

# INTRO TO HTML & CSS

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# **HOW WE'LL DO THIS**

- **Do interrupt me**
- **Do shout out**
- **Do ask me questions**
- **Do ask each other questions**

**A SET OF INSTRUCTIONS.  
A RECIPE.  
A STEP BY STEP PROCESS.**



## WHAT CAN I BUILD?



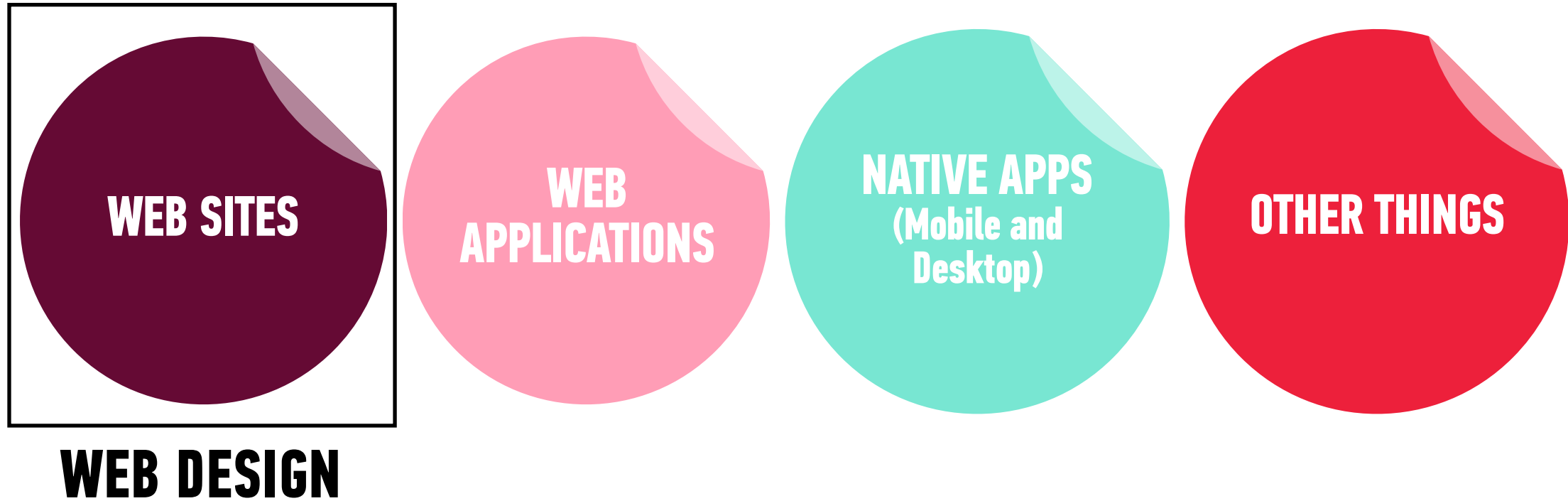
**WEB SITES**

**WEB  
APPLICATIONS**

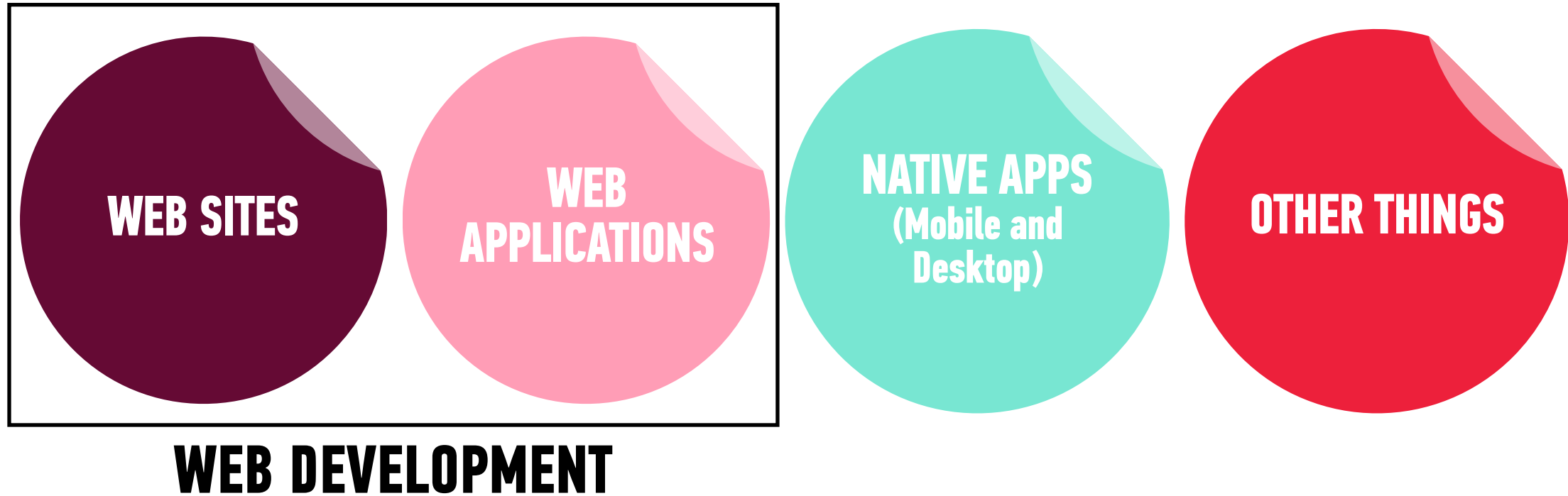
**NATIVE APPS**  
(Mobile and  
Desktop)

