PUT DOWN THE JAVASCRIPT

Level Up with the Fundamentals of Web Development

PUSH START

@colbyfayock

Colby Fayock

Developer Advocate

∢ applitools

@colbyfayock



Mark

Luke





Mark



Bootcamp A

4 week crash course

Become a Javascript ninja

Hot and popular libraries and
frameworks like React & Redux

Luke



Bootcamp B

8 week intensive course

Build a website from scratch with HTML and CSS

Learn about how Javascript works and using it to make your website dynamic

1up, Inc



Jr Front End Dev

Work with the engineering team to create and maintain websites

Technologies: HTML, CSS, JS,

React, Redux, CSS-in-JS

Experience: 1+ years



About Services





We 1up the competition

We at 1up, Inc care deeply about our customer's needs. We guarantee satisfaction with all of our ups.

Mark



Solution A

Bootstrap a new app
Use React as the framework
CSS-in-JS for styling

Luke



Solution B

Create an HTML file
Put together the page with HTML
Style everything with CSS

Solution A Mark



Solution B Luke



1up, Inc



1up, Inc

About Services



We 1up the competition

We at 1up, Inc care deeply about our customer's needs. We guarantee satisfaction with all of our ups. → my-test-app npm install react npm WARN saveError ENOENT: no such file or directory, open '/Users/colby/package.json' npm WARN enoent ENOENT: no such file or directory, open '/Users/colby/package.json'

```
<div id="root"></div>
10
11
12
       <script src="https://unpkg.com/react@16/umd/react.development.js" crossorigin></script>
       <script src="https://unpkg.com/react-dom@16/umd/react-dom.development.js" crossorigin></script>
13
       <script>
14
       const MyApp = () => {
         return (
17
           <div>
             Hello world!
           </div>
         );
20
21
       const domContainer = document.querySelector('#root');
23
       ReactDOM.render(MyApp, domContainer);
       </script>
```

```
<div id="root"></div>
10
11
12
       <script src="https://unpkg.com/react@16/umd/react.development.js" crossorigin></script>
       <script src="https://unpkg.com/react-dom@16/umd/react-dom.development.js" crossorigin></script>
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         );
20
21
       const domContainer = document.querySelector('#root');
       ReactDOM.render(MyApp, domContainer);
23
       </script>
```

```
Suncaught SyntaxError: Unexpected token '<' index.html:17

in
```

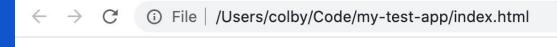
```
14
       <script src="https://unpkg.com/babel-standalone@6/babel.min.js"></script>
       <script type="text/babel">
       const MyApp = () => {
         return (
17
           <div>
             Hello world!
           </div>
20
         );
21
22
23
       const domContainer = document.querySelector('#root');
       ReactDOM.render(MyApp, domContainer);
24
```

```
14
       <script src="https://unpkg.com/babel-standalone@6/babel.min.js"></script>
       <script type="text/babel">
       const MyApp = () => {
         return (
17
           <div>
             Hello world!
19
           </div>
20
         );
21
23
       const domContainer = document.querySelector('#root');
24
       ReactDOM.render(MyApp, domContainer);
```

precompile your scripts for production - https://babeljs.lo/docs/setup/

Warning: Functions are not valid as a React child. <u>react-dom.development.js:82</u> This may happen if you return a Component instead of <Component /> from render. Or maybe you meant to call this function rather than return it.

```
<script type="text/babel">
       const MyApp = () => {
16
         return (
17
           <div>
             <div className="nav">
               <h1>1up, Inc</h1>
20
21
             </div>
22
           </div>
         );
23
24
```



