HTML & CSS

Rupayan Neogy

But first…

My Take on Web Development

There is always some tool that makes your life easier.

HTML

Hypertext Markup Language

The language your web browser uses to describe the content and structure on web pages

But first…

My Take on HTML

HTML = Nested Boxes

HTML = Nested Boxes™

xkcd

A webcomic of romance, sarcasm, math, and language.

Thing Explainer is available at: Amazon, Barnes & Noble, Indie Bound, Hudson

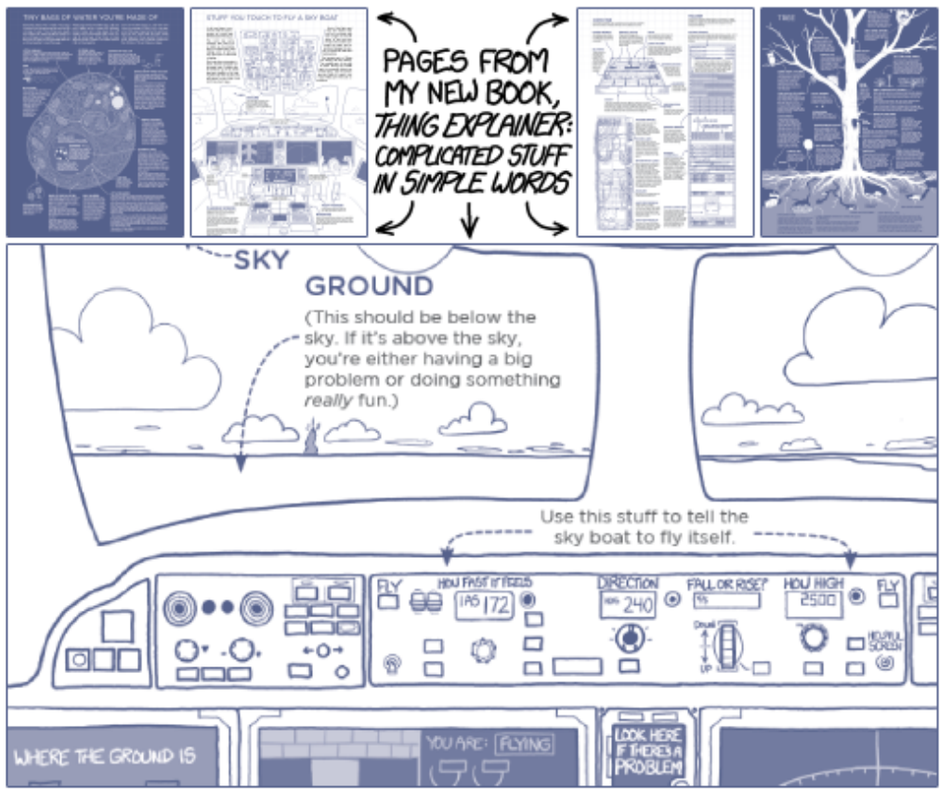
Tags

|< < Prev Random Next > >|

<DIV>Q: HOW DO YOU ANNOY A WEB DEVELOPER?</SPAN>

|< < Prev Random Next > >|

Permanent link to this comic: http://xkcd.com/1144/
Image URL (for hotlinking/embedding): http://imgs.xkcd.com/comics/tags.png



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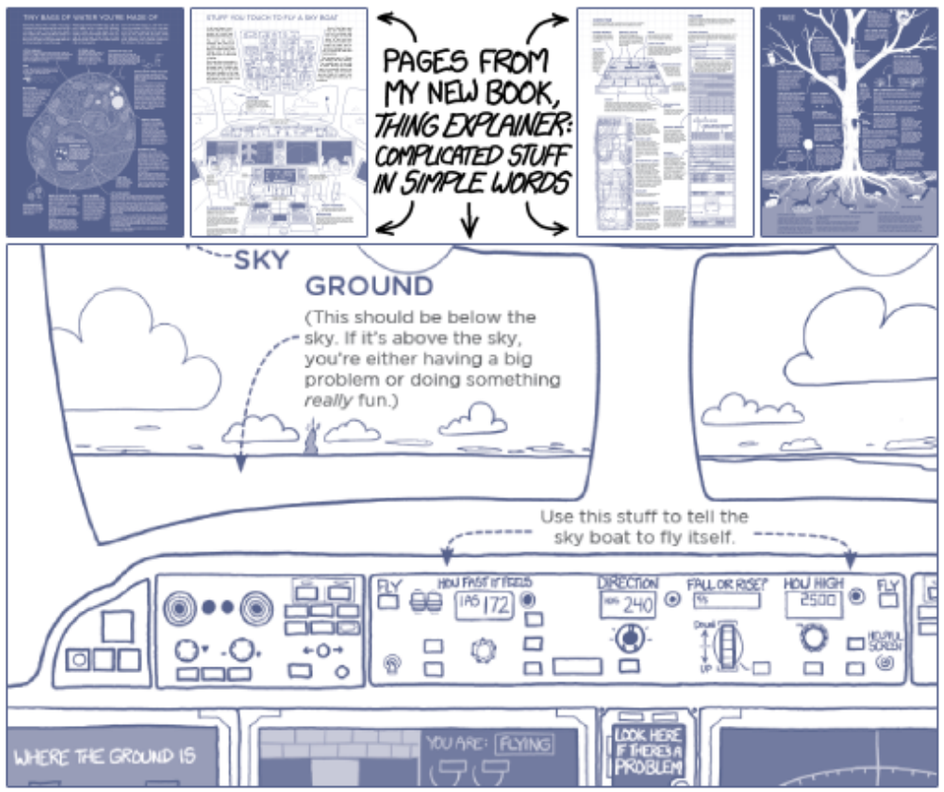

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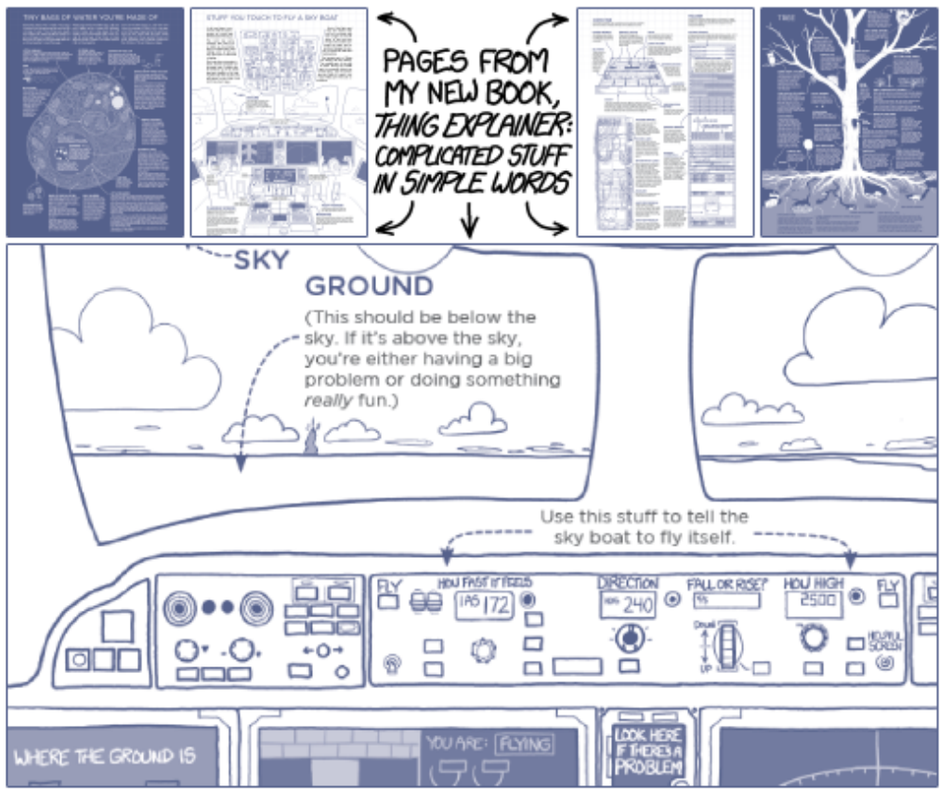

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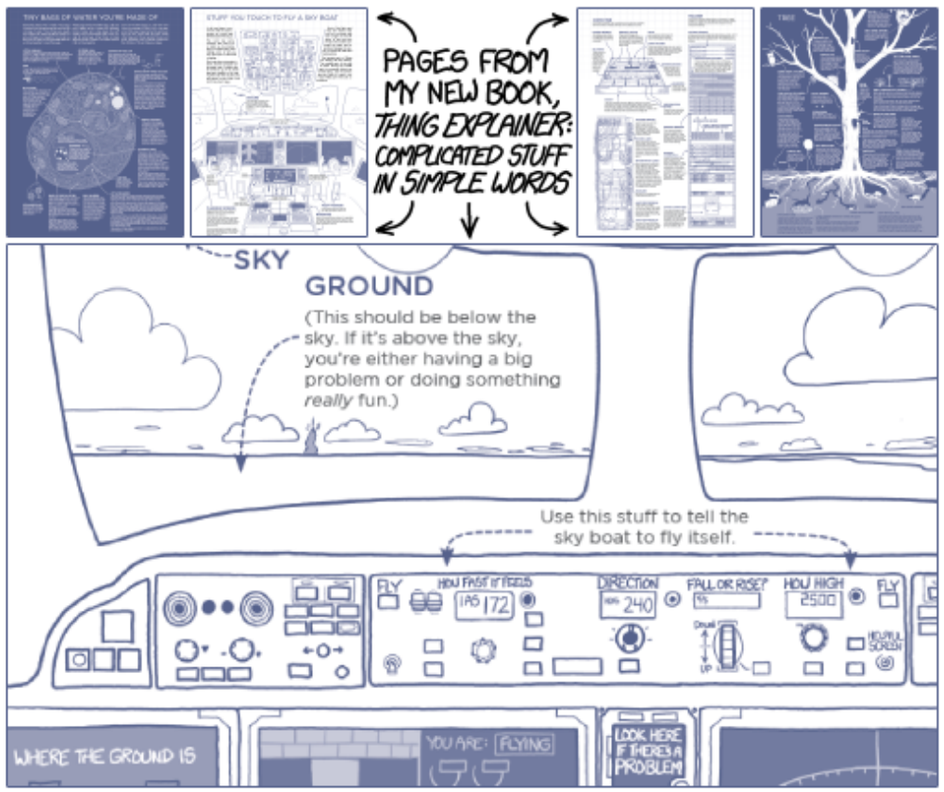

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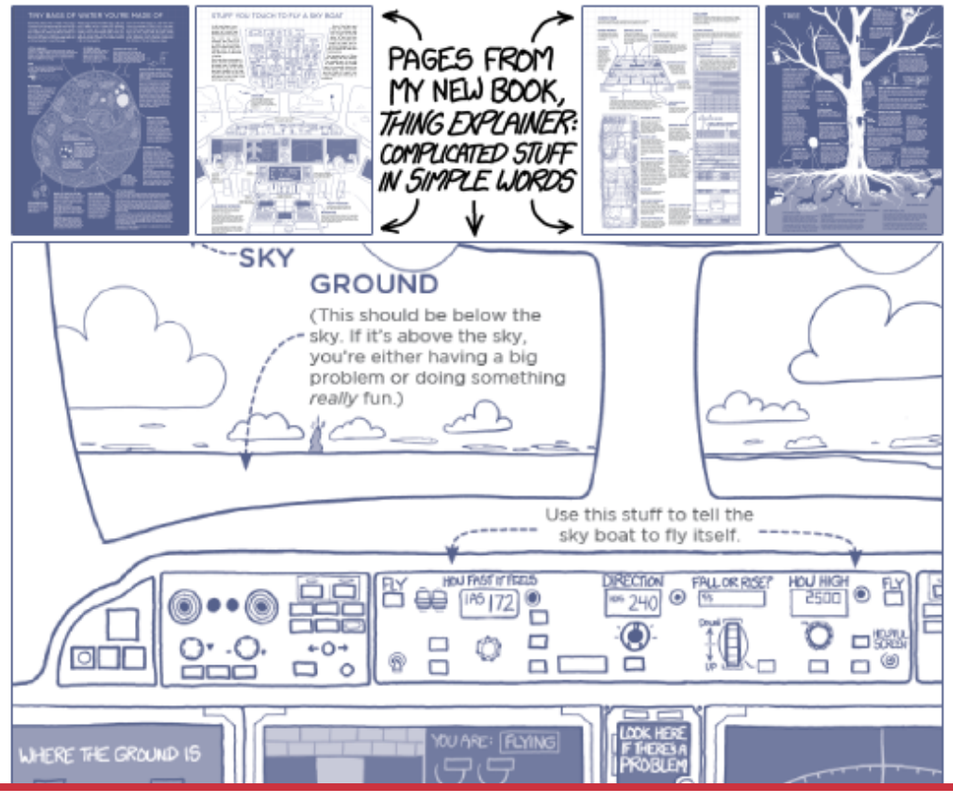

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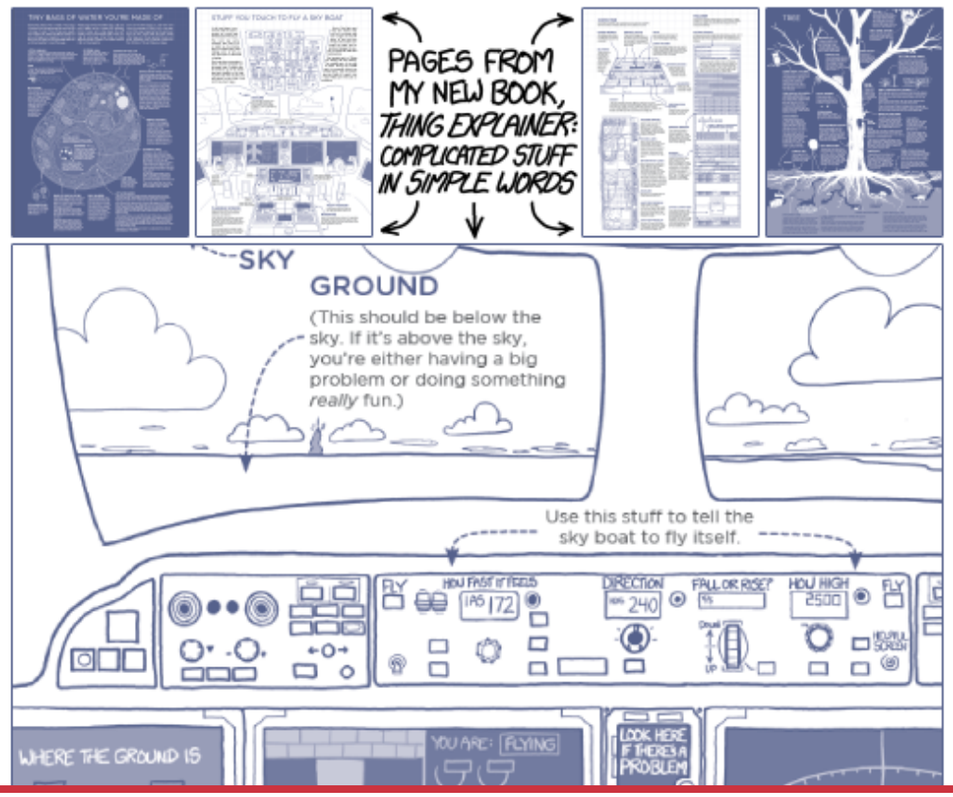

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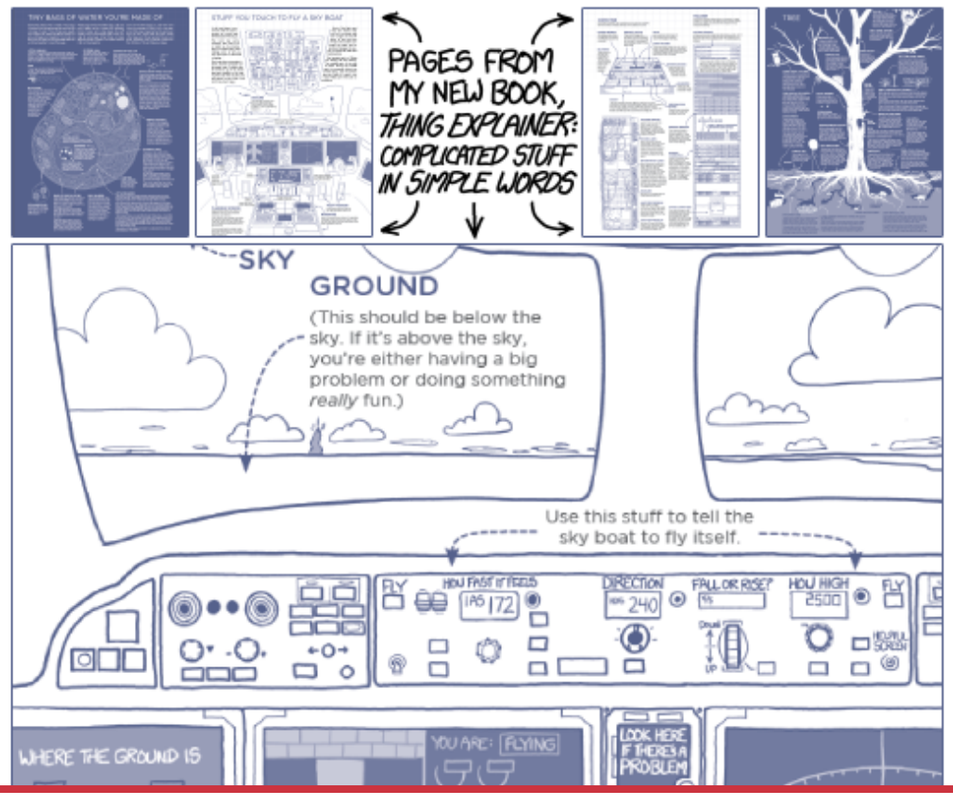