**OTHER THINGS**

## WHAT CAN I BUILD?



## WHAT CAN I BUILD?



## **FRONT END**

The content of the page, visual styling instructions and code describing the interactive parts of the user interface.

## **BACK END**

The preparation of that content, storage of user-submitted data, and any ‘business logic’.

## FRONT END LANGUAGES

### Front End

HTML,  
CSS and  
JavaScript

## BACK END LANGUAGES

### Back End

Ruby, PHP,  
Python, Perl,  
Java and more



**LET'S CODE!**

**A BASIC WEB SITE**

# **HTML**

**HYPertext MARKUP LANGUAGE**

# HTML

HyperText



Text that you can  
click through: hyperlinks!

Markup



Highlighting parts  
of content for  
description

Language

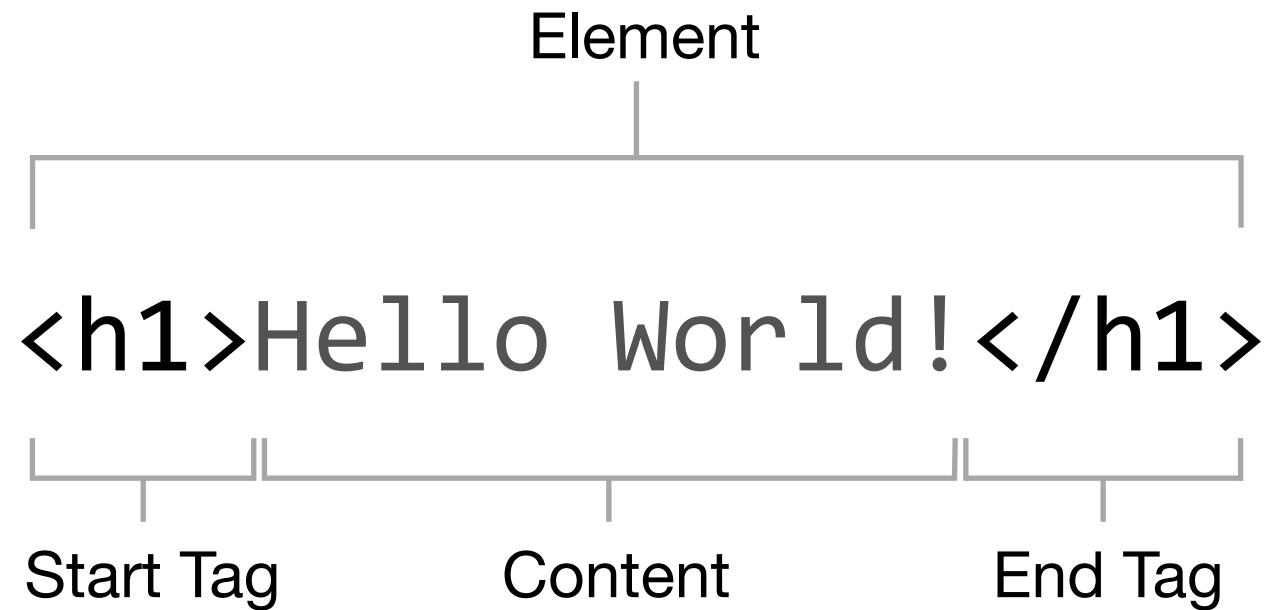


A means of  
communicating between  
two things (you and the  
computer!)