1up, Inc

```
tandalone@6/babel.min.js"><
```

```
<!DOCTYPE html>
      <html lang="en">
     <head>
      <meta charset="UTF-8">
  5
      <meta name="viewport" content="width=device-width, initial-scale=1.0">
  6
      <title>Document</title>
     </head>
  8
      <body>
  9
      </body>
 10
      </html>
 11
```

```
<!DOCTYPE html>
      <html lang="en">
      <head>
       <meta charset="UTF-8">
       <meta name="viewport" content="width=device-width, initial-scale=1.0">
       <title>Document</title>
      </head>
      <body>
       <header>
         >
          <img src="images/lup-logo-small.png" />
          1up, Inc
         <nav>
          ul>
            <
             <a href="/about">About</a>
            <a href="/services">Services</a>
            </nav>
       /header>
```

```
header {
 display: flex;
 align-items: center;
 justify-content: space-between;
header p {
 display: flex;
 align-items: center;
header img {
 display: block;
 width: 5em;
header ul {
 display: flex;
 align-items: center;
 list-style: none;
 padding: 0;
 margin: 0;
```

Solution A Mark





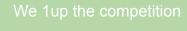


1up, Inc



1up, Inc

About Services



Solution B Luke





1up, Inc

About Services



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Starting with the basics

HTML

Hypertext Markup Language

```
!DOCTYPE html>
     <html lang="en">
 3
     <head>
 4
       <meta charset="UTF-8">
 5
       <meta name="viewport" content="width=device-width, initial-scale=1.0">
 6
       <title>Document</title>
     </head>
 8
     <body>
9
       <h1>Hello, world. It'sa me!</h1>
10
     </body>
11
     </html>
```

React / JSX

```
import React from 'react';
2
    const MyPage = () => {
3
      return (
5
        <h1>Hello, world. It'sa me!</h1>
6
8
9
    export default MyPage;
```

