

CSS  
The Box Model  
Selectors  
Display  
Positions  
&  
Flex Box



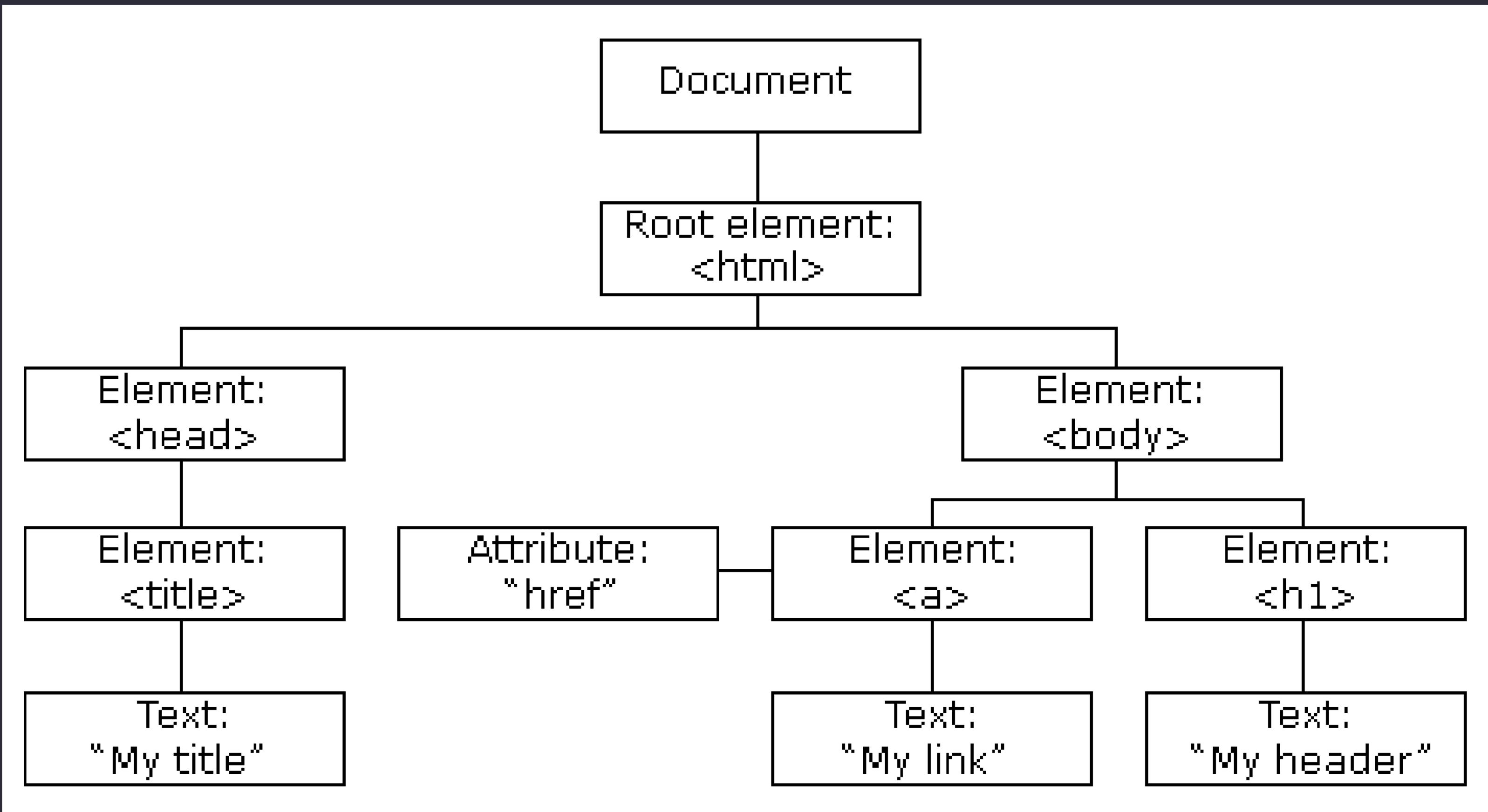
# Let's Talk About THE DOM

No...NOT This One...



# THIS ONE!

The Document Object Model (DOM) is the tree like structure each HTML document is governed by. Each element can have an attribute and/or a child, while at the same time a parent to another element...