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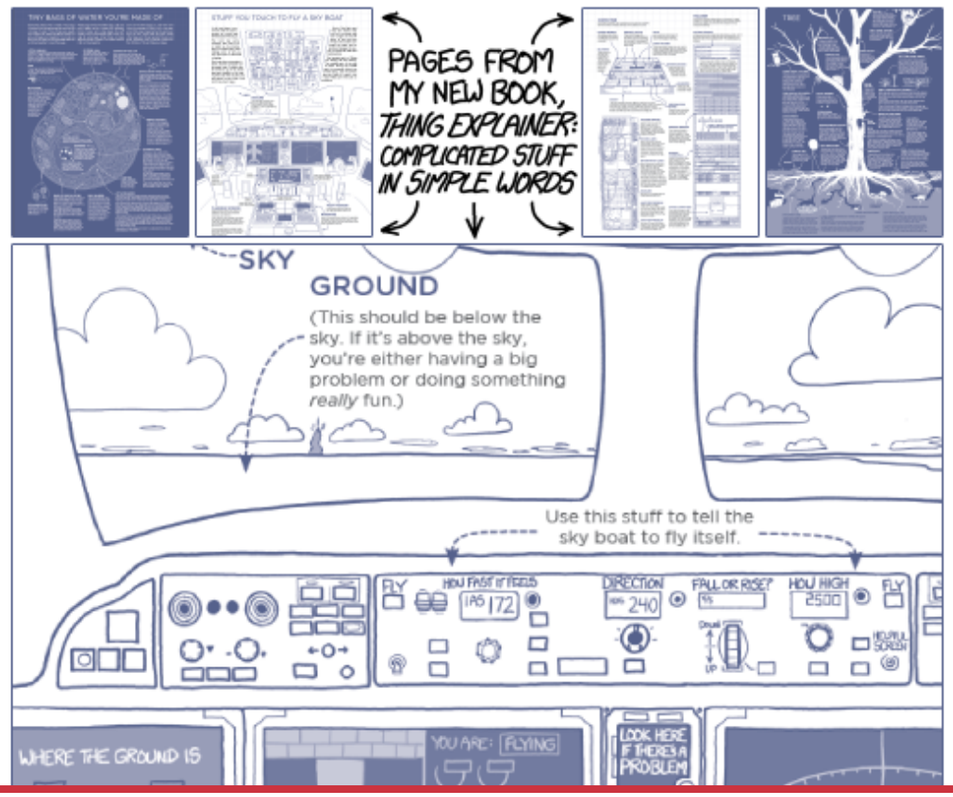