Compiled HTML

```
qtaq('js', new Date());</script><style>.async-hide { opacity: 0 !important }</style><script>(fun
{s.className+=' '+y;h.start=1*new Date;
h.end=i=function(){s.className=s.className.replace(ReqExp(' ?'+y),'')};
(a[n]=a[n]||[]).hide=h:setTimeout(function(){i():h.end=null},c):h.timeout=c:
})(window,document.documentElement,'async-hide','dataLayer',500,{'GTM-NJ75NM':true});</script><s
28076707-1', {"optimize id":"GTM-MF4ZKBR"});</script><script>(function(w,d,s,l,i){w[1]=w[1]||[];
new Date().getTime(),event:'gtm.js'});var f=d.getElementsByTagName(s)[0],
j=d.createElement(s),dl=1!='dataLayer'?'&l='+1:'';j.async=true;j.src=
 'https://www.googletagmanager.com/gtm.js?id='+i+dl+'&gtm cookies win=x';f.parentNode.insertBefor
})(window,document,'script','dataLayer', 'GTM-NJ75NM');</script><link as="script" rel="preload"
b319c86f02de5ec43924.js"/><link as="script" rel="preload" href="/framework-8e210829bcc33c32949c.
rel="preload" href="/532a2f07-05d0124221769214927b.js"/><link as="script" rel="preload" href="/a
<link as="script" rel="preload" href="/styles-dae9ed5f9ccc5d832e2f.is"/><link as="script" rel="preload" href="/styles-dae9ed5f9ccc5d832e2f.is"/><link as="script" rel="preload" href="/styles-dae9ed5f9ccc5d832e2f.is"/><link as="script" rel="preload" href="/styles-dae9ed5f9ccc5d832e2f.is"/><link as="script" rel="preload" href="/styles-dae9ed5f9ccc5d832e2f.is"/>
723ebac6e6cf64f05011.js"/><link as="script" rel="preload" href="/5e2a4920-9137fe65eee67519368e.j
rel="preload" href="/37272d1faf3f5a324dd7a8eed57e2d6b70c2dab2-763d03f360d41cd8a342.js"/><link as
href="/component---src-pages-index-js-ccb8ffb8baa20a7c0764.js"/><link as="fetch" rel="preload" h
data.json" crossorigin="anonymous"/><link as="fetch" rel="preload" href="/page-data/app-data.jso
</head><body class="home"><noscript><iframe
    src="https://www.googletagmanager.com/ns.html?id=GTM-NJ75NM&gtm cookies win=x"
    height="0"
    width="0"
    style="display: none: visibility: hidden"
></iframe></noscript><div id=" gatsby"><div style="outline:none" tabindex="-1" id="gatsby-focu
class="header container" role="navigation"><div class="content"><div class="row"><div class="header container" role="navigation"><div class="header container"><div class="header container"><div class="header container"><div class="header container"></div class="header container"></dd></dr></rr></rr>
current="page" class="" href="/">Colby Fayock</a><span class="tagline">A UX Designer & Designe
</div><div class="header-social"><div>
href="http://twitter.com/colbyfayock" rel="me"><svg stroke="currentColor" fill="currentColor" st</pre>
512" height="lem" width="lem" xmlns="http://www.w3.org/2000/svg"><path d="M459.37 151.716c.325 4
138.72-105.583 298.558-298.558 298.558-59.452 0-114.68-17.219-161.137-47.106 8.447.974 16.568 1.
16.568 130.274-44.832-46.132-.975-84.792-31.188-98.112-72.772 6.498.974 12.995 1.624 19.818 1.62
3.573-48.081-9.747-84.143-51.98-84.143-102.985v-1.299c13.969 7.797 30.214 12.67 47.431 13.319-28
87.391 0-19.492 5.197-37.36 14.294-52.954 51.655 63.675 129.3 105.258 216.365 109.807-1.624-7.79
57.828 46.782-104.934 104.934-104.934 30.213 0 57.502 12.67 76.67 33.137 23.715-4.548 46.456-13.
                        <u>833-46 132 5</u>7.827 21.117-2.273 41.584-8.122 60.426-16.243-14.292 20.791-32.161 39.308-
                                                   er</span></a><a href="https://youtub
                                                    fill="currentColor" stroke-width="0" viewBox="0 0 576 512" height="lem" wi
```

```
<body class="home">
   <noscript>
       <iframe src="https://www.googletagmanager.com/ns.html?id=GTM-NJ75NM&qtm_cookies_win=x"</pre>
   <div id="__gatsby">
       <div style="outline:none" tabindex="-1" id="gatsby-focus-wrapper">
               <nav class="header container" role="navigation">
                   <div class="content">
                       <div class="row">
                          <div class="header-logo">
                              <h1 class="h1">
                                  <a aria-current="page" class="" href="/">Colby Favock</a>
                                  <span class="tagline">A UX Designer & End Engineer
                              </h1>
                          </div>
                          <div class="header-social">
                              <div>
                                      <a href="http://twitter.com/colbyfayock" rel="me">
                                              <sva stroke="currentColor" fill="currentColor"</pre>
                                                  <path d="M459.37 151.716c.325 4.548.325 9.6</pre>
                                              <span class="ir">Twitter</span>
                                          </a>
                                      class="social-icons-voutube">
                                          <a href="https://youtube.com/colbyfayock" rel="me">
                                              <svg stroke="currentColor" fill="currentColor"</pre>
                                                  <path d="M549.655 124.083c-6.281-23.65-24.7</pre>
                                              </svq>
                                              <span class="ir">Youtube</span>
                                          </a>
```

class="social-icons-eggheadio">

<a href="https://egghead.io/instructors/colby-favor</pre>



Cascading Style Sheets

```
<style>
 8
          h1 {
 9
            color: color:
10
            font-size: 30px;
11
            text-transform: uppercase;
12
13
       </style>
     </head>
14
15
     <body>
        <h1>Hello, world. It'sa me!</h1>
16
```