# HTML SYNTAX

```
<h1>Hello World!</h1>
```

# HTML SYNTAX



# HTML HEADING ELEMENTS

`<h1>Top-Level Heading</h1>`

`<h2>Second-Level Heading</h2>`

`<h3>Third-Level Heading</h3>`

`<h4>Fourth-Level Heading</h4>`

`<h5>Fifth-Level Heading</h5>`

`<h6>Bottom-Level Heading</h6>`

# HTML PARAGRAPH ELEMENT

```
<p>Lorem ipsum dolor sit amet, consectetur  
adipiscing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.  
Ut enim ad minim veniam, quis nostrud  
exercitation ullamco laboris nisi ut aliquip  
ex ea commodo consequat.</p>
```

# HTML NESTING SYNTAX

```
<ul>  
  <li>Hello</li>  
  <li>World</li>  
</ul>
```



# HTML LIST ELEMENTS

## Ordered (numbered) List

```
<ol>  
  <li>First item</li>  
  <li>Second item</li>  
  <li>Third item</li>  
  <li>Fourth item</li>  
</ol>
```

## Un-ordered (bulleted) List

```
<ul>  
  <li>List item</li>  
  <li>List item</li>  
  <li>List item</li>  
  <li>List item</li>  
</ul>
```

# HTML ATTRIBUTES

Attributes allow us to provide more information about an element to the browser.



# HTML HYPERLINK ELEMENT

Also known as the ‘anchor’ element. Used to make a clickable link between HTML documents.

```
<a href="http://www.google.com">Click here to go to google!</a>
```