hello.html

```
<!DOCTYPE html>
<html>
    <head>
        <title>Title!</title>
    </head>
    <body>
        <h1>Heading!</h1>
        <p>Paragraph!</p>
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</html>
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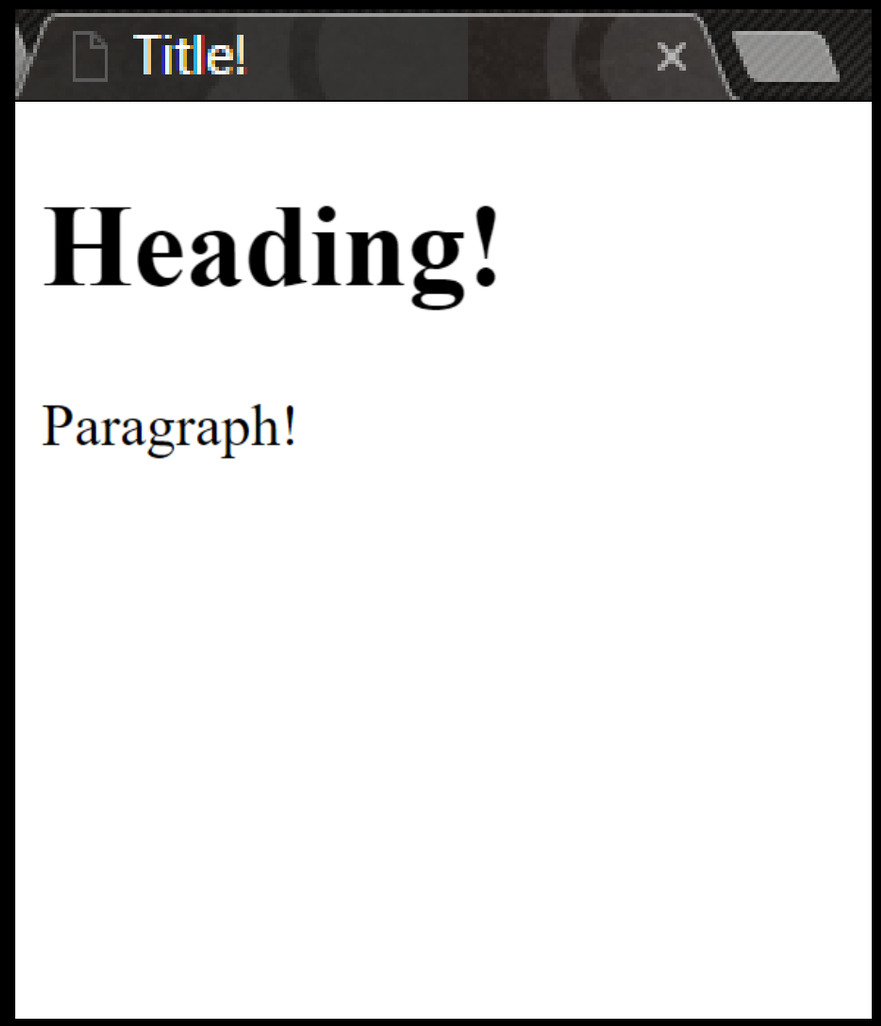

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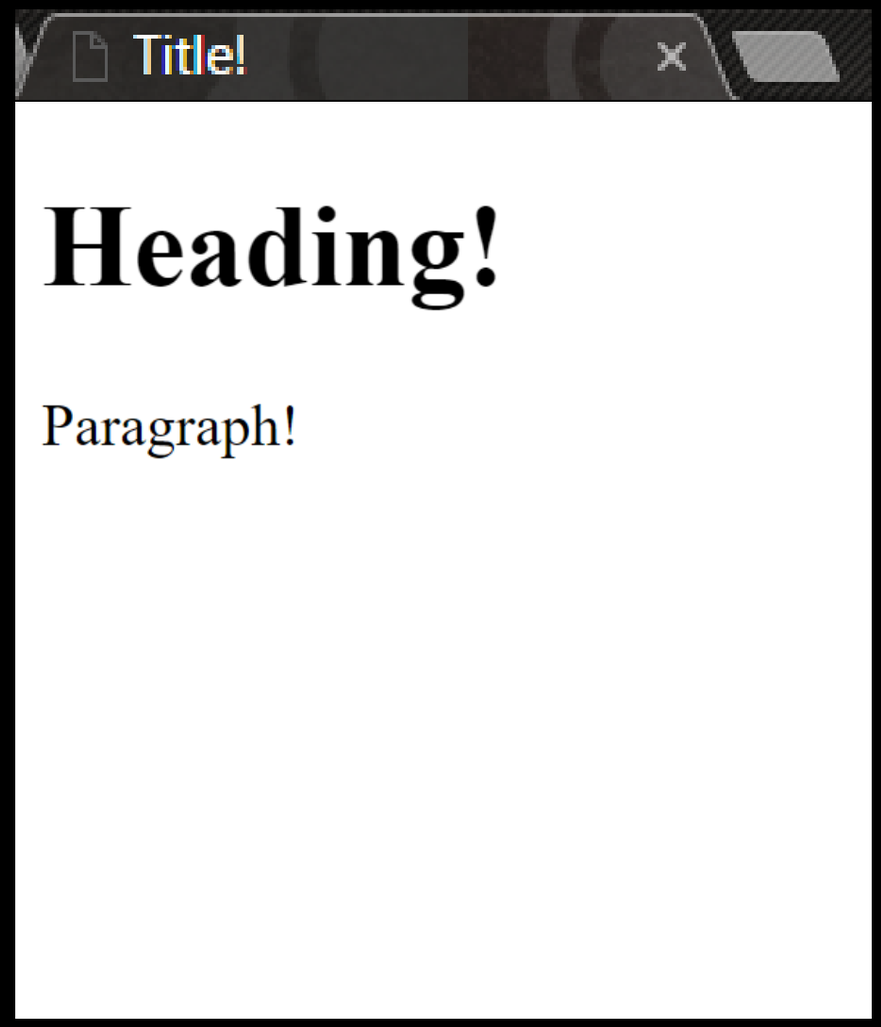

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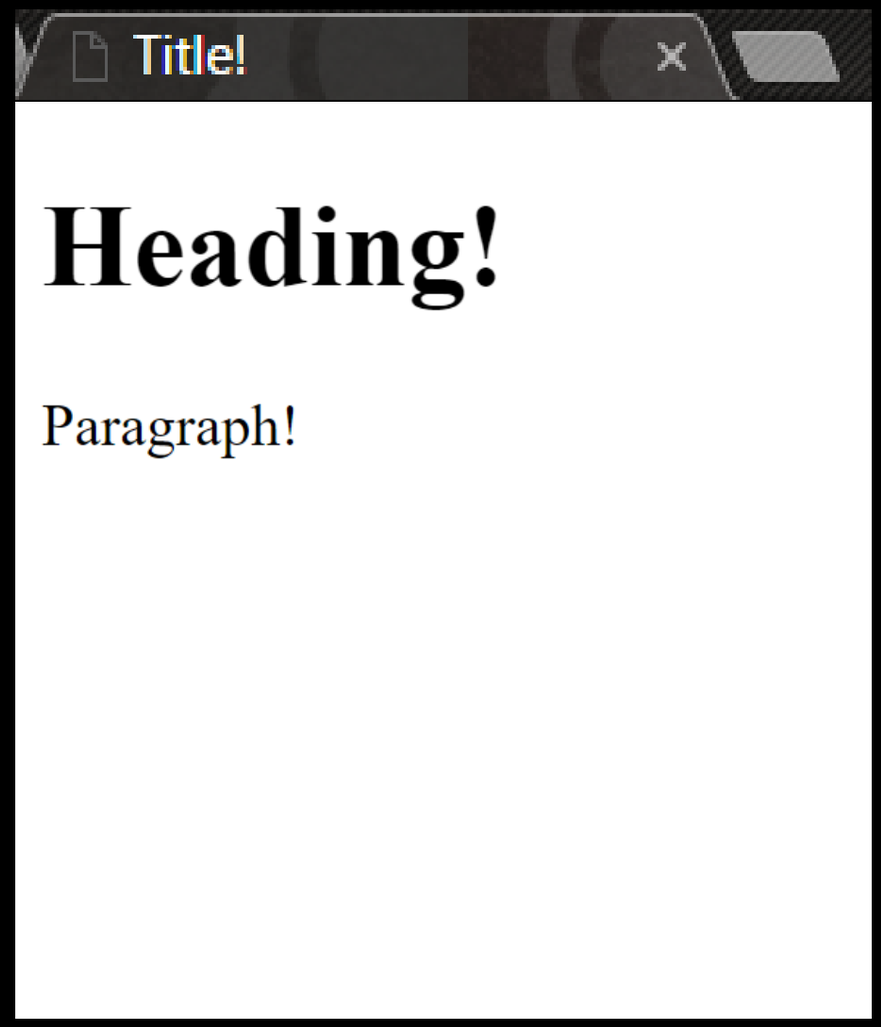
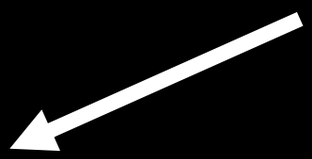


HTML Tags

Opening tag



<html>

content goes here

</html>

Closing tag

hello.html

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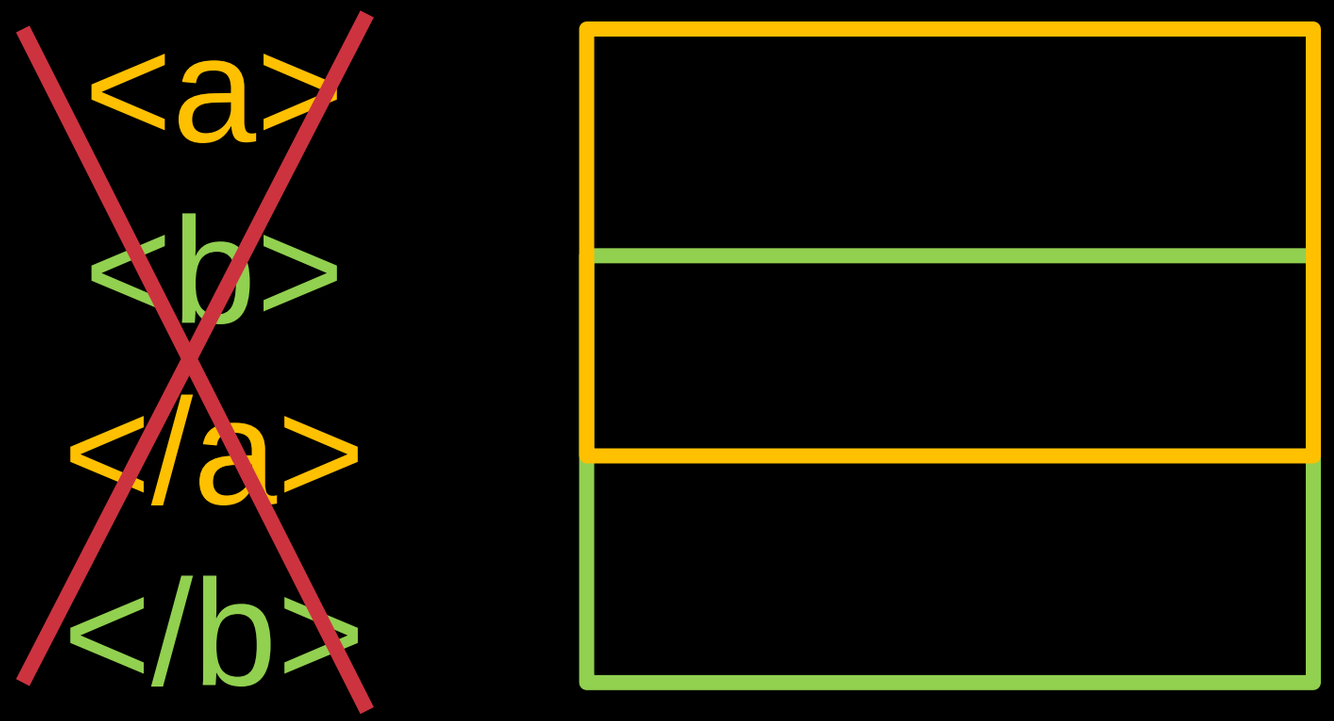

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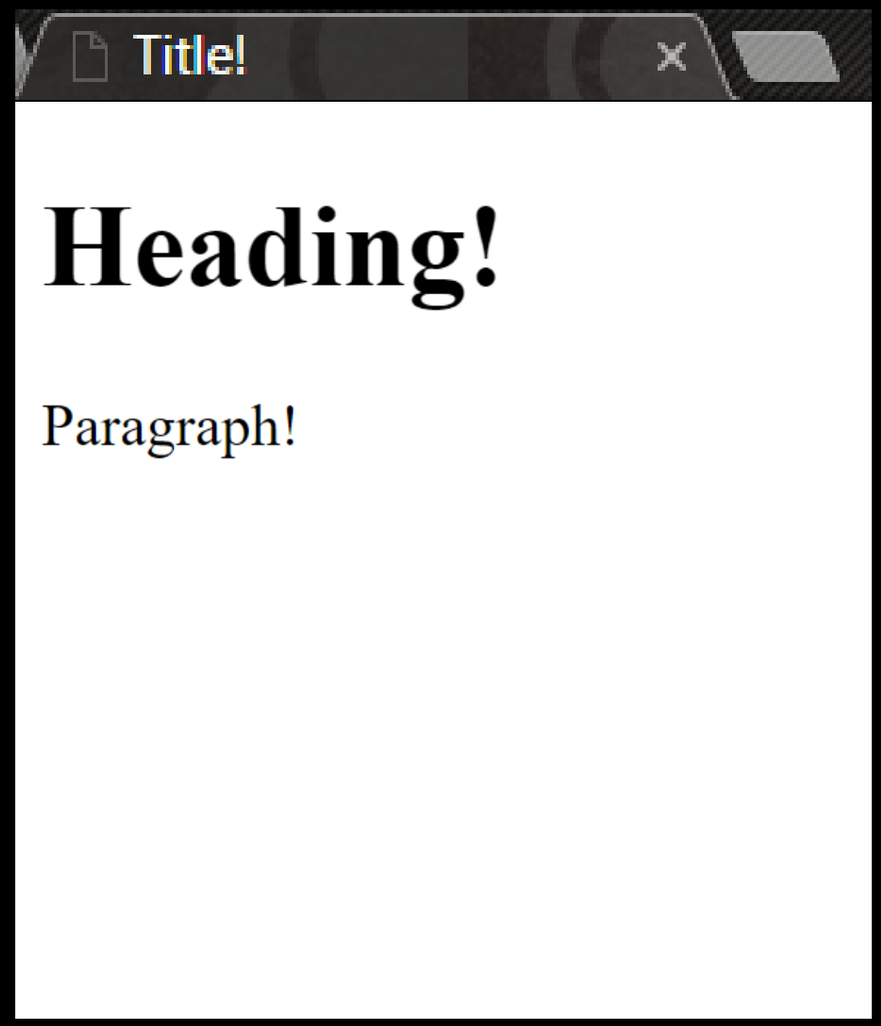

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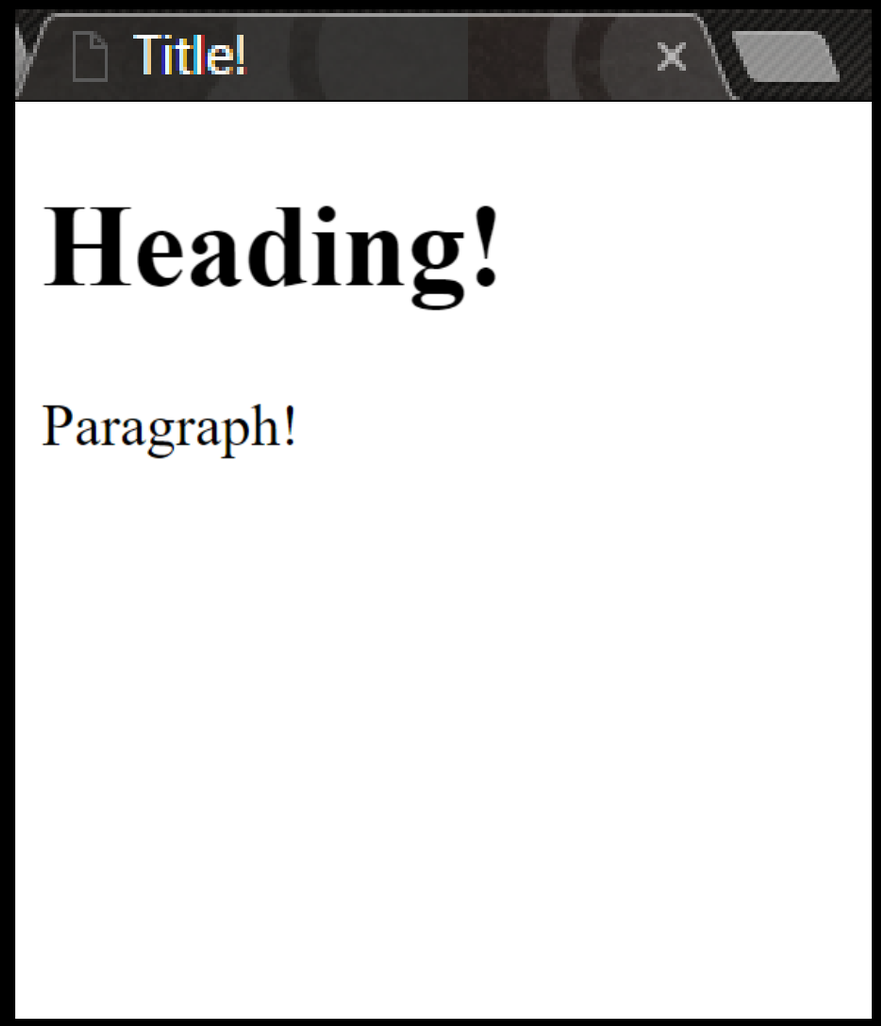

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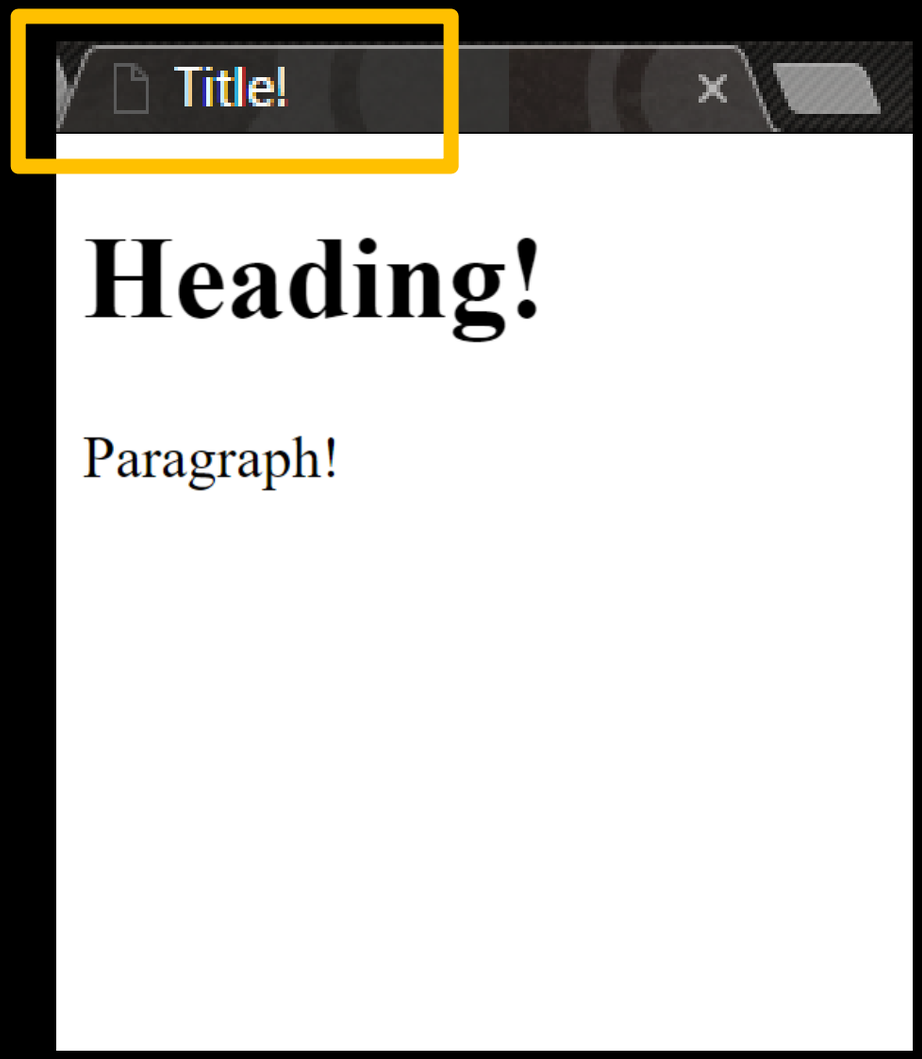

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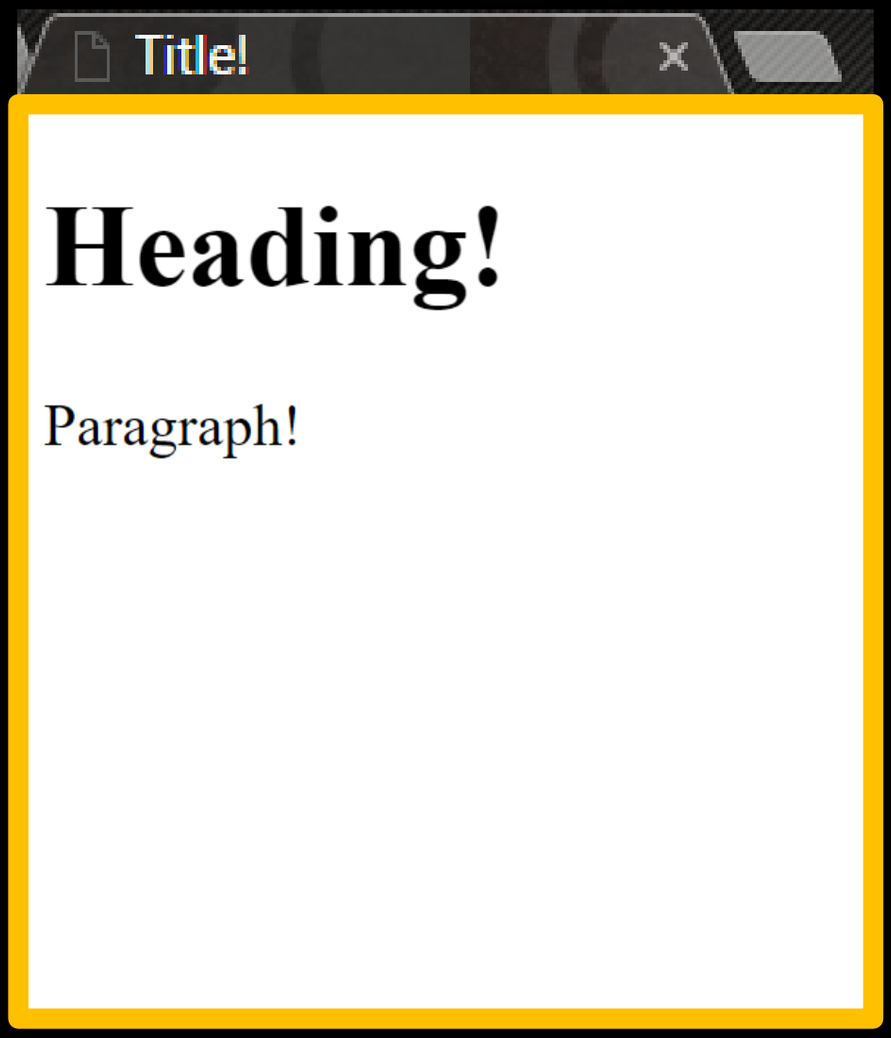

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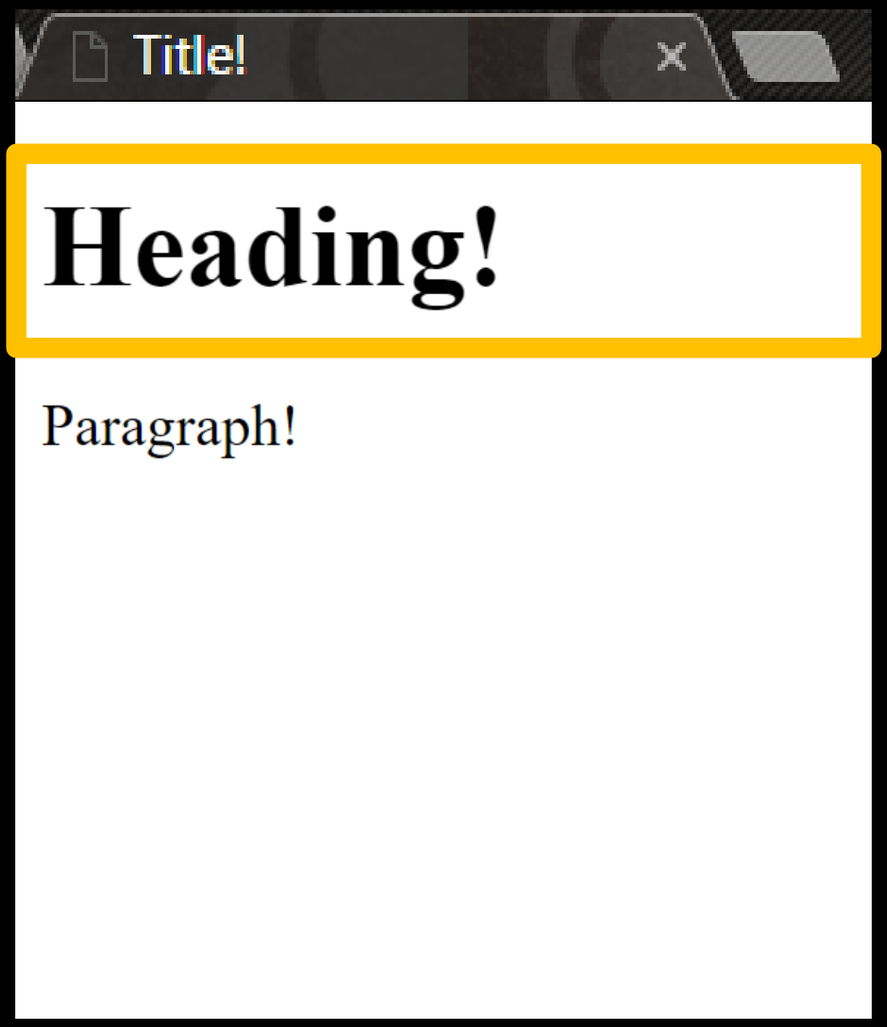

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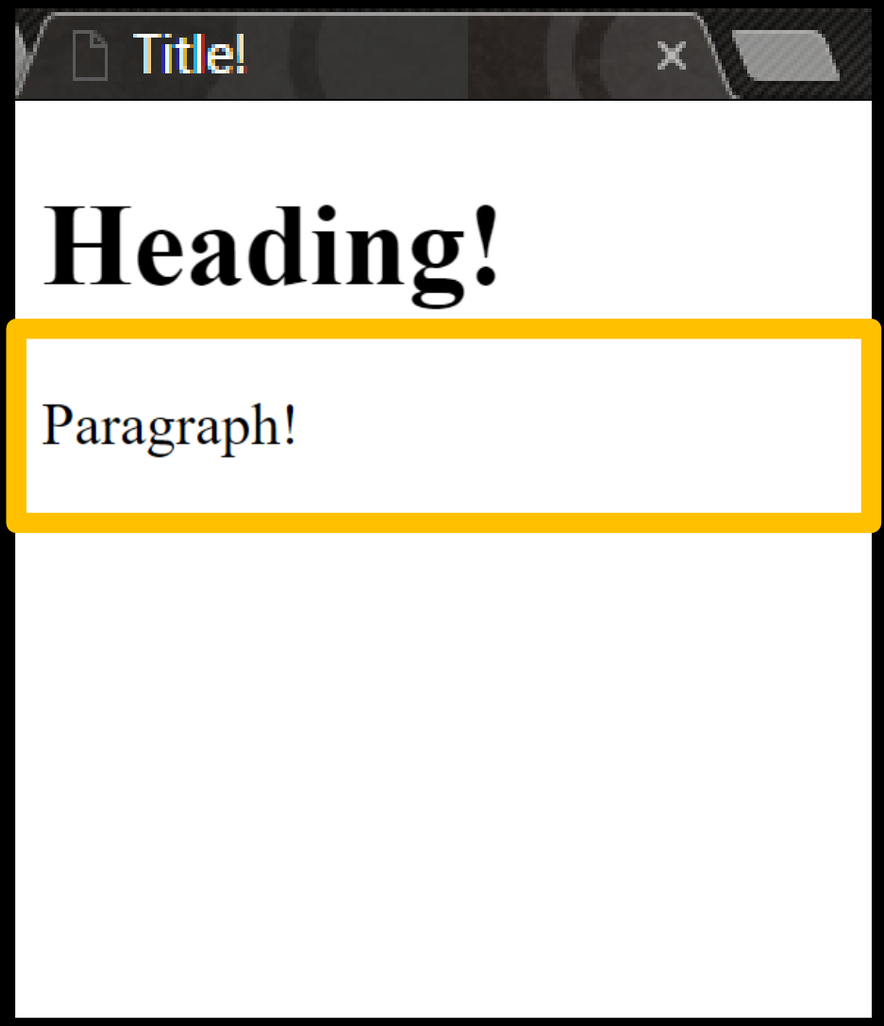

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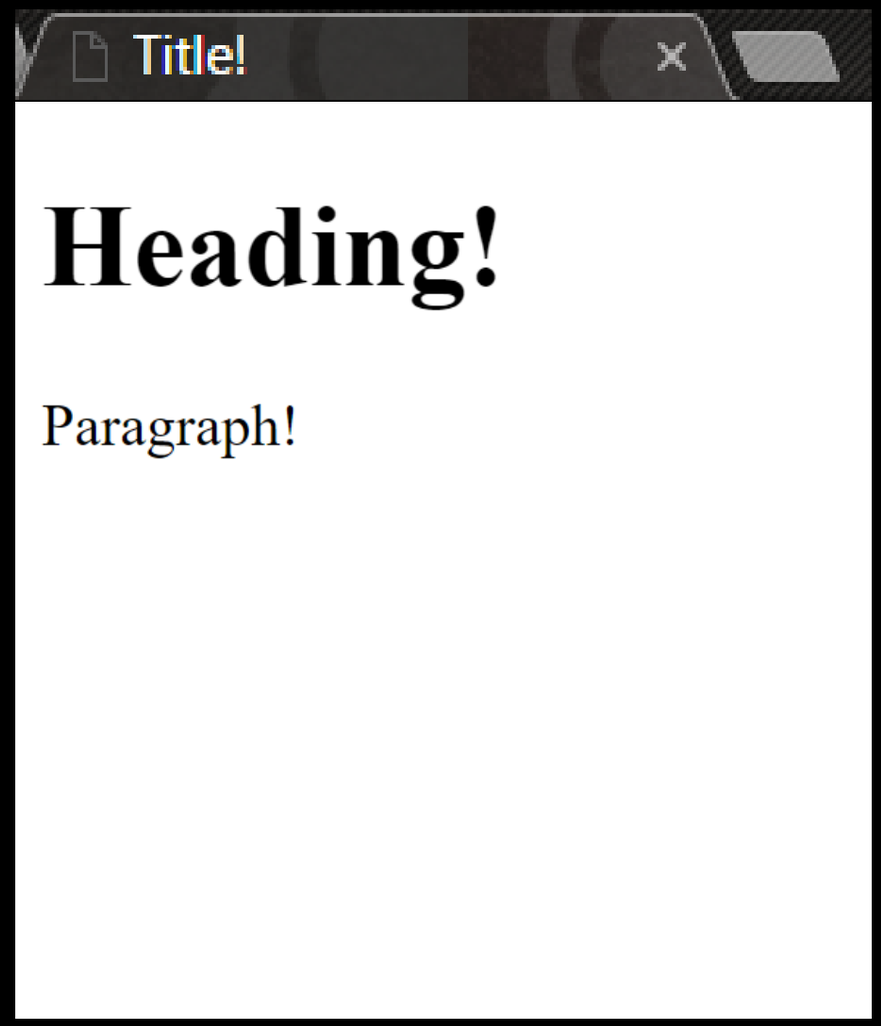

Basic HTML Elements

<html>	Root of HTML Document
<head>	Info about Document
<body>	Document Body
<h1>, <h2>, <h3>, ...	Header tags
<p>	Paragraph tags

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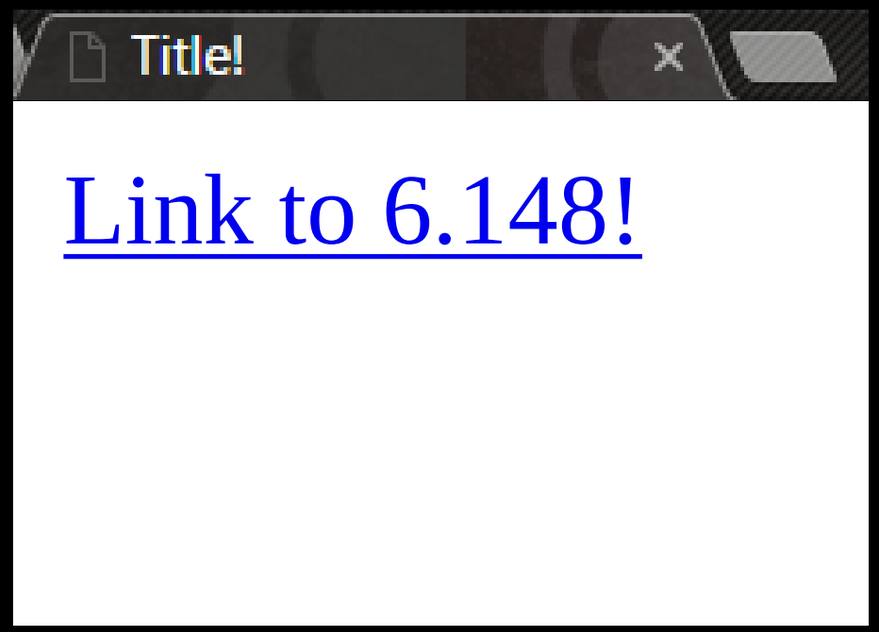
Inserting Links

<a>

Link



HTML Attributes

attribute value

Opening tag

<a href="link here">

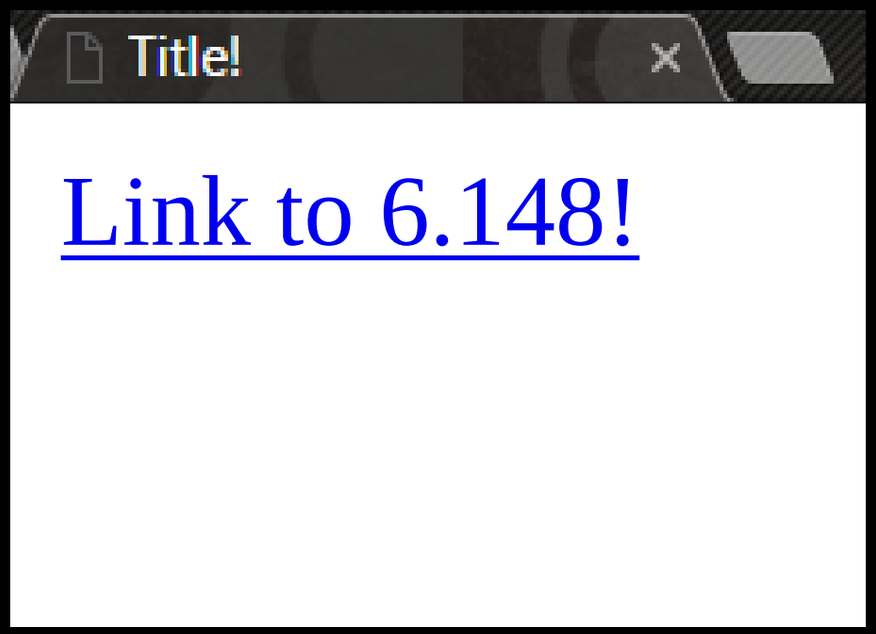
content goes here

</a>

Closing tag

Inserting Links