React + CSS

```
import 'assets/stylesheets/application.scss';
                                                           <style jsx global>{`
                                                             h1 {
 const MyPage = () => {
                                                               color: red;
   return (
                                                               font-size: 30px;
      <>
                                                               text-transform: uppercase;
        <h1>Hello, world. It'sa me!</h1>
     </>
                                                           `}</style>
                                                           <h1>Hello, world. It'sa me!</h1>
 const useStyles = createUseStyles({
                                                          const Title = styled.h1`
   h1: {
                                                            color: red;
     color: 'red',
                                                            font-size: 30px;
     fontSize: 30,
                                                            text-transform: uppercase;
     textTransform: 'uppercase'
@colbyfayock
                                                          const MyPage = () => {
```

Compiled CSS

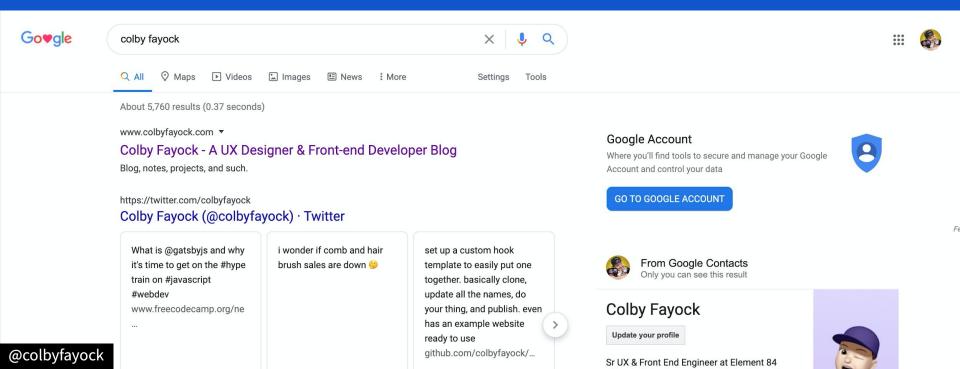
```
.fa-thumbs-o-up,.article-list-more .fa-thumbs-o-up{display:none}.article-excerpt-more a,.arti
down, article-list-more a: hover .fa-hand-o-down{display: none}.article-excerpt-more a: hover .:
                                                                                                                                                                                                                                                               @media (max-width: 37.5em) {
sizing:border-box}body{color:#2b2e30;font-family:Source Sans Pro, Helvetica, Arial, sans-serif;
                                                                                                                                                                                                                                                                          .article-header {
color:#fff}@media (max-width:37.5em){.row{padding:1em}}.page-title{margin:0}.article-list-mon
                                                                                                                                                                                                                                                                                   padding: 0 0 4em
o-down{display:none}.article-excerpt{margin-bottom:4em}@media (max-width:37.5em){.article-exc
p{margin:0 0 .8em}.article-excerpt p:last-child{margin-bottom:0}.article-excerpt .article-met
excerpt-header-title{margin:0 0 .4em}.article-excerpt-more{font-size:lem;font-weight:600}.art
0).pagination ul{list-style:none;text-align:center;padding:0;margin:0}.pagination li{display
                                                                                                                                                                                                                                                               .article-header h1 {
 .4em).pagination a{text-decoration:none}.pagination a:hover{text-decoration:underline}.pagination
                                                                                                                                                                                                                                                                         font-size: 4.08em;
style:none; padding:0; margin:0}.social-icons li{display:inline-block; margin:0 .5em}.social-icons li{display:inline-block; margin:0 .5em}
                                                                                                                                                                                                                                                                         text-align: center;
 icons li{margin:0}.social-icons a{display:block;width:2em;height:2em;line-height:2em;text-al:
                                                                                                                                                                                                                                                                         margin-bottom: 0
 polygon{color:#007079}.social-icons a,.social-icons path,.social-icons polygon{color:#505458
eggheadio{transform:translateY(1px)}.article-content iframe{display:block;margin:0 auto}.arti
content:center; list-style:none; padding:0; margin:0 }.article-links li{margin:0 .8em}.article-li
                                                                                                                                                                                                                                                               @media (max-width: 37.5em) {
items:center:text-decoration:none }.article-links syg { font-size: .9em; margin-right: .5em }.article-links syg { font-size: .9em; margin-right: .9em }.article-links syg { font-size: .9em; margin-right: .9em }.article-links syg { font-size: .9em }.article-links syg { font-siz