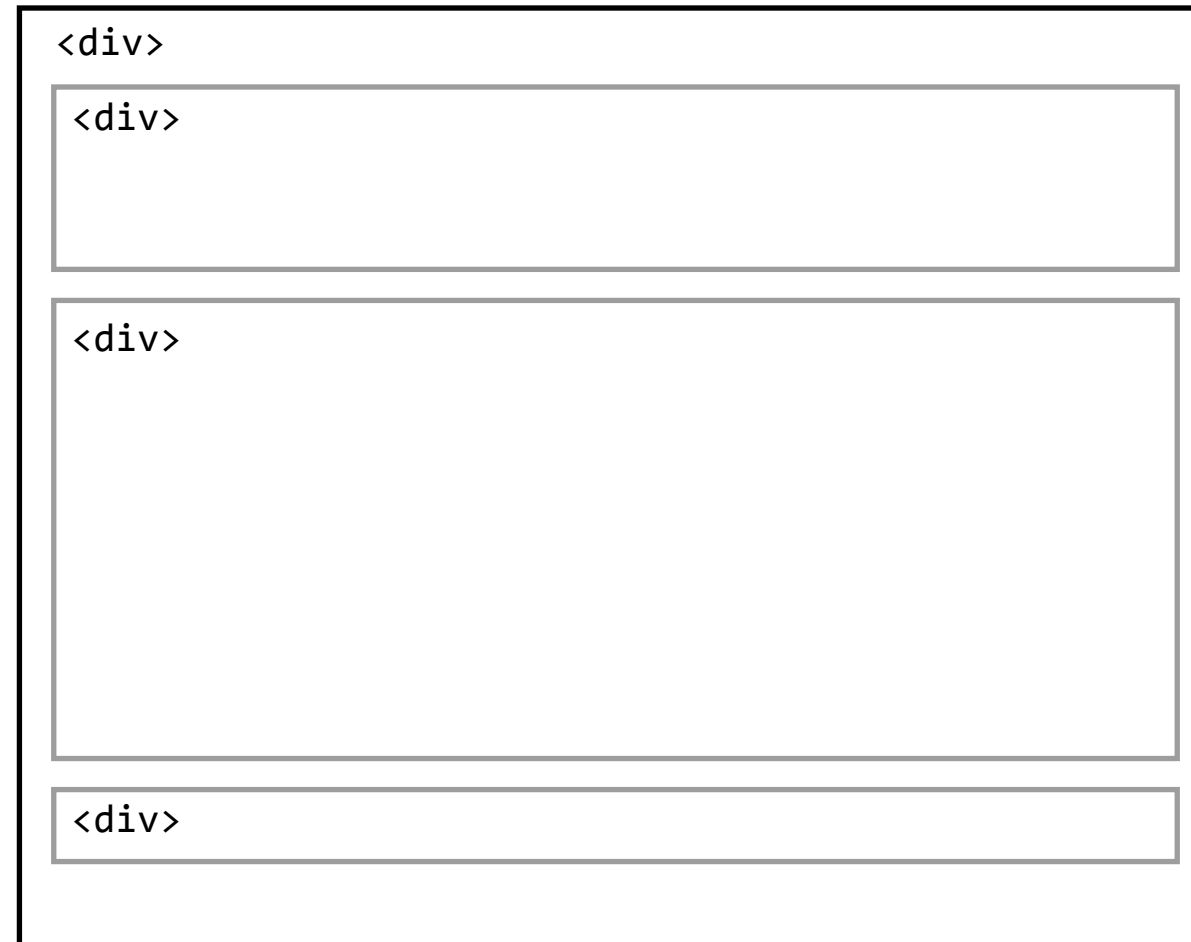
# HTML IMAGE ELEMENT

Used for content images (not backgrounds). Look! It's self-closing!

```

```

# DIVISION 'DIV' ELEMENT



## NEW HTML5 ELEMENTS

article  
aside  
section  
figure  
figcaption

footer  
header  
main  
nav  
progress  
summary

# FRESH PRINCE OF BEL-AIR

Will Smith has asked you to make a website to tell his story.

Fork and clone the repo below, and follow the instructions to complete the exercise

**Starter:**

**[https://github.com/ga-wdi-exercises/  
belair\\_biography](https://github.com/ga-wdi-exercises/belair_biography)**

# FILE STRUCTURE

We use lowercase file and folder names with no spaces in them. Hyphens or underscores can be used in place of spaces.





# HTML DOCUMENT STRUCTURE

```
<!doctype html>
<html>
  <head>
    <!-- Document metadata goes here -->
  </head>
  <body>
    <!-- Document contents goes here -->
  </body>
</html>
```

# HTML FIXIT

Visit this exercise and follow the instructions for the exercise below to fix the HTML.

**Starter:**

**[https://github.com/ga-wdi-exercises/html\\_fixit](https://github.com/ga-wdi-exercises/html_fixit)**

# HTML FILE PATHS

Files can be referenced from one file to another a number of ways:

Relative

```
src="../../../images/kitten.jpg"
```

Absolute

```
src="/images/background.jpg"
```

Full Qualified (aka Hotlinking)

```
src="http://www.placekitten.com/400/300"
```

# HTML LINK ELEMENT

We need to use a link element to tell the browser to apply CSS to our HTML page.

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

# CSS

## CASCADING STYLESHEETS

# CSS

Cascading



```
graph TD; A[Cascading] --> B[Styling instructions can overlap and overrule one another, to various ends.]; C[Stylesheets] --> D[Documents containing instructions dictating the appearance of a web page];
```

Stylesheets

Documents containing  
instructions dictating the  
appearance of a web page

Styling instructions can overlap and  
overrule one another, to various  
ends.

# **CSS SYNTAX**

```
h1 {  
    color: red;  
}
```

# CSS SYNTAX

Selector



**h1 {**

**color: red;**

**}**

Property

Value



# CSS SELECTOR SYNTAX

Element name selectors are used to select that type of element all through the document.

```
<p>Lorem ipsum</p>
```

```
p {  
    font-weight: bold;  
}
```

## **SOME CSS PROPERTIES**

`color: red;`

`background: yellow;`

`font-family: helvetica sans-serif;`

`font-size: 20px;`

`border: 1px solid black;`

`width: 300px;`

# CSS CLASS SELECTOR SYNTAX

Classes are used to style **certain elements**; they could be different types of elements or at different positions in the page.

```
<p class="intro">Lorem ipsum</p>
```

```
.intro {  
    font-weight: bold;  
}
```

# CSS ID SELECTOR SYNTAX

Use an ID to style an **individual element**. A unique ID should only be used once, on one element, in an HTML document.

```
<p id="intro">Lorem ipsum</p>
```

```
#intro {  
    font-weight: bold;  
}
```

# CSS COLOURS

## Name

e.g. red, lightgrey, green, black

## RGB

e.g. `rgb(255,0,0)`, `rgb(128,128,128)`, `rgb(0,200,50)`

## RGBa

e.g. `rgba(255,0,0,1)`, `rgba(128,128,128,0.5)`, `rgba(0,200,50,0.1)`

## Hexadecimal

e.g. `#33ffcc`, `#666666`, `#bada55`

# CSS HEXADECIMAL SYNTAX

Instead of counting 0-15, computers like to count 00-09 then 0a-0f.