```
<a href="http://6148.io">Link to 6.148!</a>
```



Inserting Links

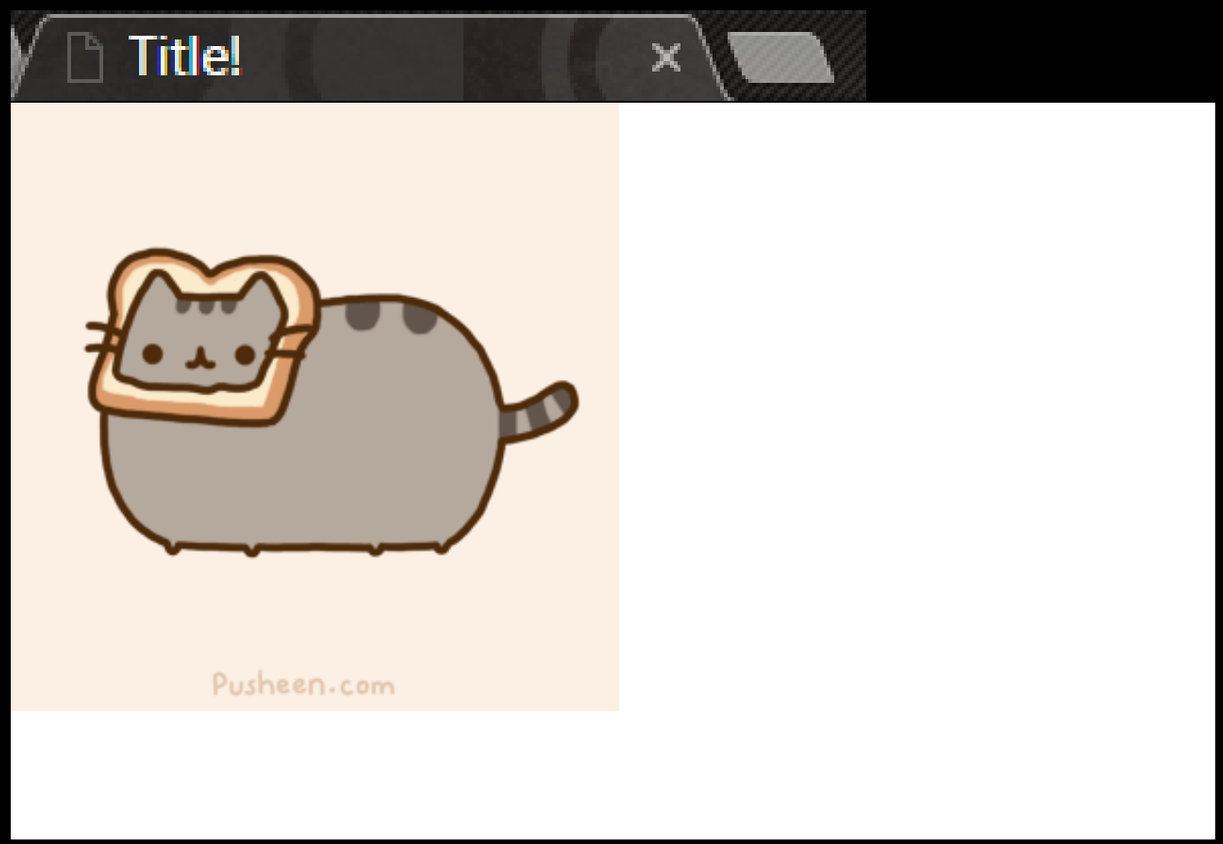
```
<a href="home.html">Link to home!</a>
```

Inserting Images

Inserting Images

Inserting Images

<img src="pusheen.gif">



Inserting Images

```
<img src="pusheen.gif">
```

```
app/
    hello.html
    pusheen.gif
```

Inserting Images

~~<img src="~~pusheen.gif~~">~~

<img src="images/pusheen.gif">

app/
    hello.html
    images/
        pusheen.gif

Lists

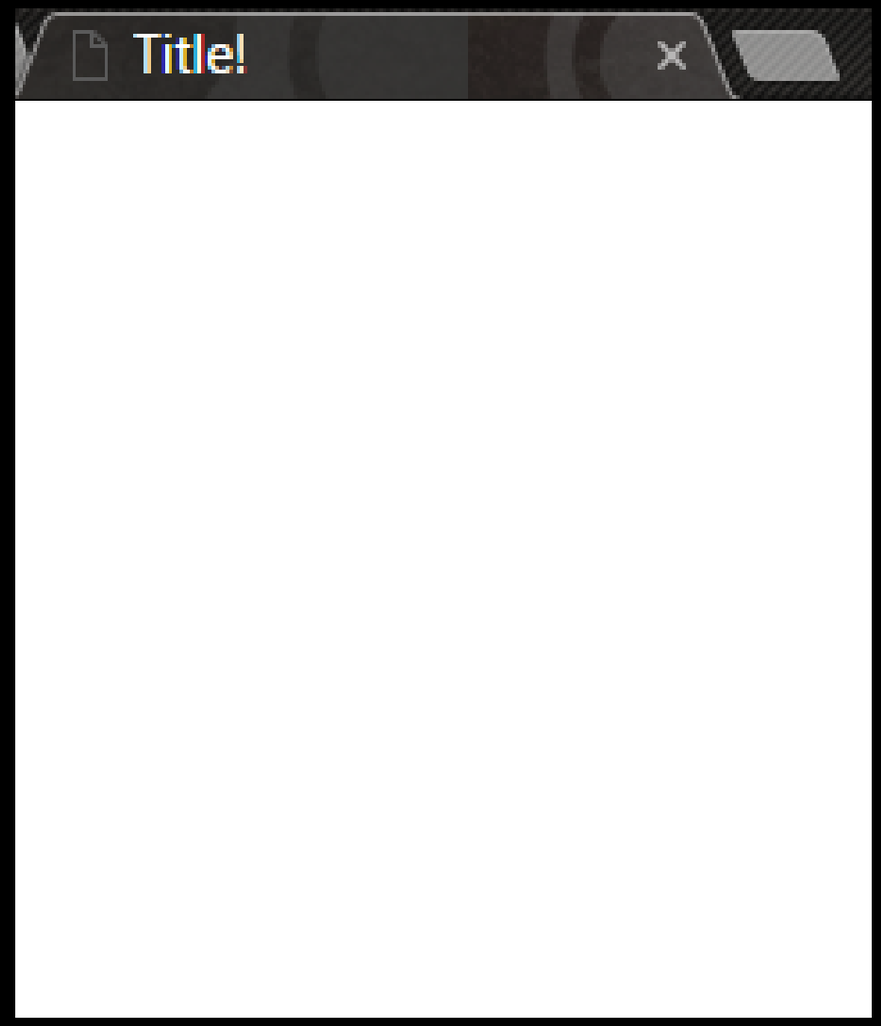
<ol> Ordered List (1, 2, 3…)

<ul> Unordered List (bullets)

<li> List Item

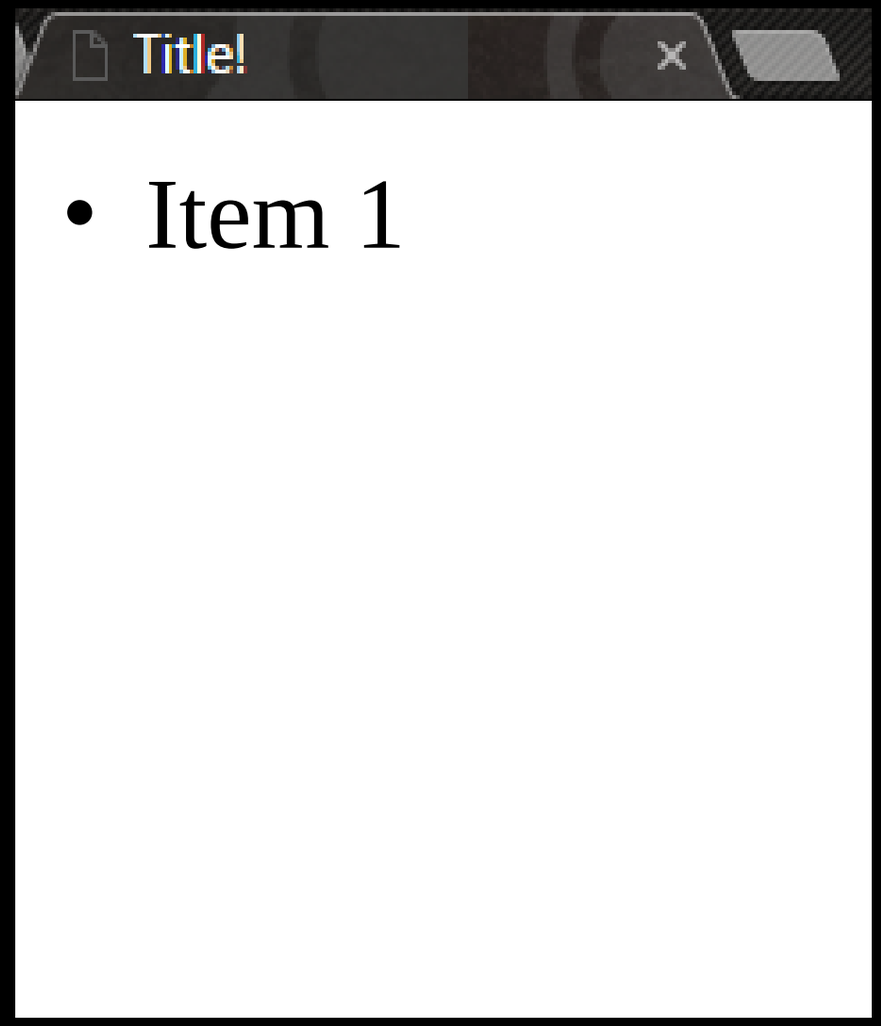
hello.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <ul>
    </ul>
  </body>
</html>
```



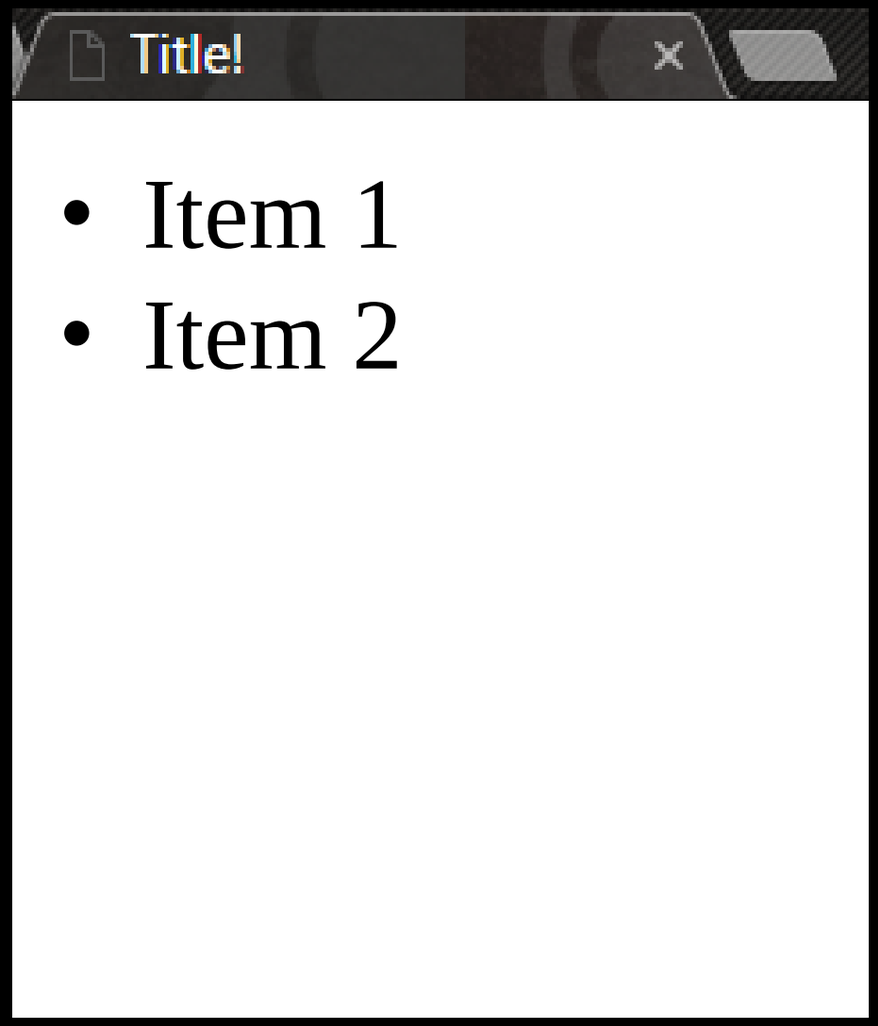
hello.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <ul>
      <li>Item 1</li>
    </ul>
  </body>
</html>
```



hello.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <ul>
      <li>Item 1</li>
      <li>Item 2</li>
    </ul>
  </body>
</html>
```