                                                                                                                                                                                                                                                                          .article-header h1 {
direction:row:justify-content:center:align-items:center}.article-tweet a{font-size:1.4em:text
                                                                                                                                                                                                                                                                                   font-size:3em
header{padding:3em 0 4em}@media (max-width:37.5em){.article-header{padding:0 0 4em}}.article-
{.article-header h1{font-size:3em}}.article-content-body{margin-bottom:2em}.article-content-l
h4:first-child, article-content-body h5:first-child, article-content-body h6:first-child(mark
right:auto}.article-meta{color: #747a80; list-style: none; text-align: center; padding: 0; margin: 2er
                                                                                                                                                                                                                                                               .article-content-body {
child{margin-left:0}.article-meta li:last-child{margin-right:0}.article-meta a{color:inherit
                                                                                                                                                                                                                                                                         margin-bottom: 2em
decoration:underline }.article-meta span { margin-right:.2em }.article-meta span:after { content: "
child:after{content:none}.article-meta .categories-list{color:#070708;font-weight:600}.home
 (max-width: 37.5em) {.home .header{margin: 4em auto}}.home .react-tabs tab-list{display:flex;ju
                                                                                                                                                                                                                                                               .article-content-body h2:first-child,.article-content-body h3:first-child,.article-content-b
style:none; padding:0; margin:0 0 4em}.home .react-tabs tab{color:#747a80; padding:.4em; margin
                                                                                                                                                                                                                                                                         margin-top: 0
selected{color:#070708;border-bottom:3px solid #007079}.page-about h3{margin-bottom:.8em}.page-about h3{margin-bottom:0.8em}.page-about h3{margin-bottom:0.8
 size:lem;margin-top:0}.header{text-align:center}.header .row{display:flex;width:100%;margin-l
a{font-weight:700}.home .header .h1{text-align:center}.home .header .h1 a{font-size:1.6em}@me
                                                                                                                                                                                                                                                               .article-content-body img {
 .hl{font-size:lem}.header .tagline{display:block;color:#747a80;font-weight:400;font-size:.5er
                                                                                                                                                                                                                                                                         display: block;
grow:1}body:not(.home) .header .header-logo{font-size:1.4em;text-align:left}body:not(.home)
                                                                                                                                                                                                                                                                         margin-left: auto:
height: 2em}body: not(.home) .header .header-logo a:hover{color:#007079}@media (max-width: 37.5@
                                                                                                                                                                                                                                                                         margin-right: auto
 icons{display:flex;font-size:1.6em;flex-flow:wrap;justify-content:center;margin-top:.3em}@mec
.row{padding:0:margin_bottom:0}.footer .container{margin:8em auto}@media (max-width:37.5em){
                                                        ondary{color:#747a80;font-size:1em;text-align:center}@media (max-width
    @colbyfayock
                                                                                                                                                                                                                                                               .article-meta {
                                                           .5em}.footer-secondary .emoji{font-size:2.5em;margin-bottom:.2em}.foote
                                                                                                                                                                                                                                                                         color: #747a80:
```