Base 10

0  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

Base 16

00  
01  
02  
03  
04  
05  
06  
07  
08  
09  
0a  
0b  
0c  
0d  
0e  
0f

Base 10

16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32

Base 16

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
1a  
1b  
1c  
1d  
1e  
1f

# CSS HEXADECIMAL SYNTAX

#	red	green	blue
#	00-ff	00-ff	00-ff

e.g. #000000 = black  
#ff0000 = red  
#333333 = dark grey  
#ccccff = light blue  
#ffffff = white

# CSS RGB SYNTAX

rgb( red , green , blue )  
rgb( 0-255 , 0-255 , 0-255 )

e.g. rgb(0,0,0) = black  
rgb(255,0,0) = red  
rgb(50,50,50) = dark grey  
rgb(196,196,255) = light blue  
rgb(255,255,255) = white



# CSS COLOUR NAMES

aliceblue, antiquewhite, aqua, aquamarine, azure, beige, bisque, black, blanchedalmond, blue, blueviolet, brown, burlywood, cadetblue, chartreuse, chocolate, coral, cornflowerblue, cornsilk, crimson, cyan, darkblue, darkcyan, darkgoldenrod, darkgray, darkgreen, darkkhaki, darkmagenta, darkolivegreen, darkorange, darkorchid, darkred, darksalmon, darkseagreen, darkslateblue, darkslategray, darkturquoise, darkviolet, deeppink, deepskyblue, dimgray, dodgerblue, firebrick, floralwhite, forestgreen, fuchsia, gainsboro, ghostwhite, gold, goldenrod, gray, green, greenyellow, honeydew, hotpink, indianred, indigo, ivory, khaki, lavender, lavenderblush, lawngreen, lemonchiffon, lightblue, lightcoral, lightcyan, lightgoldenrodyellow, lightgray, lightgreen, lightpink, lightsalmon, lightseagreen, lightskyblue, lightslategray, lightsteelblue, lightyellow, lime, limegreen, linen, magenta, maroon, mediumaquamarine, mediumblue, mediumorchid, mediumpurple, mediumseagreen, mediumslateblue, mediumspringgreen, mediumturquoise, mediumvioletred, midnightblue, mintcream, mistyrose, moccasin, navajowhite, navy, oldlace, olive, olivedrab, orange, orangered, orchid, palegoldenrod, palegreen, paleturquoise, palevioletred, papayawhip, peachpuff, peru, pink, plum, powderblue, purple, red, rosybrown, royalblue, saddlebrown, salmon, sandybrown, seagreen, seashell, sienna, silver, skyblue, slateblue, slategray, snow, springgreen, steelblue, tan, teal, thistle, tomato, turquoise, violet, wheat, white, whitesmoke, yellow, yellowgreen

e.g. <http://colours.neilorangepeel.com>

# CSS BOX PROPERTIES

width: 50%;

height: 150px;

padding: 20px;

border: 1px solid black;

margin: 50px;

# CSS BOX PROPERTIES

Margin, padding and border-width accept shortcuts:

```
/* All sides */
```

```
margin: 10px;
```

```
/* Top bottom, left right */
```

```
margin: 10px 50px;
```