div & span

	Block Section in Document
	Inline Section in Document

hello.html

```
<!DOCTYPE html>
<html>
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  </head>
  <body>
    <h1>Heading!</h1>
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  </body>
</html>
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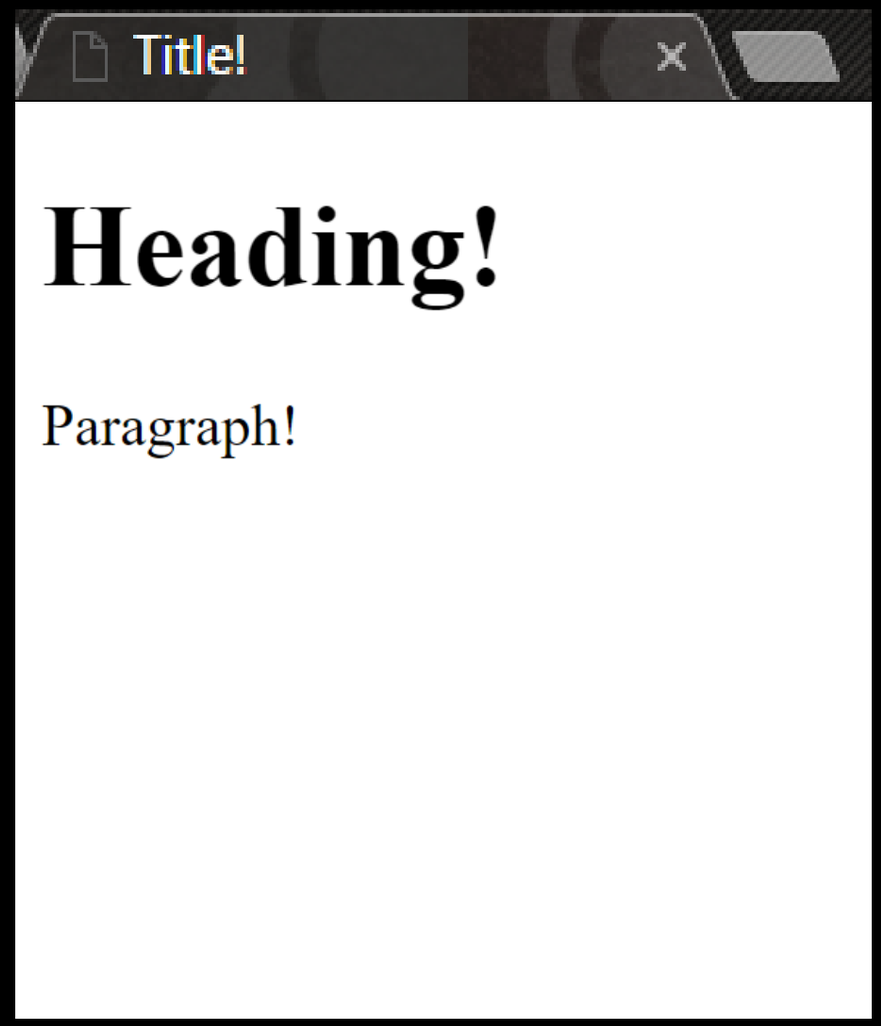

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  <head>
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    <div>
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    </div>
  </body>
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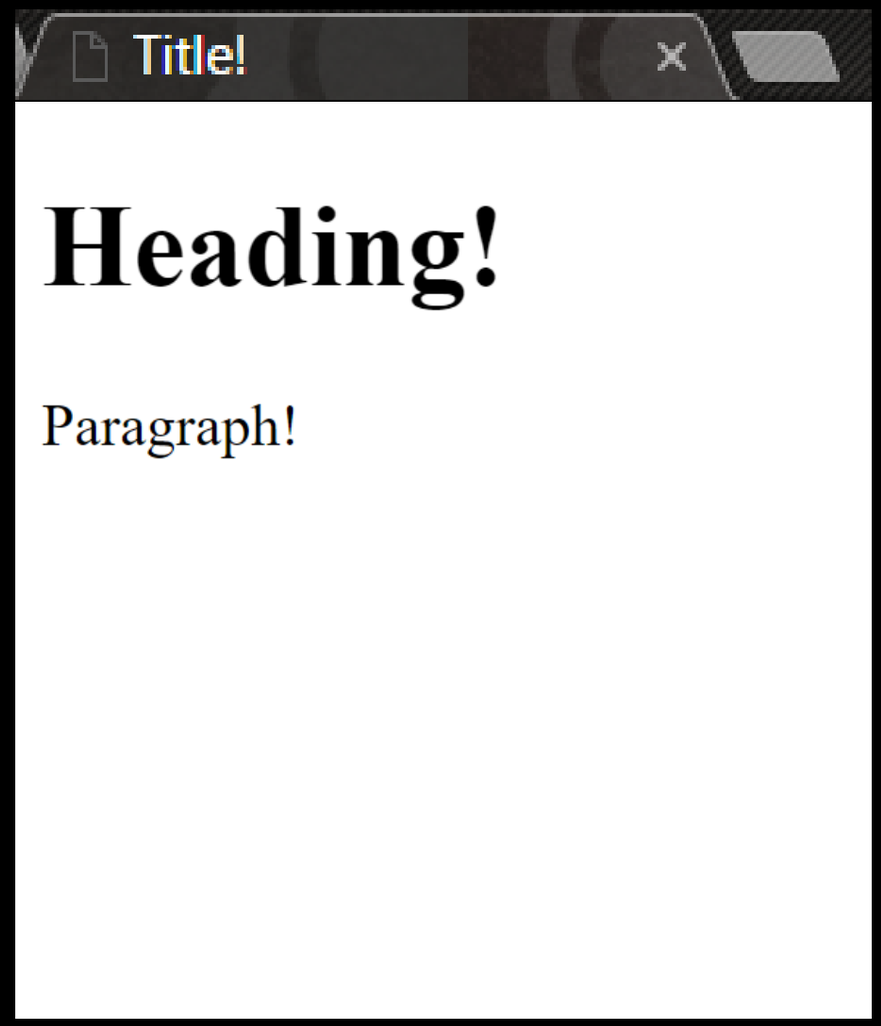

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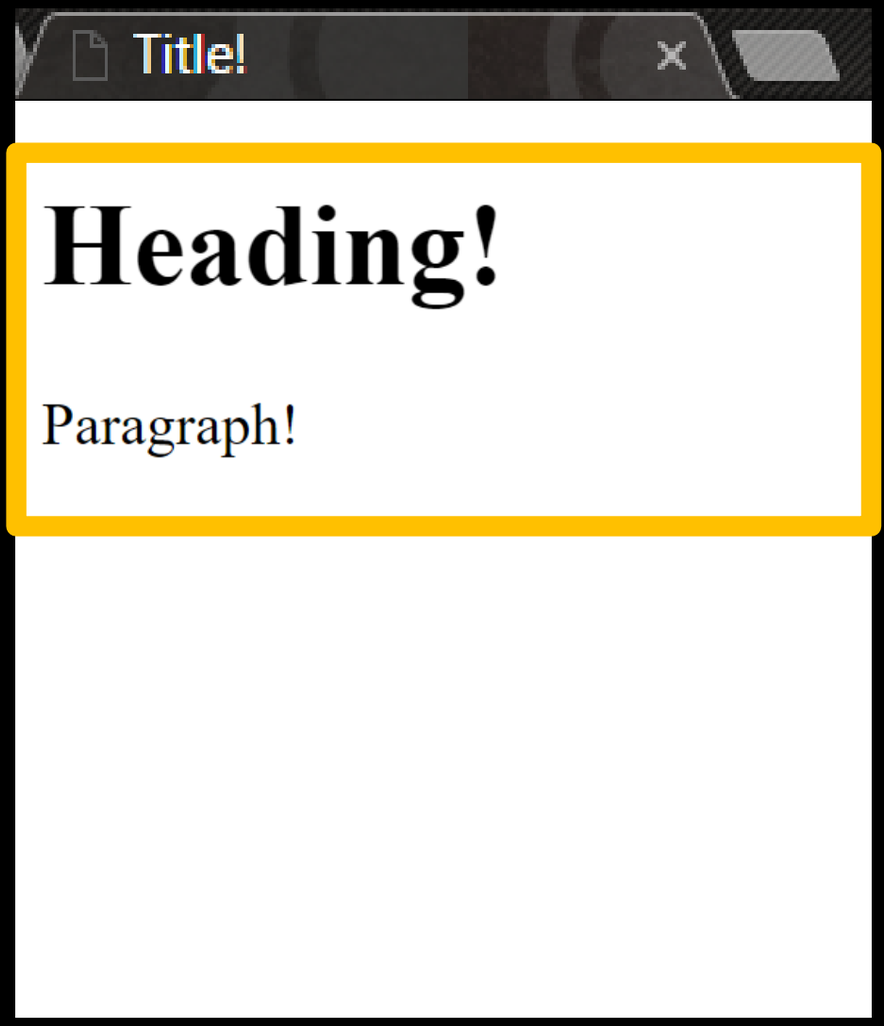
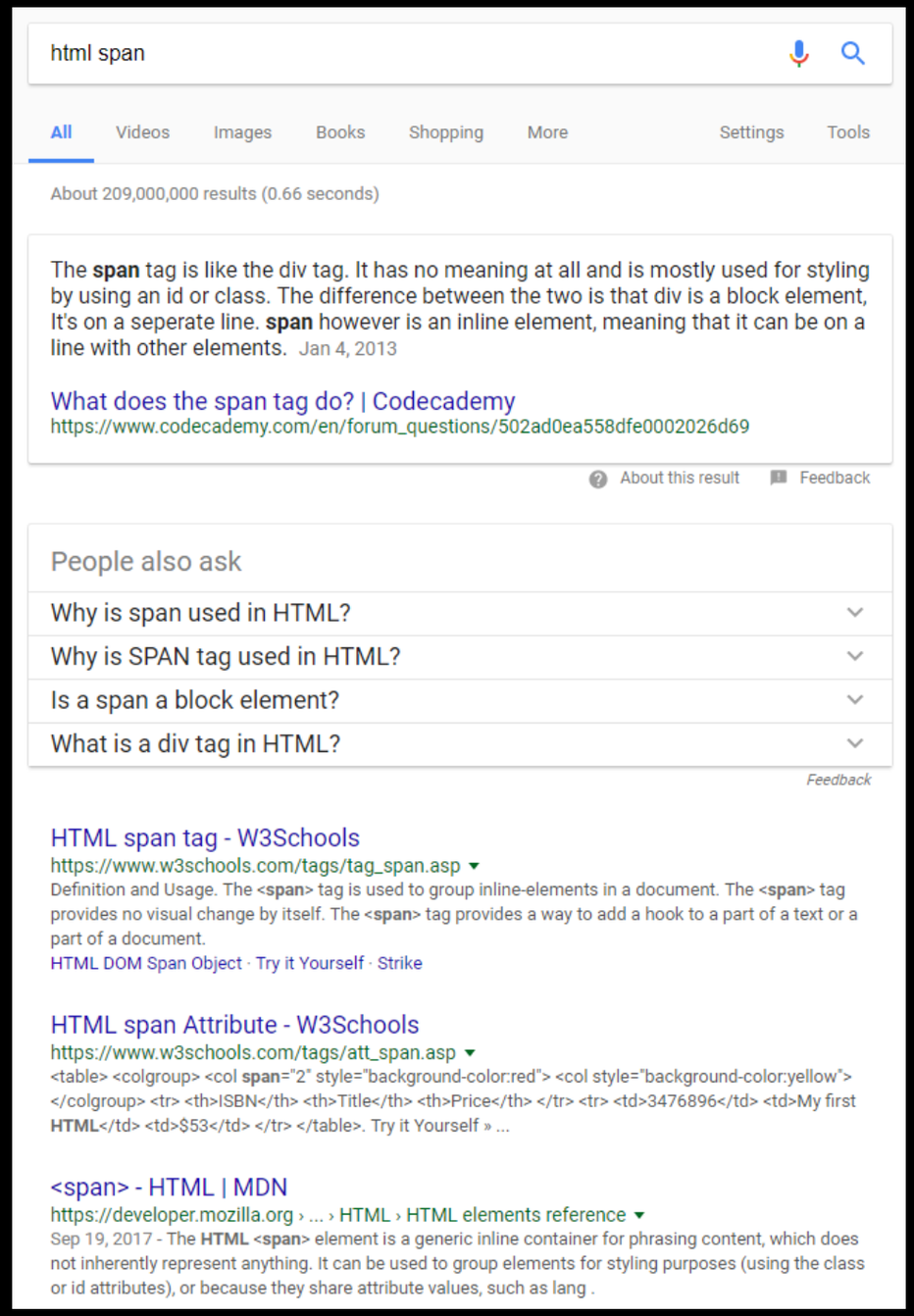


?

the real way to learn

Web Dev

Step 1: Google!



the real way to learn

Web Dev

Step 2: Learn.

The **span** tag is like the div tag. It has no meaning at all and is mostly used for styling by using an id or class. The difference between the two is that div is a block element, It's on a seperate line. **span** however is an inline element, meaning that it can be on a line with other elements. Jan 4, 2013

What does the span tag do? | Codecademy
https://www.codecademy.com/en/forum_questions/502ad0ea558dfe0002026d69

the real way to learn

Web Dev

w3schools.com

THE WORLD'S LARGEST WEB DEVELOPER SITE

HTML CSS JAVASCRIPT SQL PHP BOOTSTRAP JQUERY ANGULAR W3.CSS XML MORE REFERENCES EXAMPLES FORUM

<mark>
<menu>
<menuitem>
<meta>
<meter>
<nav>
<noframes>
<noscript>
<object>
<ol>
<optgroup>
<option>
<output>
<p>
<param>
<picture>
<pre>

HTML Tag

‹ Previous | Complete HTML Reference | Next ›

Example

A element used to color a part of a text:

```
<p>My mother has <span style="color:blue">blue</span> eyes.</p>
```

Try it Yourself »

MDN web docs moz://a

Technologies References & Guides Feedback Sign in

Languages Edit

Jump to: Attributes Example 1 Example 2 Specifications Browser compatibility See also

Web technology for developers › HTML › HTML elements reference ›

Related Topics

<a>

<abbr>

<b>

<bdi>

The **HTML `<span>` element** is a generic inline container for phrasing content, which does not inherently represent anything. It can be used to group elements for styling purposes (using the `class` or `id` attributes), or because they share attribute values, such as `lang`. It should be used only when no other semantic element is appropriate. `<span>` is very much like a `<div>` element, but `<div>` is a block-level element whereas a `<span>` is an inline element.

Content categories	Flow content, phrasing content.
Permitted content	Phrasing content

HTML

Hypertext Markup Language

The language your web browser uses to describe the content and structure on web pages

CSS

Cascading Style Sheets

The rules that tell your web browser how stuff looks

But first…

My Take on CSS

CSS = A list of descriptions

facebook

Email or Phone | Password | Log In

Keep me logged in | Forgot your password?

Connect with friends and the world around you on Facebook.

See photos and updates from friends in News Feed.

Share what's new in your life on your Timeline.

Find more of what you're looking for with Facebook Search.

Sign Up

It's free and always will be.

First name | Last name

Email or mobile number

Re-enter email or mobile number

New password

Birthday

Month | Day | Year — Why do I need to provide my birthday?

Female | Male

By clicking Sign Up, you agree to our Terms and that you have read our Data Policy, including our Cookie Use.

Sign Up

Create a Page for a celebrity, band or business.

English (US) Español Français (France) 中文(简体) العربية Português (Brasil) Italiano 한국어 Deutsch हिन्दी ...

Sign Up | Log In | Messenger | Facebook Lite | Mobile | Find Friends | Badges | People | Pages | Places
Games | Locations | About | Create Ad | Create Page | Developers | Careers | Privacy | Cookies | Ad Choices
Terms | Help

Facebook © 2015
English (US)

Facebook logo

Email or Phone Password

Log In

Keep me logged in Forgot your password?

Connect with friends and the world around you on Facebook.

See photos and updates from friends in News Feed.

Share what's new in your life on your Timeline.

Find more of what you're looking for with Facebook Search.

Sign Up

It’s free and always will be.

First name

Last name

Email or mobile number

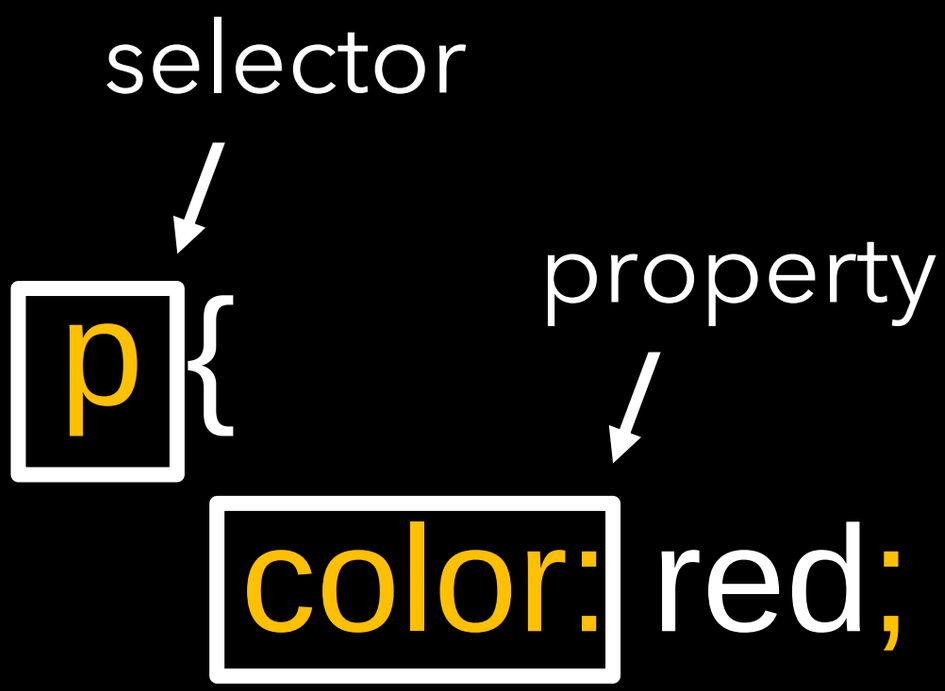
Re-enter email or mobile number

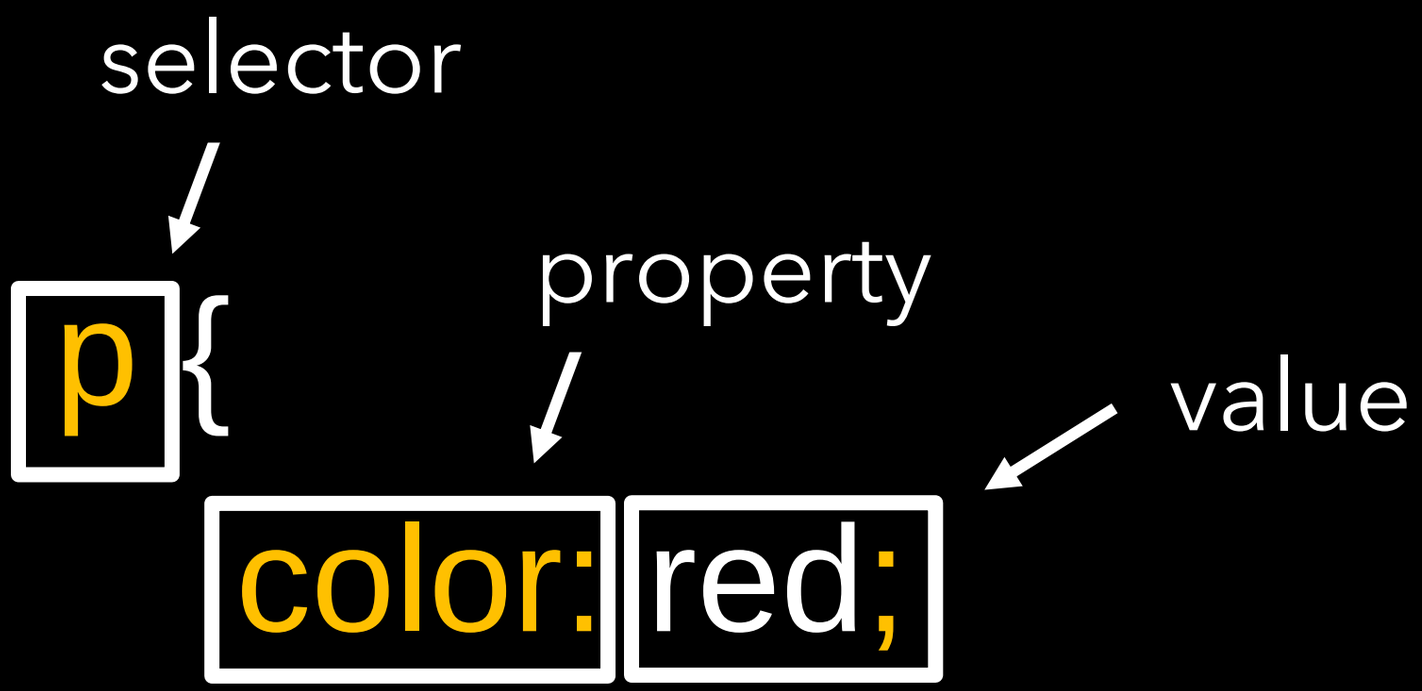
New password

Birthday