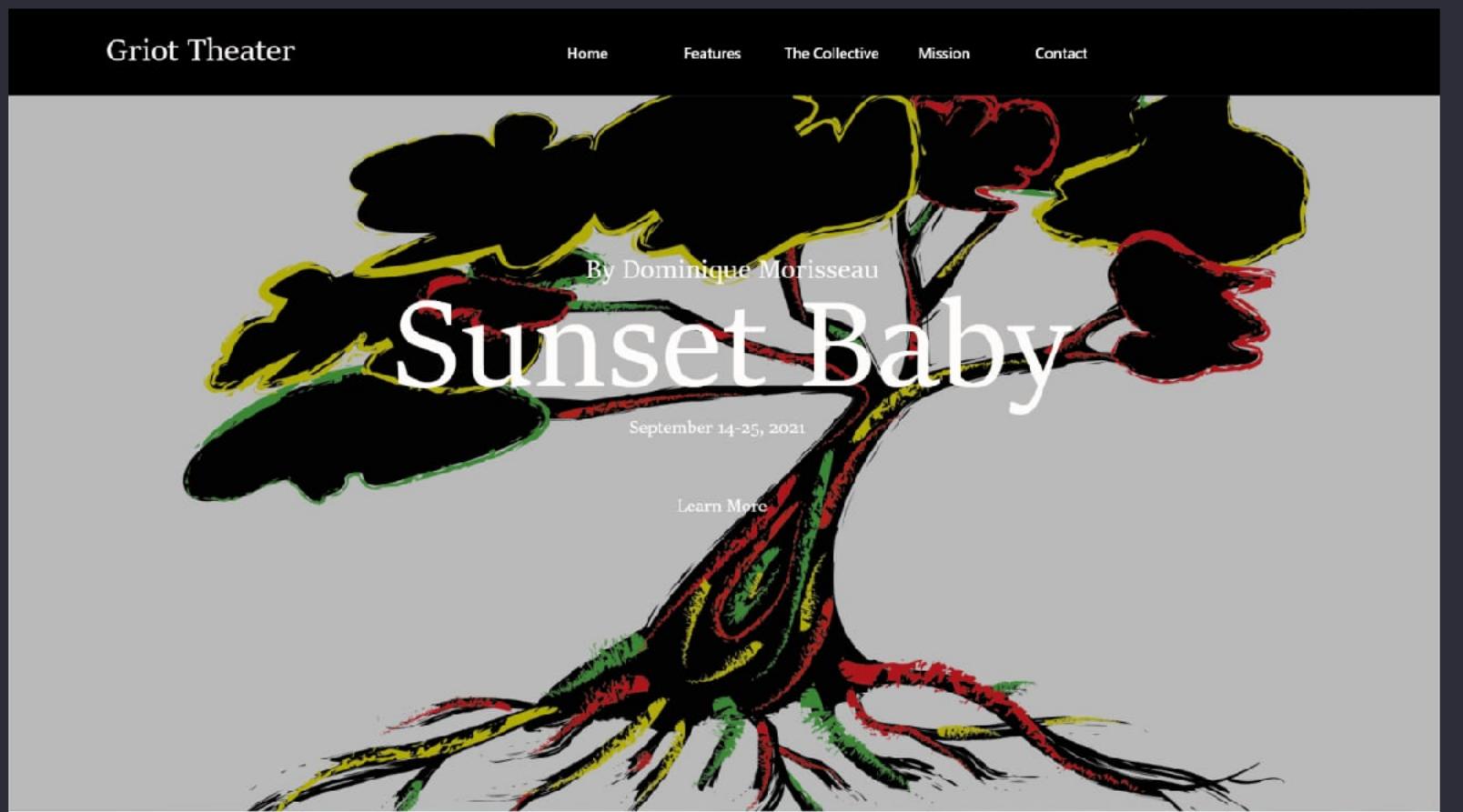
# The Box Model

Can a Box Walk a runway??

# But Can You Box Model...?

Every HTML element is a box! Understanding this will help you visualize how to work with a design you are given. The term "Box Model" specifically speaks to the design and/or layout of a page. And if you look close enough at a design, you will start to see where boxes could be drawn.

