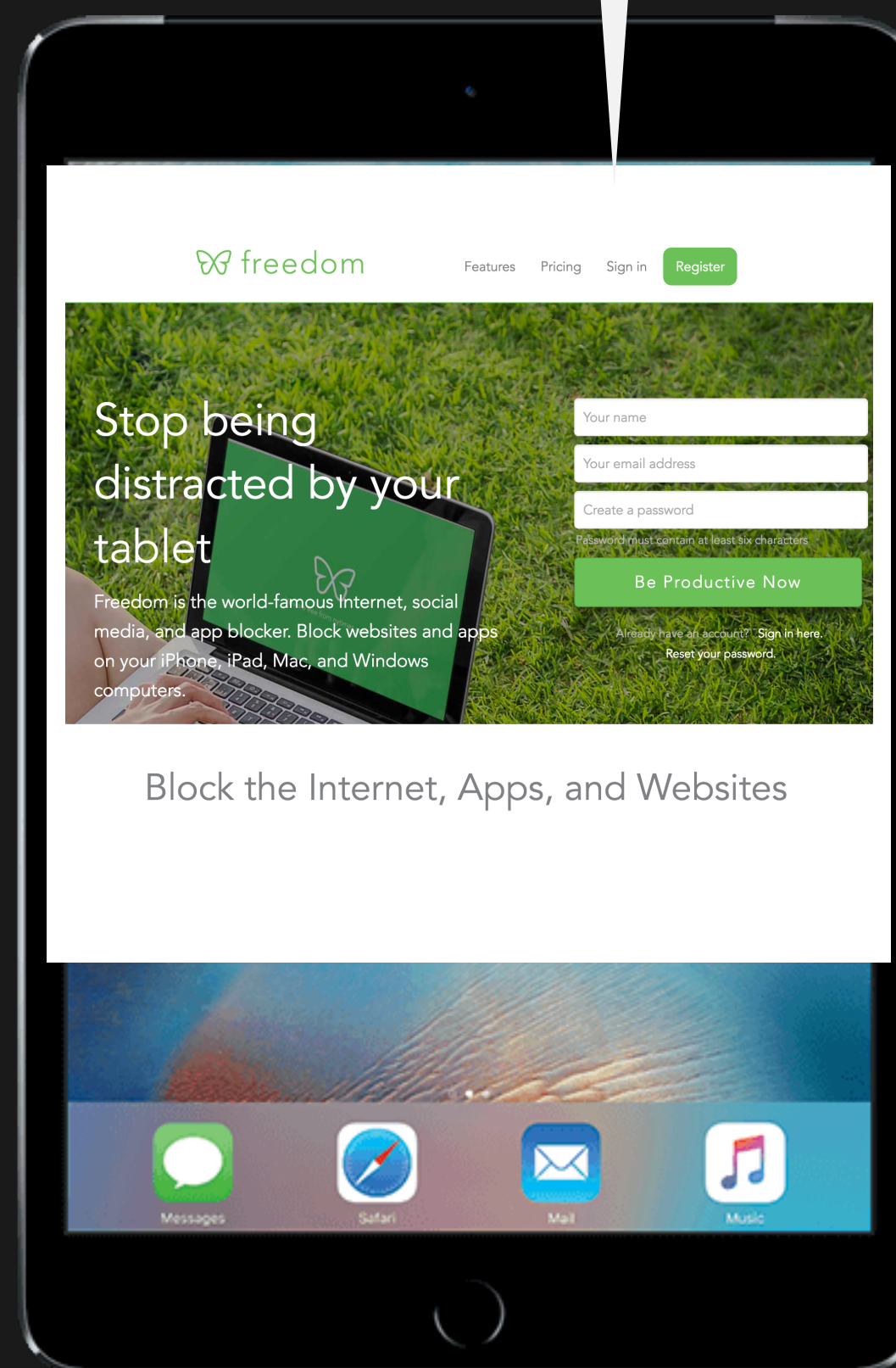




Desktop

If device is desktop,
apply styles 1

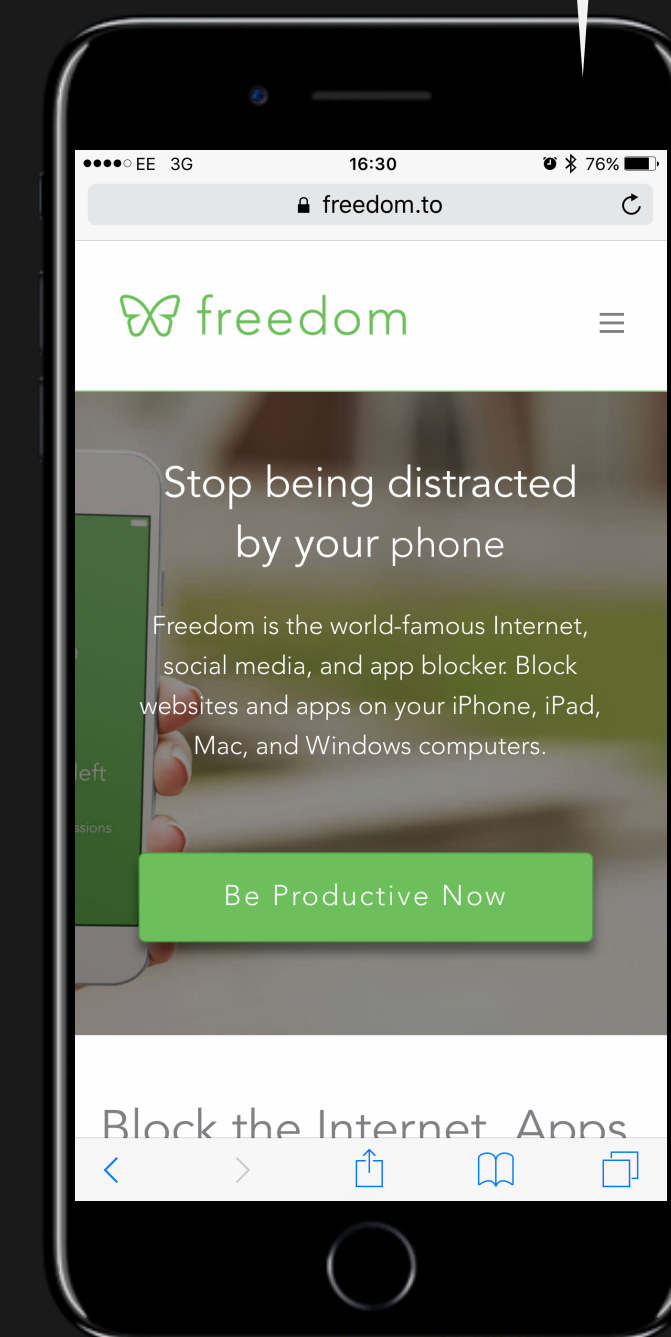
Remove navigation elements



Tablet

If device is tablet,
apply styles 2

Use navigation hamburger

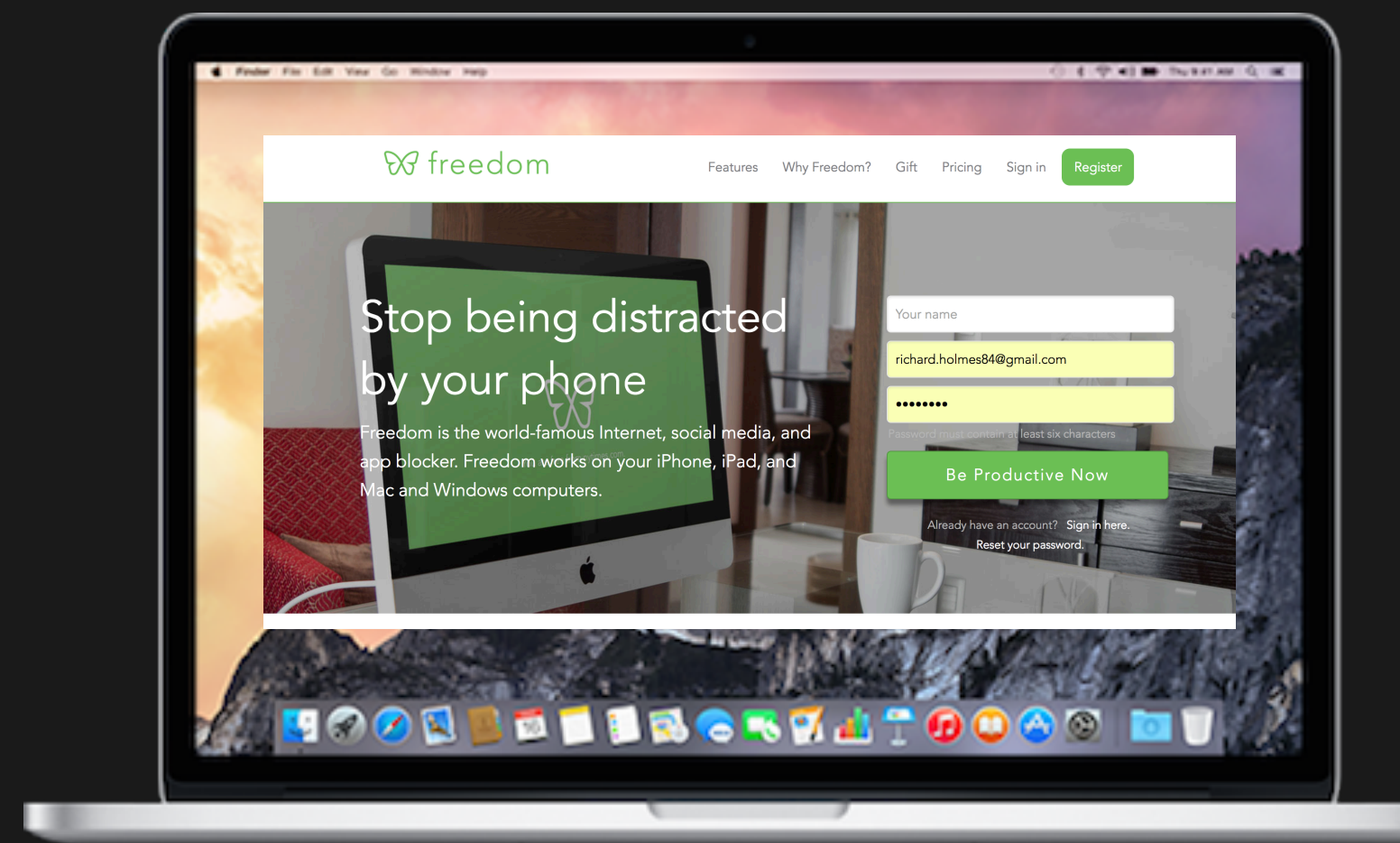


Mobile

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



A brief recap

1. CSS is a front end technology - cascading style sheets
2. CSS is separated from HTML but works with it using *stylesheets*
3. CSS is responsible for *styling* and *positioning*