```
p {
    color: red;
    font-family: Arial;
    font-size: 24pt;
}
```

```
    color: red;
    font-family: Arial;
    font-size: 24pt;
}
```

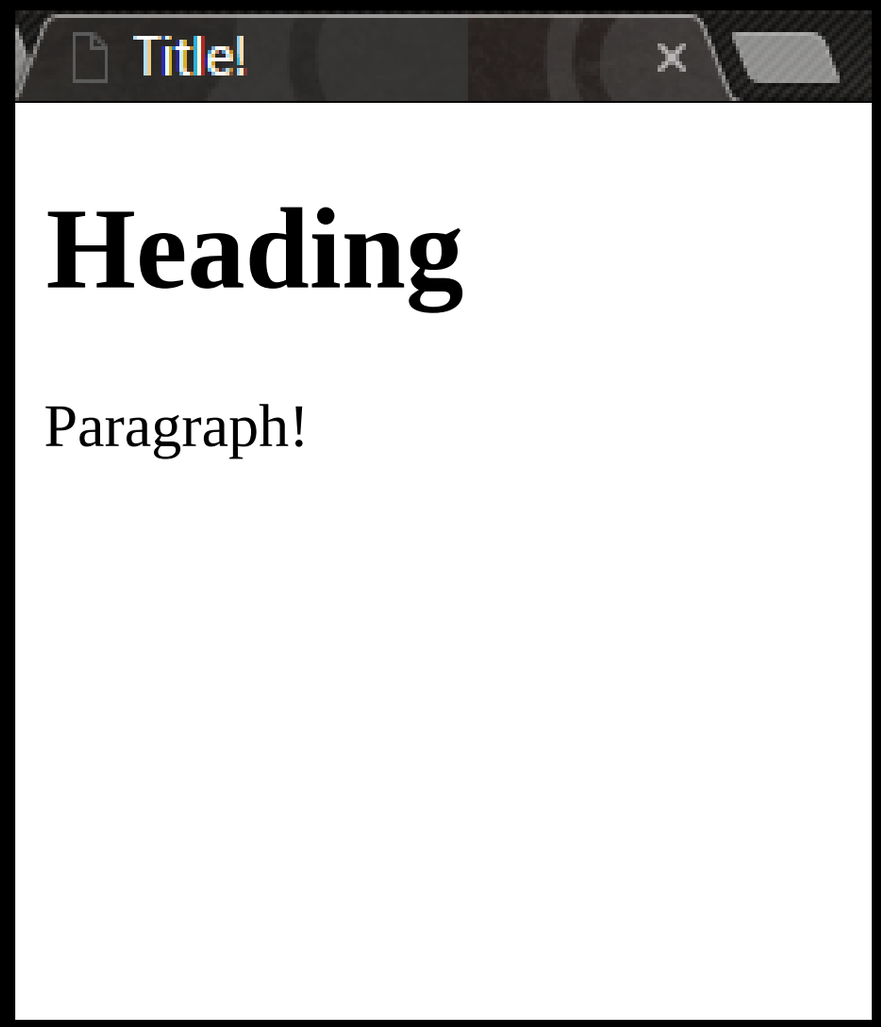

selector
property
p{
color: red;
font-family: Arial;
font-size: 24pt;
}




```
    font-family: Arial;
    font-size: 24pt;
}
```

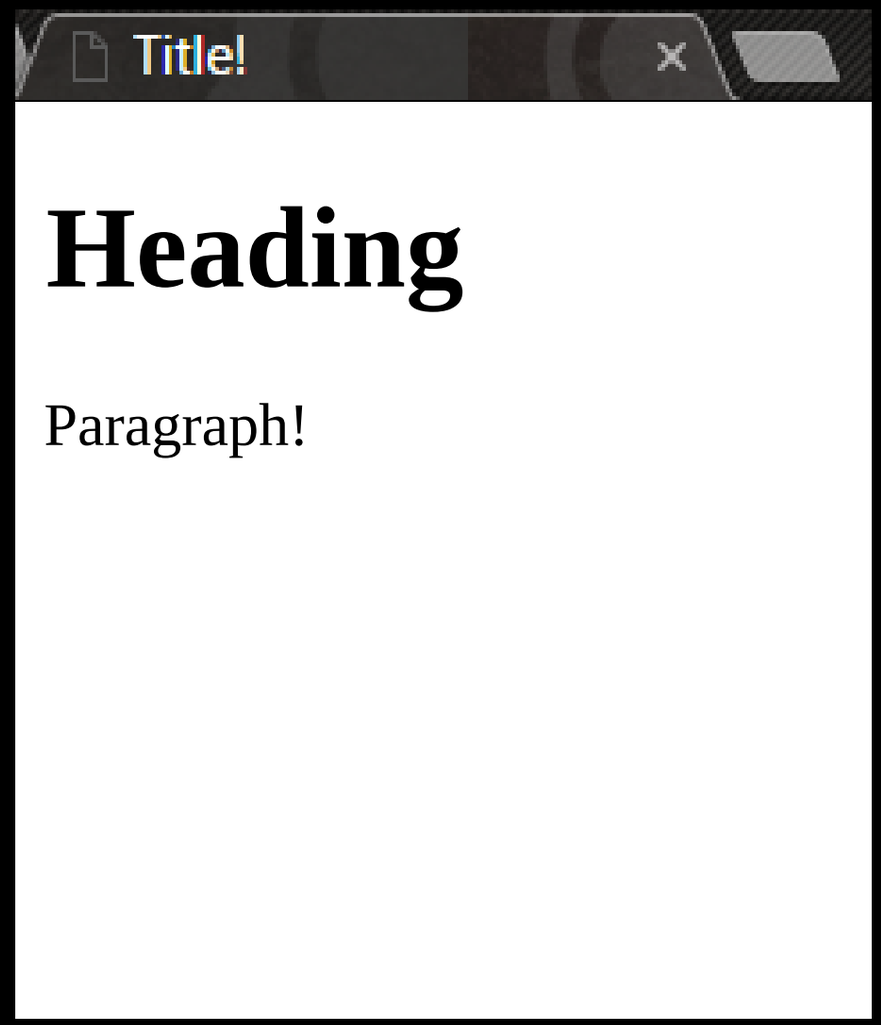
hello.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
  </body>
</html>
```



hello.html

```
<h1>Heading!</h1>
<p>Paragraph!</p>
```



hello.html

```
<h1>Heading!</h1>
<p>Paragraph!</p>
<p>Info</p>
```

Title!

Heading

Paragraph!

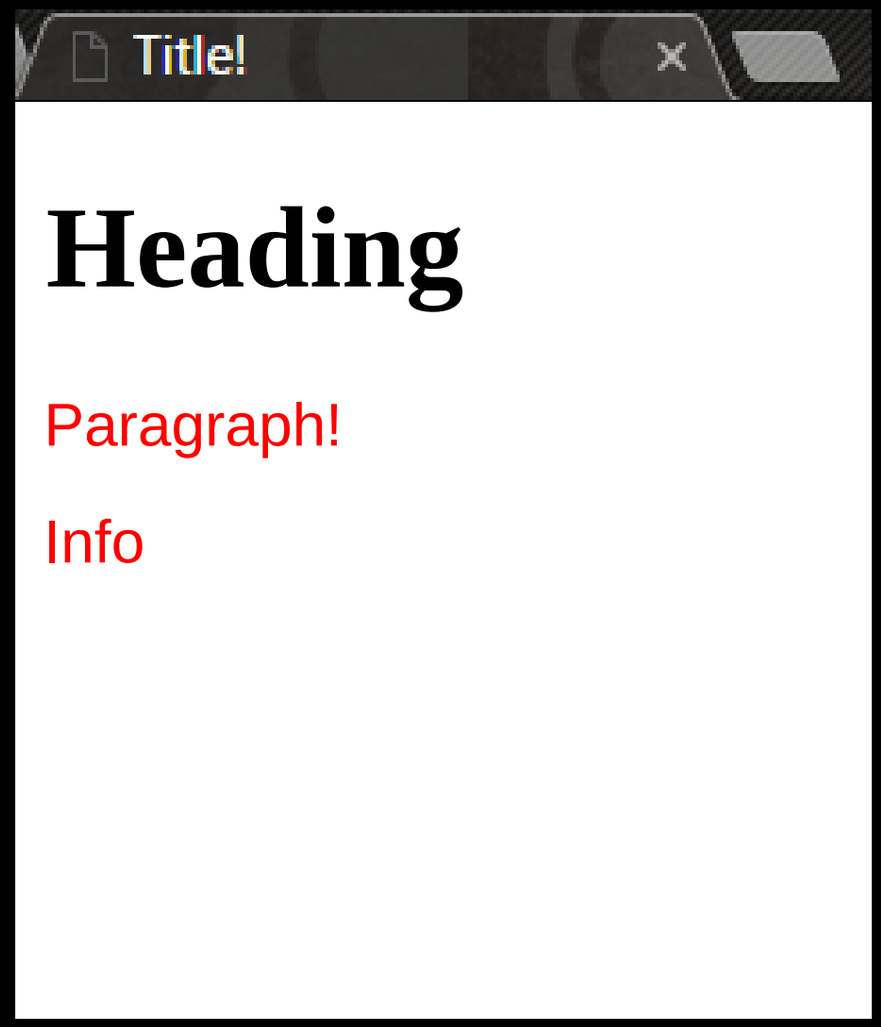
Info

hello.html

```html
<h1>Heading!</h1>
<p>Paragraph!</p>
<p>Info</p>
```

style.css

```css
p {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
```

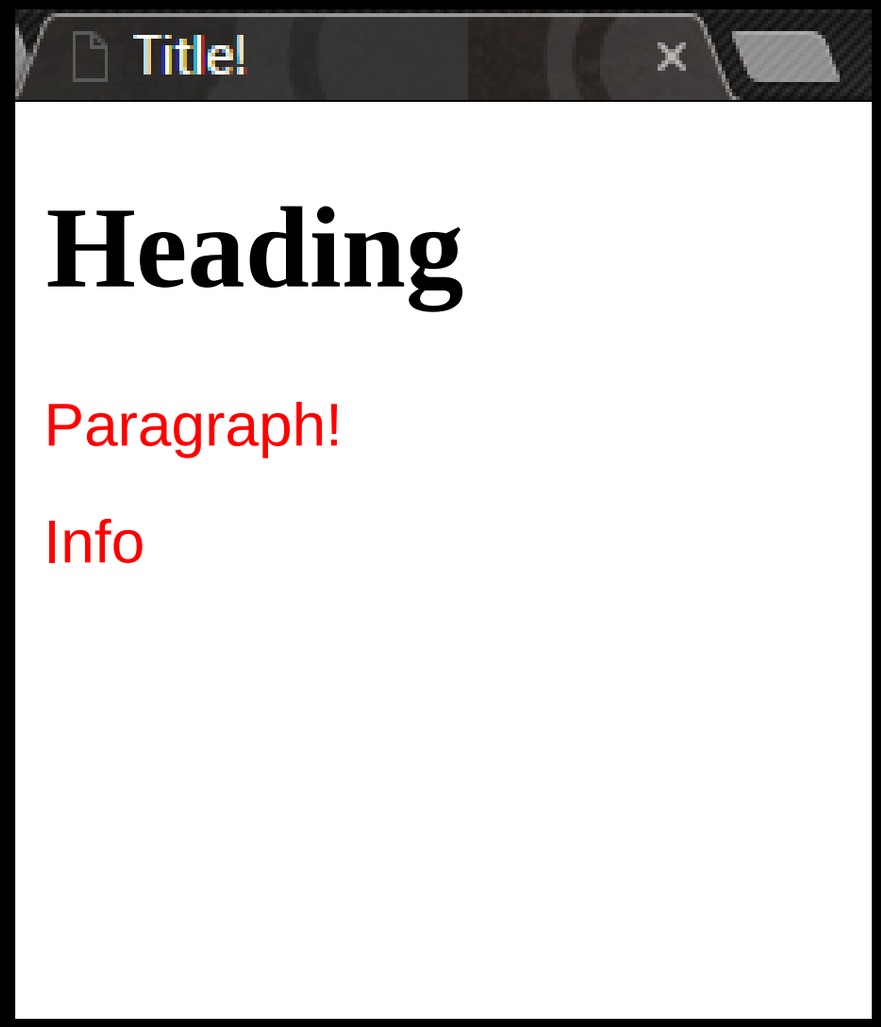


hello.html

```
<h1>Heading!</h1>
<p>Paragraph!</p>
<p class="info">Info</p>
```

style.css

```
p {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
```

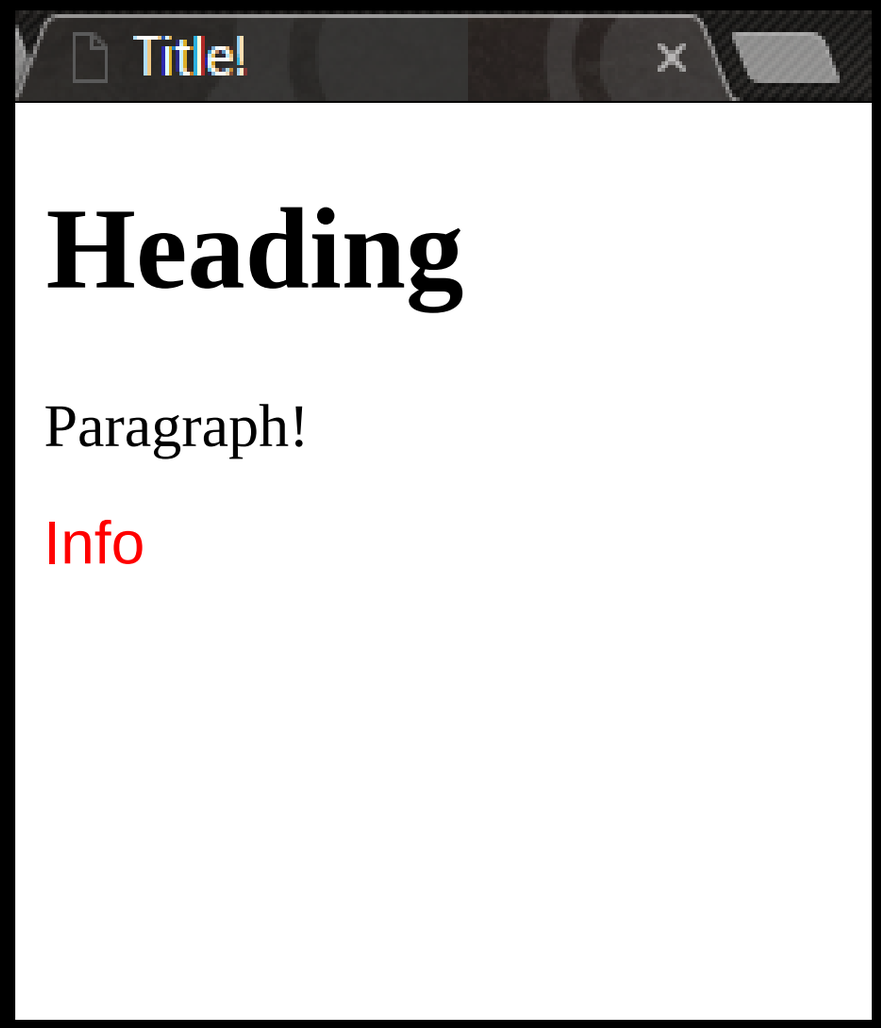


hello.html

```html
<h1>Heading!</h1>
<p>Paragraph!</p>
<p class="info">Info</p>
```

style.css

```css
.info {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
```

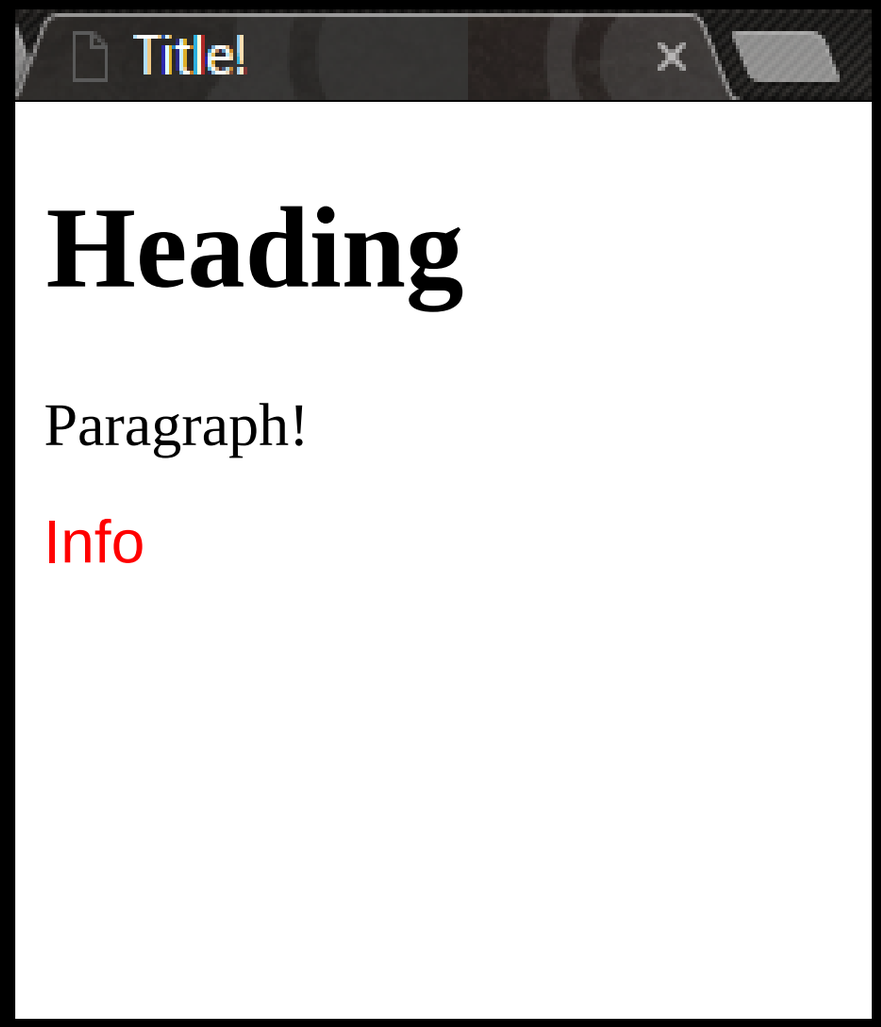


hello.html

```html
<h1>Heading!</h1>
<p>Paragraph!</p>
<p id="unique">Info</p>
```

style.css

```css
#unique {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
```



Class vs ID

Class

Can use the same class on multiple elements

Can use multiple classes on the same element

ID

Each element can have only one ID

Each page can have only one element with that ID

Class vs ID

Class

Can use the same class on multiple elements

Can use multiple classes on the same element

```
.classname {
    …
}
```

ID

Each element can have only one ID

Each page can have only one element with that ID

```
#id {
    …
}
```

Combining HTML & CSS

hello.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
  </body>
</html>
```

hello.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
    <link rel="stylesheet"
          type="text/css"
          href="style.css">
  </head>
  <body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
  </body>
</html>
```

In Conclusion:

HTML = nested boxes!