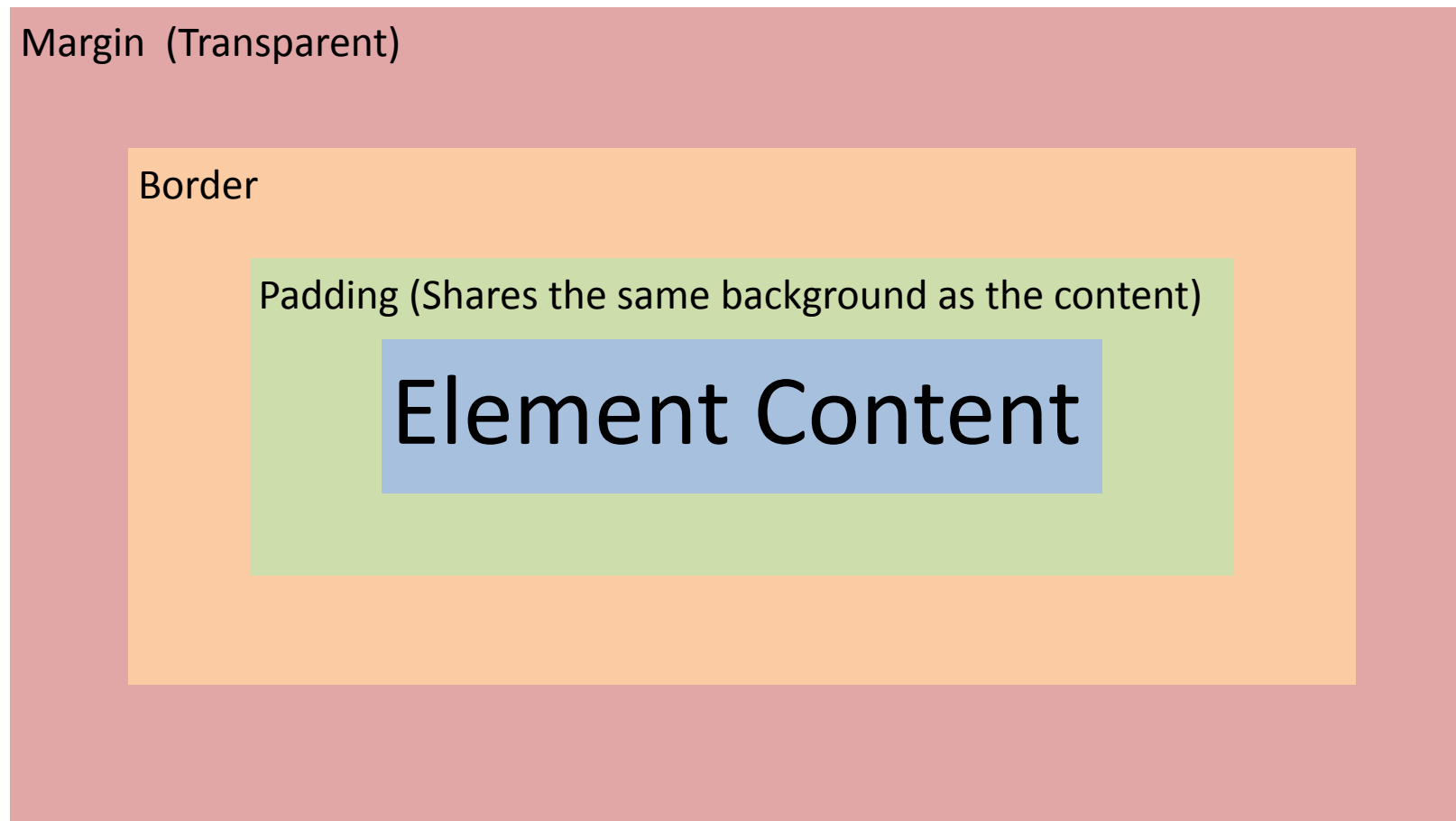
```
/* Top, left right, bottom */
```

```
margin: 10px 50px 100px;
```

```
/* Top, right, bottom, left */
```

```
margin: 10px 50px 100px 20px;
```