# Can You Find The Boxes In This Design?



## Welcome To **The Griot Theater Company**

Creating Opportunities to produce cross cultural theatrical works  
as well as new work by local BIPIC artists.  
While providing an educational training ground and nurturing  
space for youth by exposing them to the theatrical experience.

### Featured Shows



### Upcoming Shows

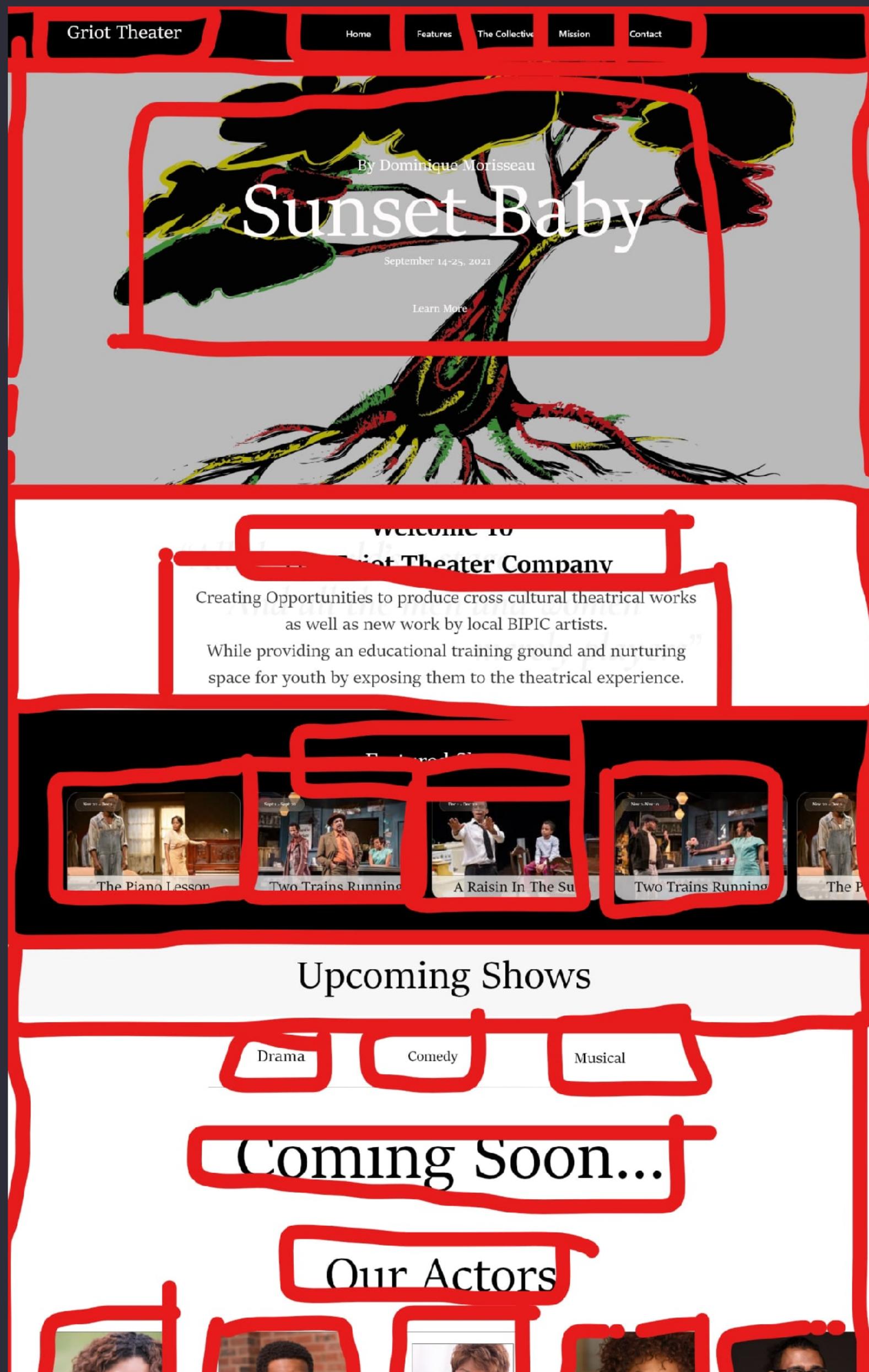
Drama      Comedy      Musical

## Coming Soon...

### Our Actors



Did you think all of  
these boxes were here?