CSS = a list of descriptions

A description in the CSS affects a box in the HTML

HTML/CSS Workshop

Making your Catbook profile!

Catbook

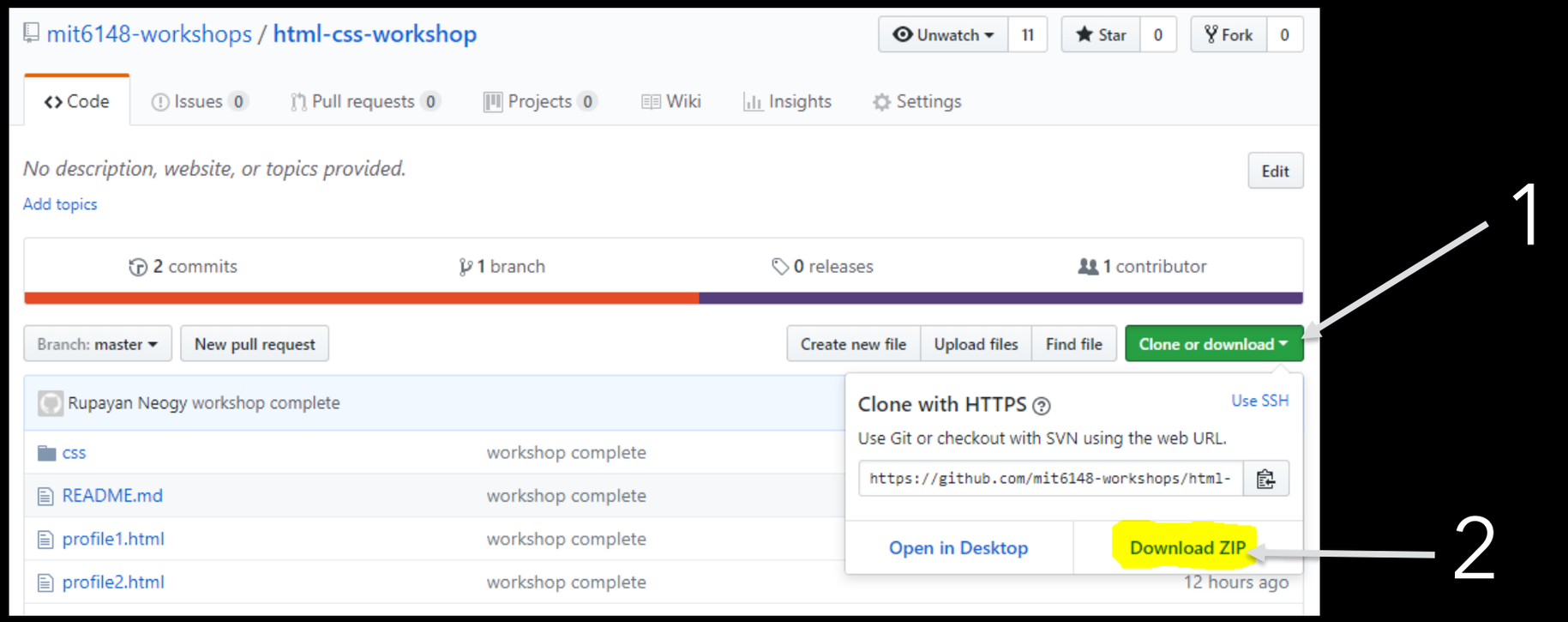
The purrfect social media website

Git the workshop code!

go.6148.io/html-css-workshop

If you know how to Git, clone the repository.

If you don’t know how to Git, download as zip.



Exercise 1: Kitten Started

Open profile1.html in chrome to see what it looks like.

Change the name, description, and status to your choice.

You have to save the file and refresh the webpage to see changes.

Exercise 1: Kitten Started

Change to “Favorite Types of Cats” and instead of the <h3> below, create an unordered list of your favorite cats!

Exercise 1: Kitten Started

Change to “Favorite Types of Cats” and instead of the <h3> below, create an unordered list of your favorite cats!

```
      <p>Today was a great day! I made
      <h4>My Favorite Type of Cat</h4>
      <ul>
        <li>Russian Blue</li>
        <li>Siamese</li>
        <li>American Bobtail</li>
      </ul>
    </div>
  </body>
</html>
```

My Favorite Type of Cat

- Russian Blue
- Siamese
- American Bobtail

CSS Time!!

Open styles1.css.

Guess what it will do…

Add the following the link tag:

```
6    <body>
7      <link rel="stylesheet" href="css/style1.css">
8      <h1>Catbook</h1>
9      <div id="profile-container">
```

CSS Time!!

Catbook

Rupayan Neogy

About Me

I am an avid cat-lover. I have 9 different cats: Aberforth, Belinda, Carmen, Darsh, Evelyn, Francis II, Gottfried, Hamilton, and Irma.

My Status

Today was a great day! I made a home-made sushi banquet for me and my family of cats ^_^

My Favorite Type of Cat

- Russian Blue
- Siamese
- American Bobtail

CSS Time!!

Try the following:

Make all <h1> elements blue.

Make everything in the div with the ID “profile-container” have centered text.

CSS Time!!

```
 9  h1 {
10      color: blue;
11  }
12
13  #profile-container {
14      text-align: center;
15  }
```

Rupayan Neogy

About Me

I am an avid cat-lover. I have 9 different cats: Aberforth, Belinda, Carmen, Darsh, Evelyn, Francis II, Gottfried, Hamilton, and Irma.

My Status

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My Favorite Type of Cat

Russian Blue
Siamese
American Bobtail

Exercise 2: Feline Good

Open up profile2.html and style2.css

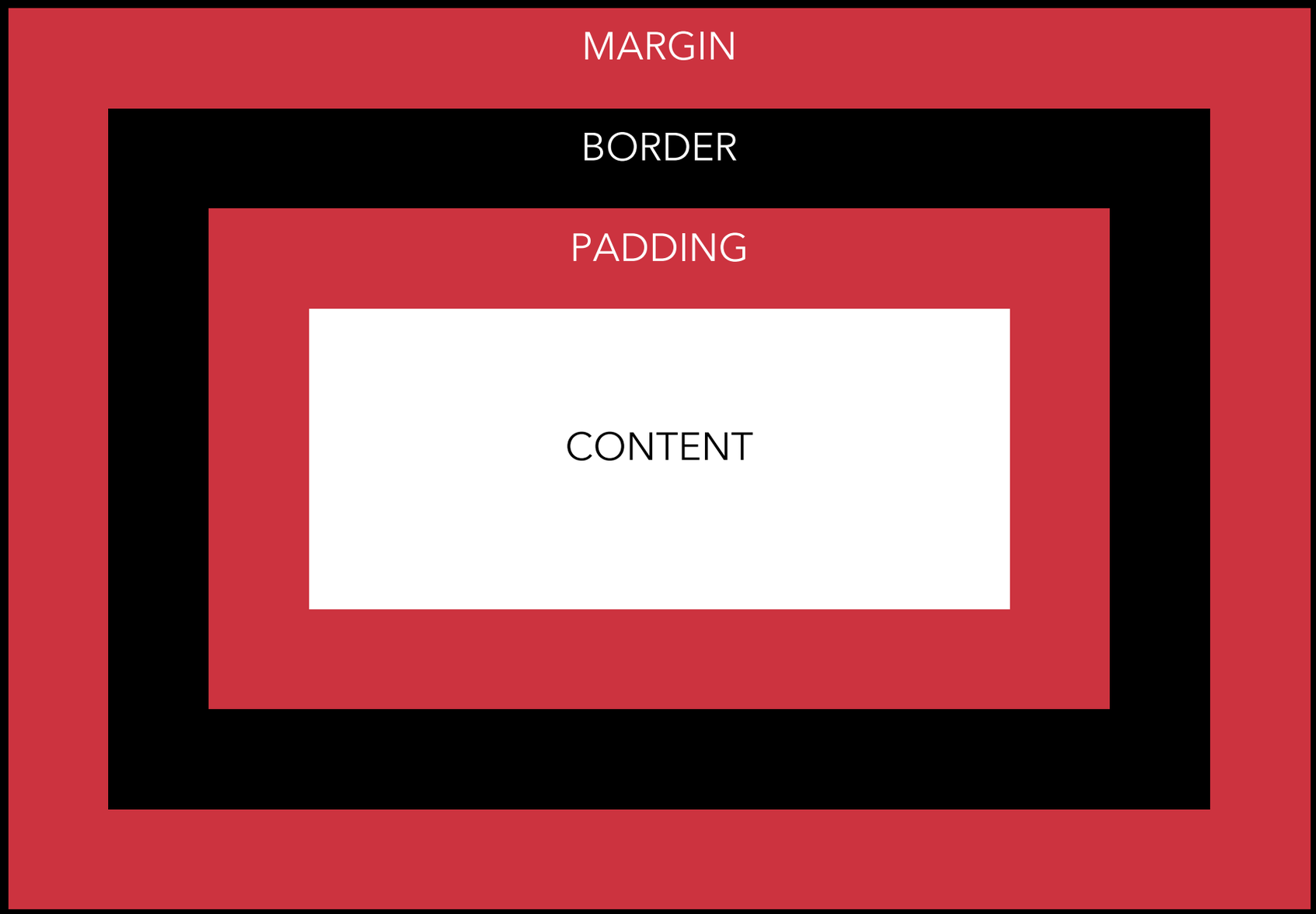
Take a look at profile2 in a browser.

Exercise 2: Feline Good

Let’s walk through the CSS changes.

(switch to sublime now)

CSS Box Model



Exercise 2: Feline Good

Make a class called “text-center” in style2.css

The class should make any element that has the class have centered text.

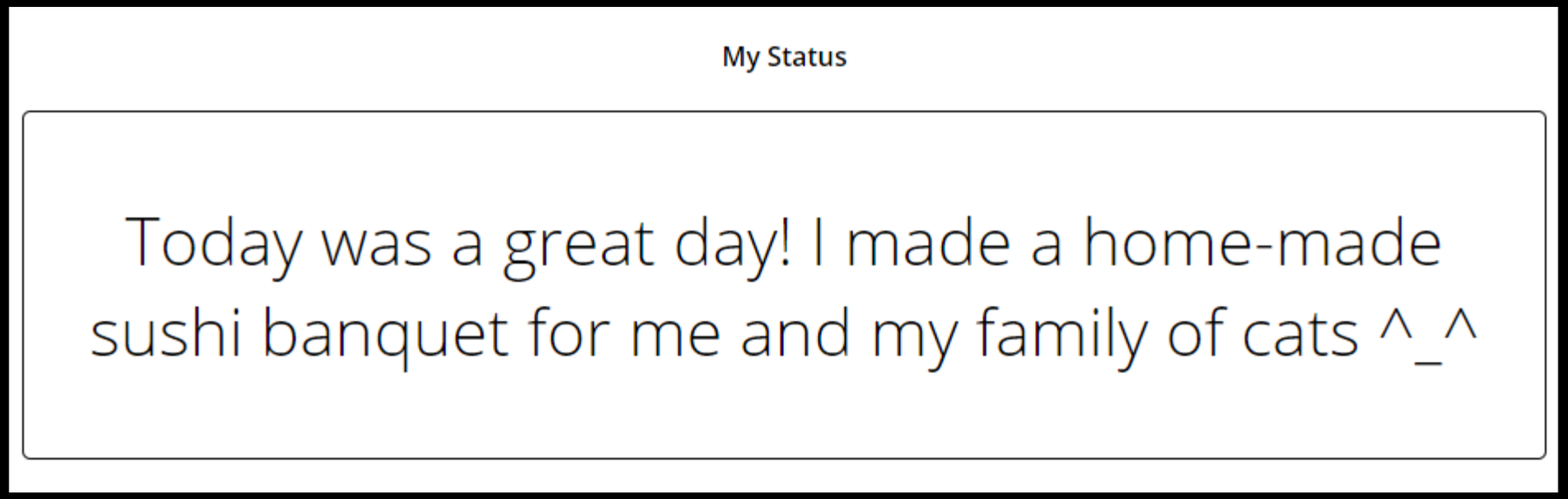
Add the class to the div with id “profile-container”

(this should center everything in the div)

Exercise 3: A little Further

Let's talk about border-radius!

```
36  .card {
37      border-style: solid;
38      border-width: 1px;
39      padding: 10px;
40      /* ADDED IN STEP 3 */
41      border-radius: 5px;
42  }
43
```



Exercise 3: A little Further

Make your profile picture round!

You can either add an ID to the <img> and apply CSS to the ID, or you can create a class representing rounded edges, and add the class to the <img>

Exercise 3: A little Further

Make your profile picture round!

```
<img src="https://i.pinimg.com/736x/98/e0/7d/98
e07decc7c1ca58236995de3567e46a--cat-shirts-kitt
ies-cutest.jpg" style="border-radius: 50px;">
```

```
<!DOCTYPE html>
<html>
  <head>
    <title>Profile Page</title>
  </head>
  <body>
    <link rel="stylesheet" href="css/style3.css">
    <h1>Catbook</h1>
    <div class="text-center" id="profile-container">
      <img src="https://i.pinimg.com/736x/98/e0/7d/98
      e07decc7c1ca58236995de3567e46a--cat-shirts-kitt
      ies-cutest.jpg" style="border-radius: 50px;">
      <div id="name-container">
        <h1 id="name">Rupayan Neogy</h1>
      </div>
      <h4>About Me</h4>
      <div id="profile-description">I am an avid
      cat-lover. I have 9 different cats: Aberforth,
      Belinda, Carmen, Darsh, Evelyn, Francis II,
      Gottfried, Hamilton, and Irma.</div>
      <hr>
      <h4>My Status</h4>
```

Catbook

Rupayan Neogy

About Me

Exercise 4: Stay Pawsitive

What about a perfect circular image?

See profile4.html and style4.css

Exercise 4: Stay Pawsitive

The internet is your friend!

Exercise 4: Stay Pawsitive

The internet is your friend!

Use the internet to add something cool to your app
(make sure to use only HTML and CSS, no JS)

CSS-Tricks.com, stack-overflow, etc.

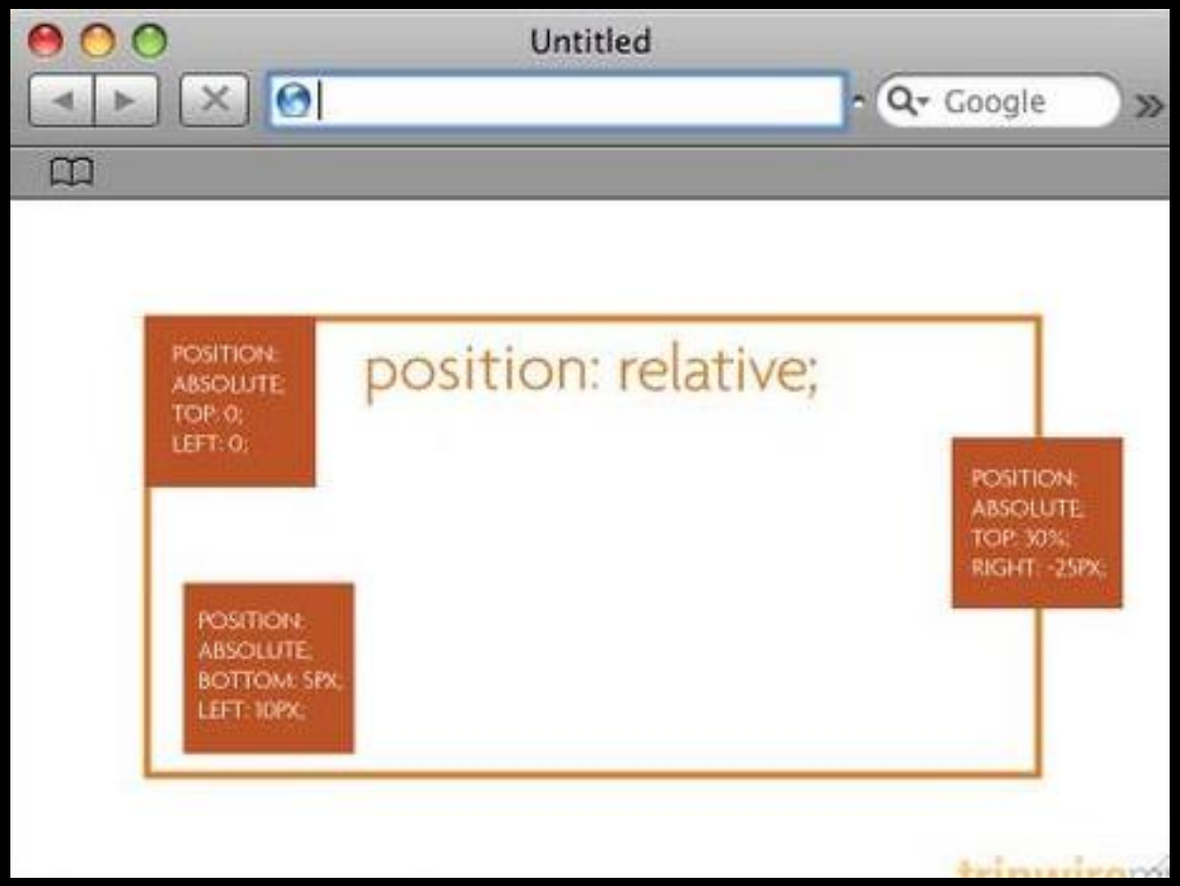
(if you can’t think of something, try element:hover or css animations)

CSS Meowster!

Congrats! You now know a tiny bit about the vast sea that is CSS!