LEVEL UP



Search Engine Optimization



HTML Page Outline

Image Alt

```
<img src="/image/01293u501823y532.jpg" />
```


<title>

<title>My Cool Webpage</title>

My Cool Webpage

×

My Cool Web Page

Jul 8, 2014 - This is a blog post that's really interesting things.

www.colbyfayock.com > 2014/07 > interesting-blog

<**title**>Interesting Blog Post — My Cool

Interesting Blog Post - My Coo X
@colbyfayock

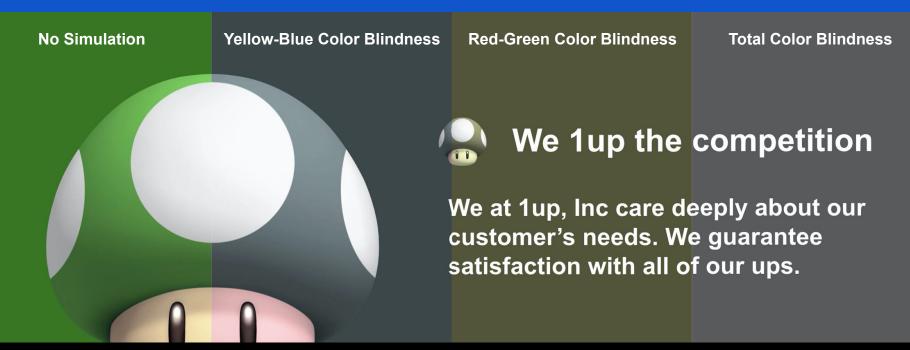
Interesting Blog Post - My Cool W

www.colbyfayock.com > 2014/07 > interesting-blo

Jul 8, 2014 - This is a blog post that's really interhas many interesting things.

ACCESSIBILITY

Accessibility



HTML Page Outline

Image Alt

```
<img src="/image/01293u501823y532.jpg" />
```


Lists

SIMPLICITY

```
const MyComponent = () => {
  const defaultWidth = 800;
  const defaultHeight = 600;
  const ratio = defaultHeight / defaultWidth;
  const [dimensions, setDimensions] = useState({
   width: defaultWidth,
   height: defaultHeight
  });
  function handleOnWindowResize() {
    const width = window.innerWidth;
    const height = width * ratio;
    setDimensions({
   });
  useEffect(() => {
   window.addEventListener('resize', handleOnWindowResize);
   return () => {
     window.removeEventListener('resize', handleOnWindowResize);
  }, []);
  const styles = {
    backgroundImage: url('/my-image.jpg'),
    ...dimensions
@colbyfayock f={ref} style={styles} />;
```

Simplicity

```
const MyComponent = () => {
  const styles = {
    width: '100%',
    height: 0,
    backgroundImage: url('/my-image.jpg'),
    backgroundSize: 'cover',
    paddingTop: `${(800/600)*100}%`
  }

return <div style={styles} />;
```

export default MyComponent;

Get Interactive with Native HTML

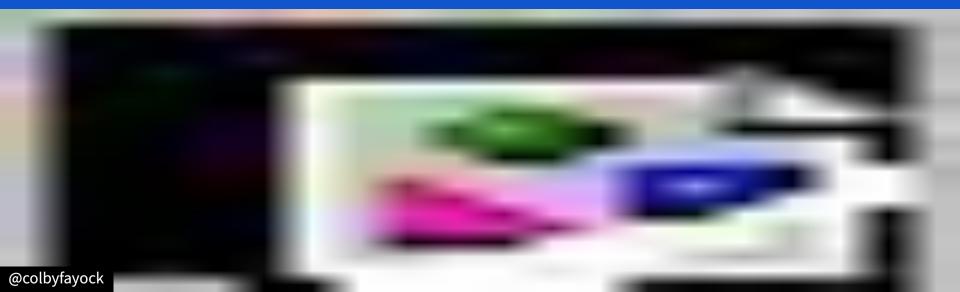
My Favorite Color



Loading Without the Load

```
.loading {
  background: linear-gradient(90deg, ■#eff1f1 30%,
  background-size: 400%;
  animation: loading 1.2s ease-in-out infinite;
@keyframes loading {
  0% {
    background-position: 100% 50%;
  100% {
    background-position: 0 50%;
@colbyfayock
```

Responsive Text









FROM DESIGN TO DEVELOPMENT

CRASH COURSE

fromdesignto.dev







Colby Fayock

Developer Advocate



colbyfayock.com/jsnation-fundamentals