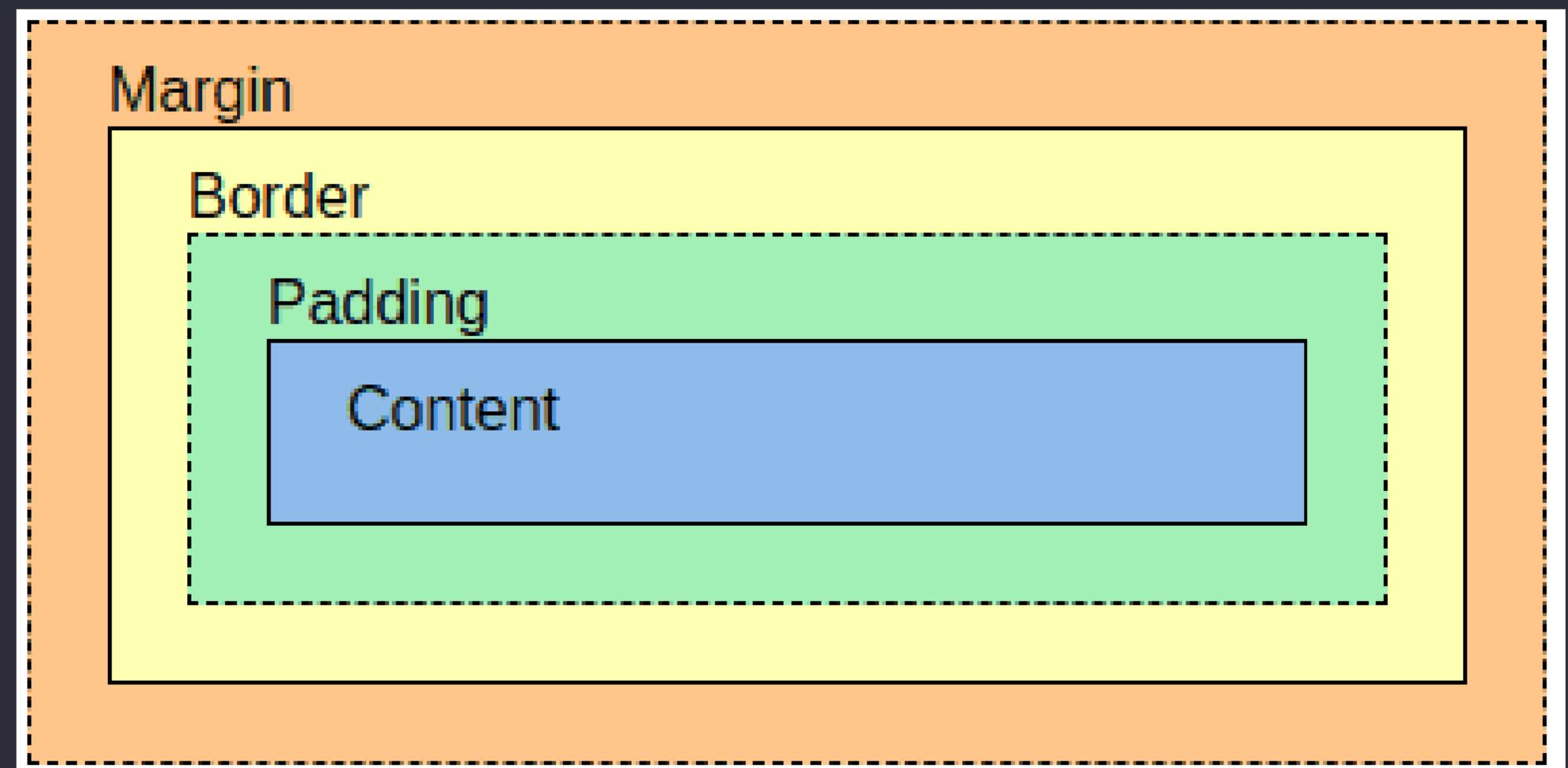


# The Box Model Diagram

Each portion of the box-model adds to the size of the element (content) , this assumes that you are using the "border-box" default version of the model.