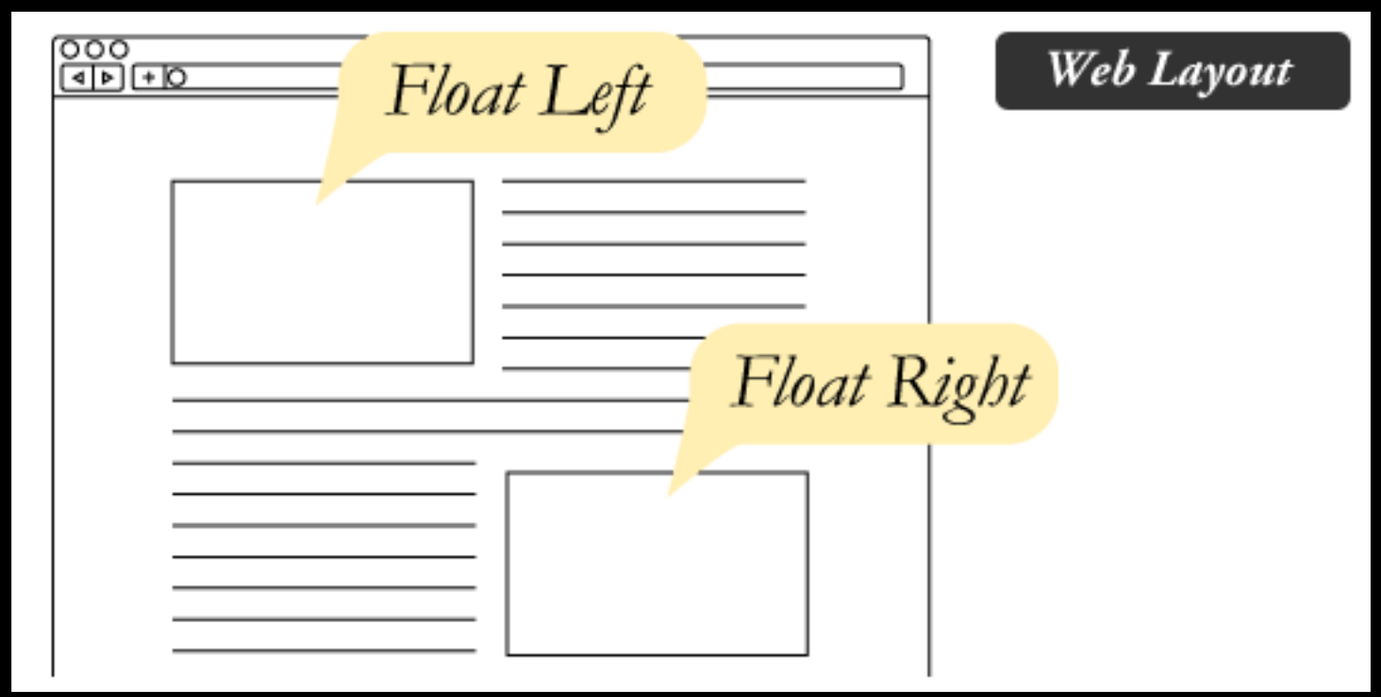
Advanced Topics

Position, float, z-index



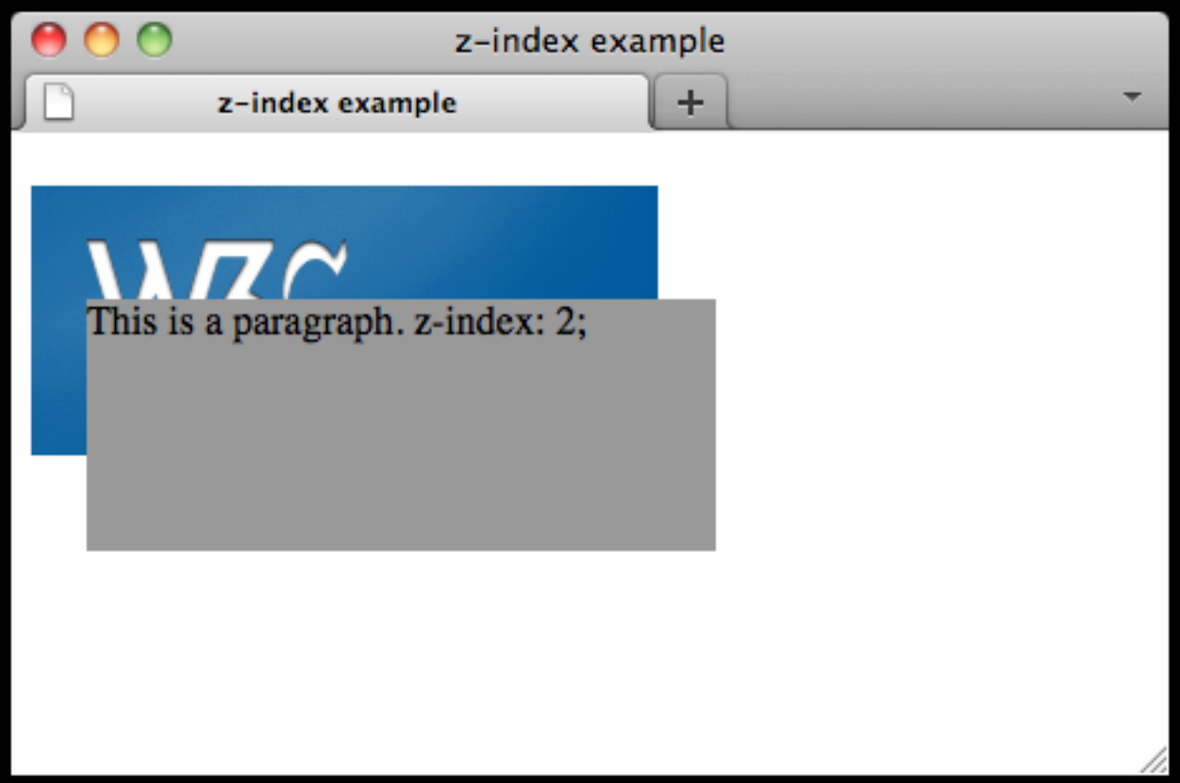
Advanced Topics

Position, float, z-index



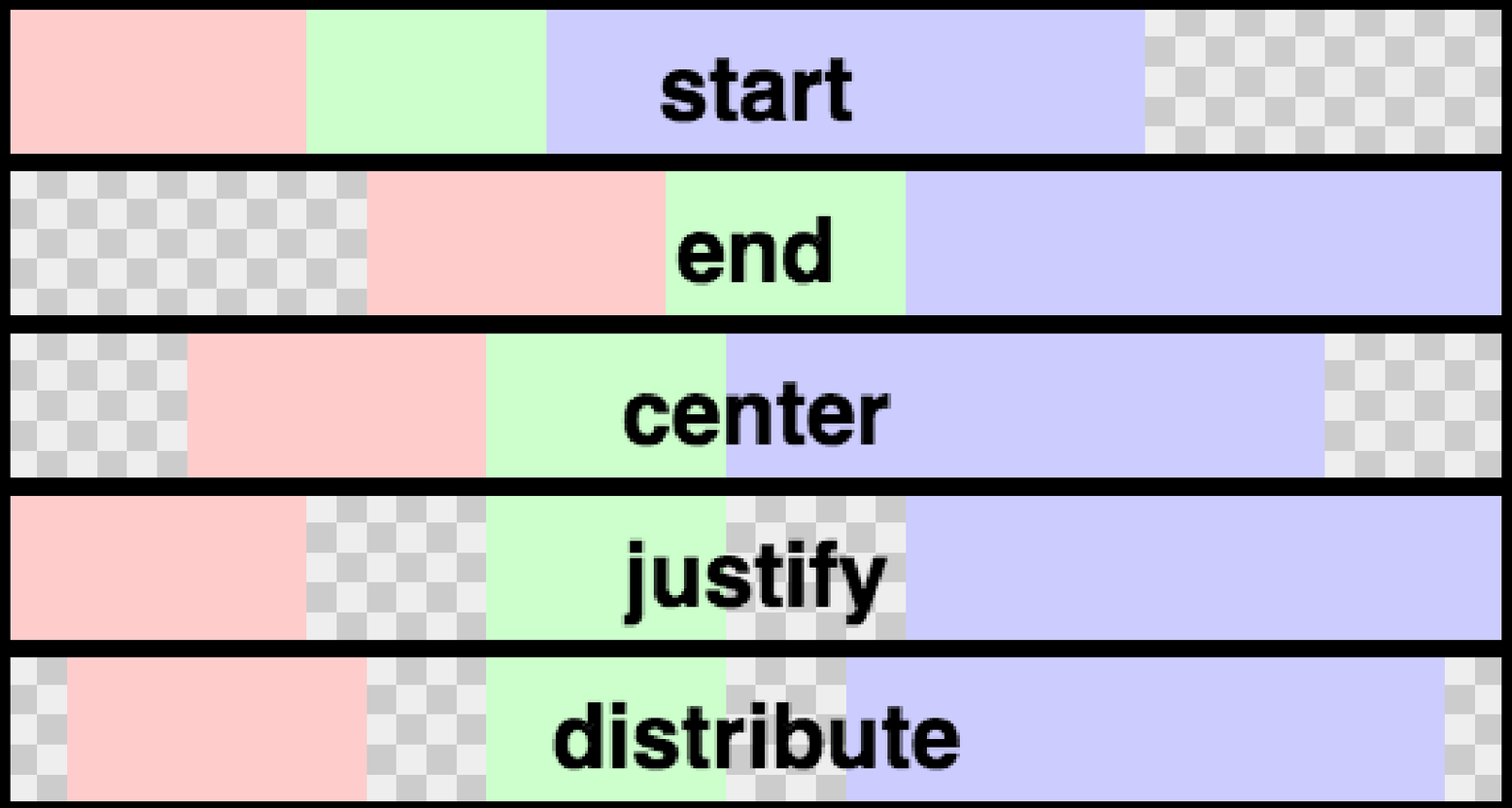
Advanced Topics

Position, float, z-index



Advanced Topics

Flexbox



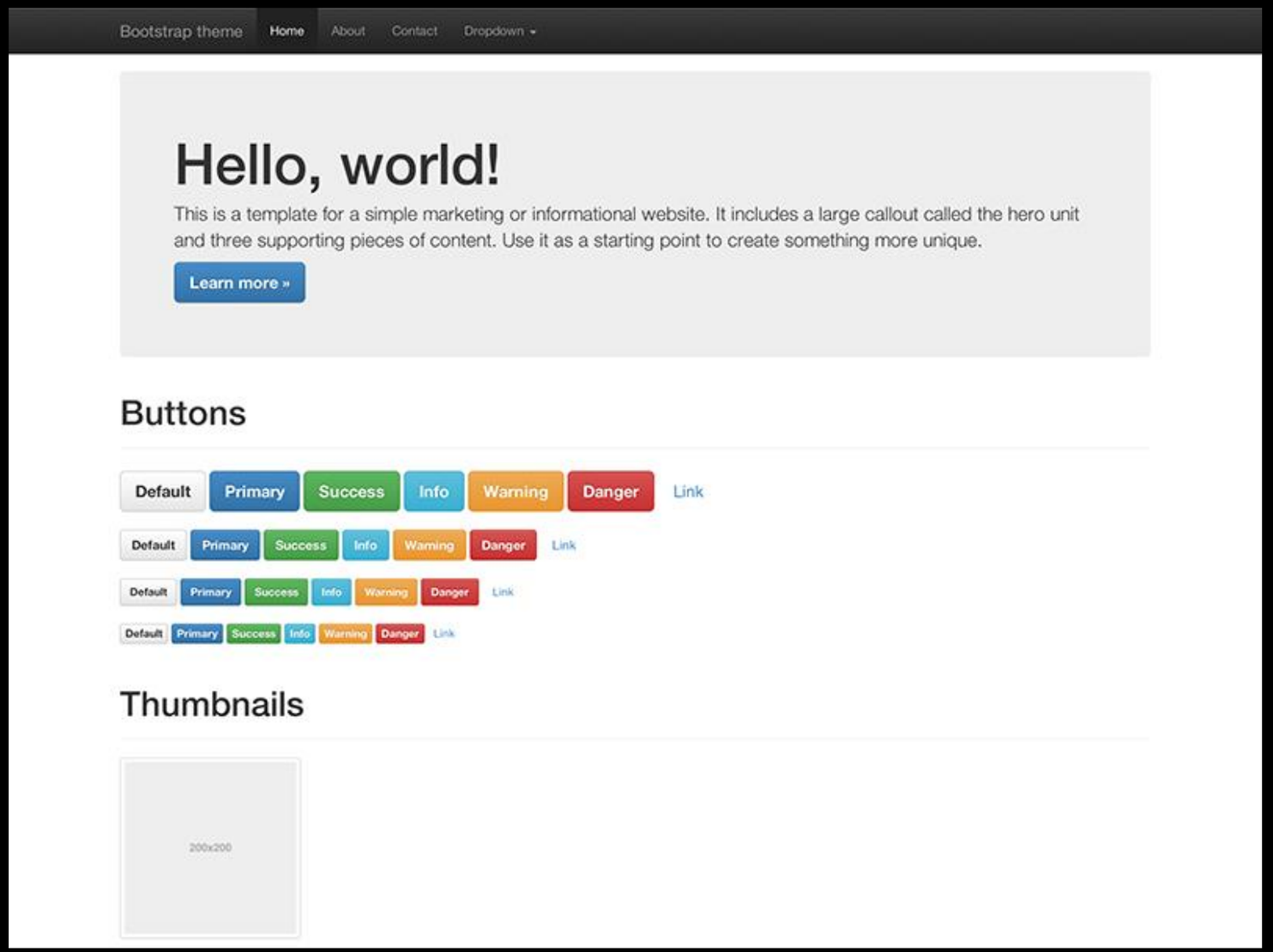
Advanced Topics

Media Queries

```
@media (min-width: 900px) {
  p {
    color: red;
  }
}
```

Advanced Topics

CSS frameworks/libraries (Bootstrap, Foundation, Semantic UI)



Bootstrap

A Quick Introduction to CSS Frameworks

Premade CSS (and other fun components)!

A lack of professionalism

Catbook

Rupayan Neogy

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My Status

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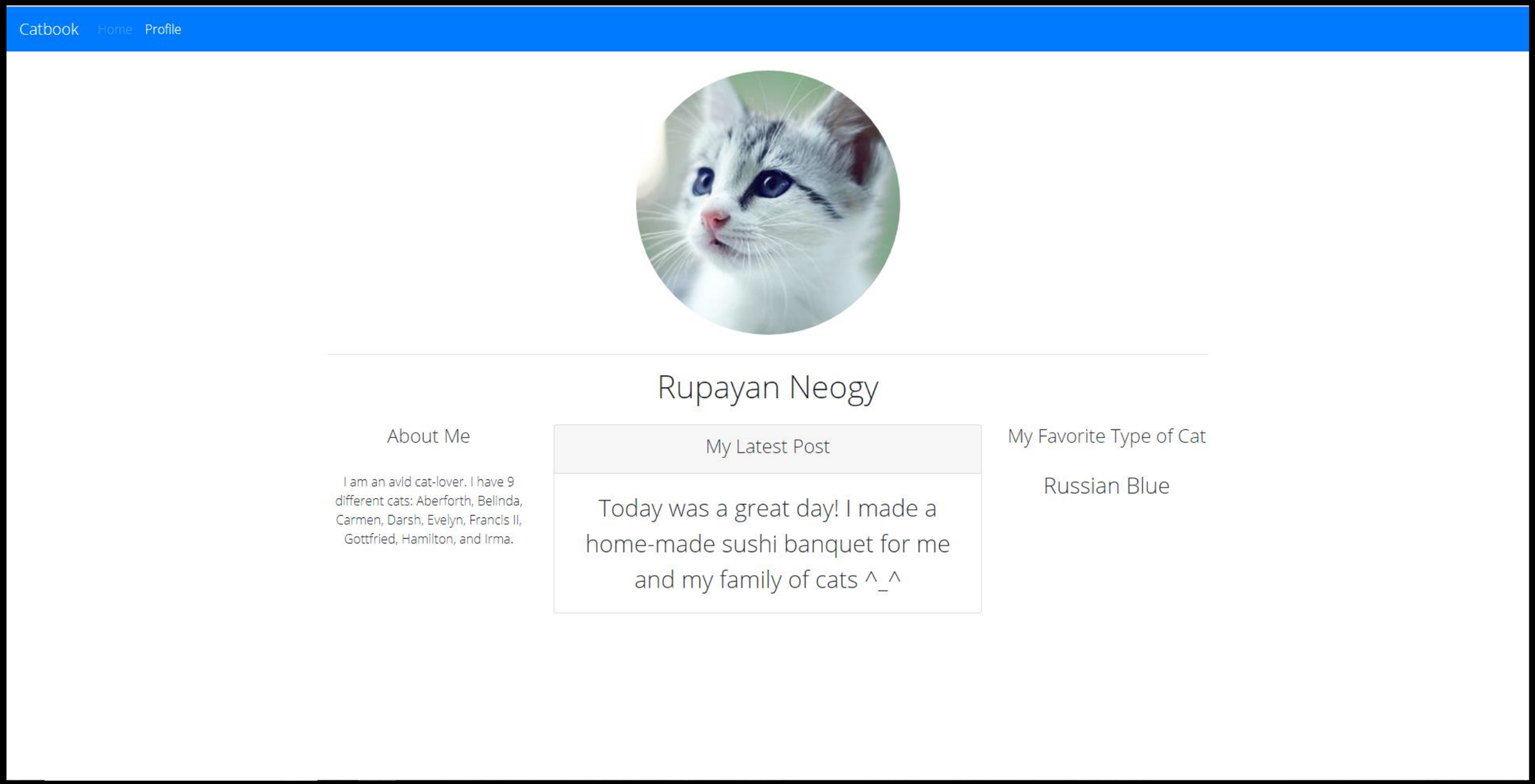
My Favorite Type of Cat

Russian Blue

A level of professionalism



There is always some tool that makes your life easier.

Issues with CSS

- Simple at its core, incredible amount of depth
- Easily accumulates to extremely large files.
- Hard to make mobile friendly/responsive
- Very easy to *not* do well.

What is Bootstrap?

Remember ".text-center"?

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

What is Bootstrap?

- A collection of CSS Classes that add prebuilt styles to your webpage.
- Includes color theming, structural tools, and out-of-the-box components.
- Completely responsive (mobile friendly)
- (Also has JS-based components)

getbootstrap.com/docs

the documentation is your friend

Bootstrap Time!!

Open BS/profileBS.html

Be scared by how many classes there are in the HTML now.

Open BS/styleBS.css

Be amazed by how little CSS there is

Bootstrap Time!!

The most important line:

```
<body>
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/
  bootstrap/4.0.0-beta.3/css/bootstrap.min.css" integrity="
  sha384-Zug+QiDoJOrZ5t4lssLdxGhVrurbmBWopoEl+M6BdEfwnCJZtKxi1KgxUyJq13dy"
  crossorigin="anonymous">
  <link rel="stylesheet" href="styleBS.css">
```

How to use Bootstrap

1. Open Documentation
2. Look for something that you like
3. Copy the code tutorial, modify for your own purposes
4. Smile at how easy that was

How to use Bootstrap

Just dive in!

There is always some tool that makes your life easier.