# CSS BOX MODEL



# CSS BOX MODEL EXAMPLE

## Heading Text

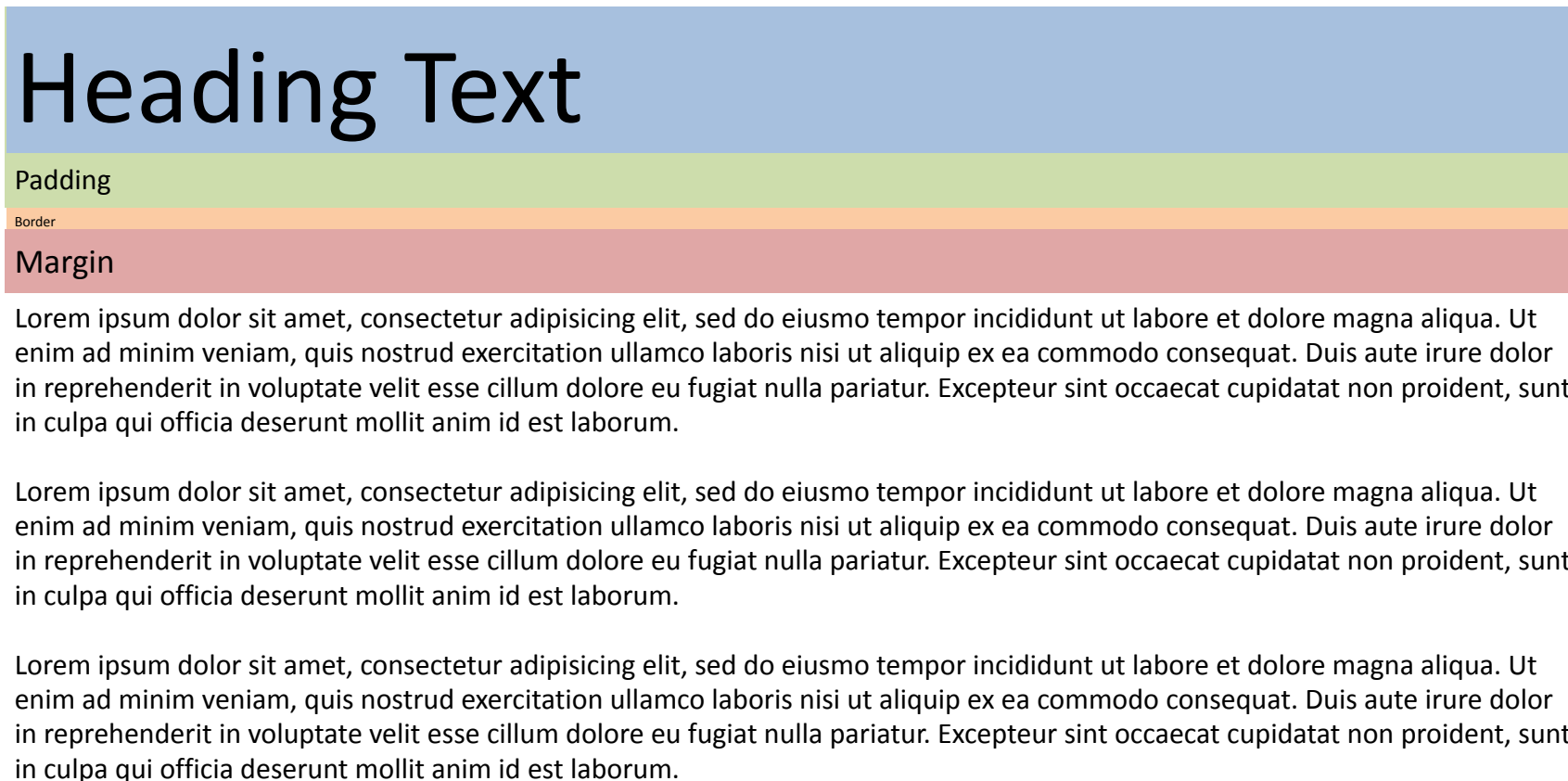
---

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

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# CSS BOX MODEL EXAMPLE



# CSS BOX MODEL EXAMPLE

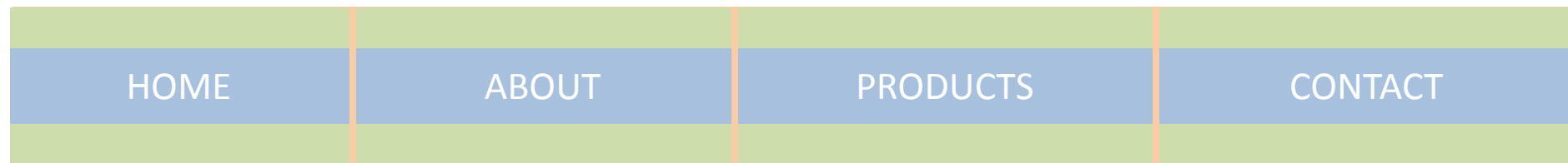
HOME

ABOUT

PRODUCTS

CONTACT

# CSS BOX MODEL EXAMPLE





# WENDY BITE

Wendy has asked you to make a website for her.

Fork and clone the repo below, and follow the instructions to complete the exercise

**Starter:**

[\*\*https://github.com/ga-wdi-exercises/wendy\\_bite\*\*](https://github.com/ga-wdi-exercises/wendy_bite)

# ECARDLY

ECard.ly has asked you to build their new site.

Fork and clone the repo below, and follow the instructions to complete the exercise

**Starter:**

**<https://github.com/ga-wdi-exercises/ecardly>**