We calculate the box model of a given element by adding the following values:

Width of element + padding + border + margin



# Take scenario for example

So Our Calculation Breaks Down as:

420px(Width) + 20px(left & Right  
Padding + 10px(left +right Border) +  
0px(left + right margin) == 450px of  
width in total

```
1 div{  
2   width: 420px;  
3   padding: 10px;  
4   border: 5px solid black;  
5   margin: 0;  
6 }
```

# Selectors

Careful with your selections!!

# One M U S T Select W i s e l y !

CSS Selectors are primarily used to "grab" or "find" HTML elements to attach styles to. The selector that is the MOST specific usually is the one that wins the battle, IF there are multiple selectors trying to style one element.

In the next slides we talk more about specific style selectors

# CSS Selectors Breakdown

Selector	Selector Function
Simple Selectors	Select elements based on name,id or class
Combinator Selectors	Select elements based on a specific relationship between them
Pseudo-class selectors	Select Elements based on a certain state
Pseudo-element selectors	Select and style a part of an element
Attribute Selectors	Select elements based on an attribute or attribute value

# S i m p l e   S e l e c t o r s



Simple Selectors

# C o m b i n a t o r S e l e c t o r s



Combinator Selectors

# P s e u d o   C l a s s e s



CSS Pseudo-Classes

# P s e u d o   E l e m e n t s



wvzjoBx

# A t t r i b u t e S e l e c t o r s



Attribute Selectors

# CSS Displays

"Floor displays don't always fit every situation"

# CSS Displays

The display property dictates to each HTML element how it should behave in relation to the other elements around it.

## **The Block Level Element**

Starts a new line and requires full width availability.

Includes:

div,h1-h6,p,form,header,footer,section

and aside

## **Inline Elements**

And inline element DOES NOT start a new line and only uses space required for content. Includes: span,a,img

## **Display None**

Used to hide an element.

Commonly used with

JavaScript.

## **Display Flex**

Creates a Flex box layout that will expand and contract at more forgivable breakpoints

## **Display Grid**

Creates a Grid like structure on the browser which can be filled by quadrants and/or fractional units.

# CSS Position

"TAKE YOUR POSITIONS!!"

# CSS Position

The position property declares the type of positioning an element will have.

## Static

This element will not be moved by the top, bottom, left, or right properties.

## Relative

This element will be positioned relative to its normal position (or parent)

## Fixed

Positions elements inside a particular space in the browser viewport. Stays put if the page scrolls.

## absolute

This element is positioned relative to a near ancestor/parent instead of the viewport.

## Sticky

Positioned based on scroll position. Keep on scrollin' baby!

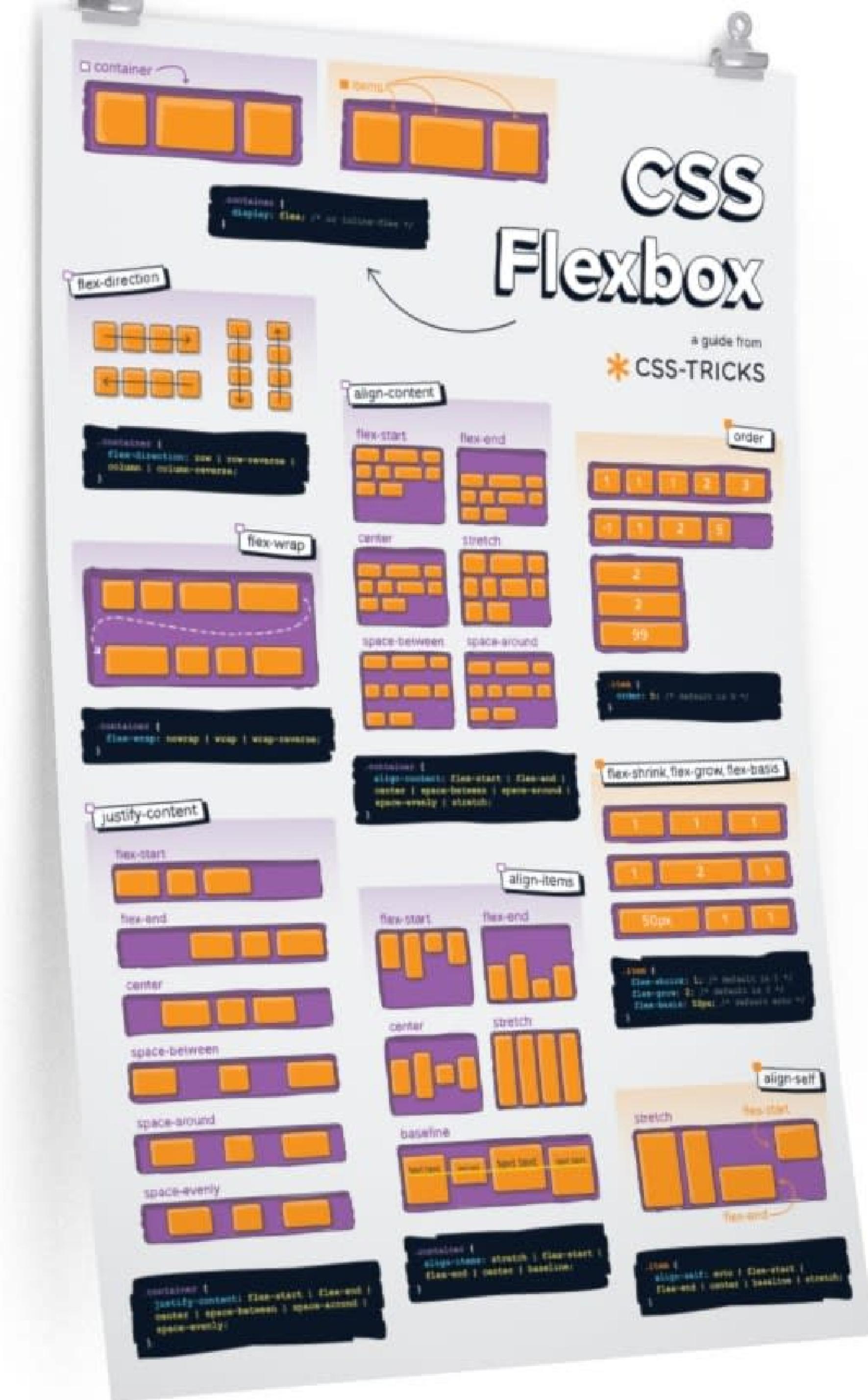
# FlexBox

Let's...Get...Flexible

This is an amazing section title

# CSS Flexbox

The benefit of flexbox is that we have the ability to give a "container" the ability to alter its items' width/height(as well as order) to best fill the available space. A flex container can expand it's items to fill available free space.



container



# Properties useful for the Parent Element

You can have more than one parent!

# Flex-Wrap

```
1 .container {  
2   flex-wrap: nowrap | wrap | wrap-reverse;  
3 }
```

## Display Flex

```
1 .container{  
2   display:flex; /* OR In-line flex */  
3 }
```

## Flex Direction

```
1 .container{  
2   flex-direction: row | row-reverse | column | column-reverse;  
3 }
```

# Flex-Flow

## Display Flex

```
1 container {  
2   justify-content: flex-start | flex-end | center | space-between | space-around | space-evenly | start | end | left | right;  
3 }
```

## Align Items

```
1   .container {  
2     align-items: stretch | flex-start | flex-end | center | baseline | first baseline | last baseline | start | end | self-start | self-end;  
3   }
```



items

## Properties useful for the Child Elements

You can have more than one child!

# Order

```
.child{  
  order: 5; /*default is 0*/  
}
```

## Flex-Grow

```
.child{  
  flex-grow: 5; /*default is 0*/  
}
```

## Flex-Shrink

```
.child{  
  flex-shrink: 5; /*default is 0*/  
}
```

## Flex-Basis

```
.child{  
  flex-basis: 5; /*default is 0*/  
}
```

# Flex

Flex is the shorthand version of the previous values.

The values mentioned in green would be substituted  
for a number ie 0 1 1 or 1 1 1

```
.item {  
  flex: none | [ <'flex-grow'> <'flex-shrink'? || <'flex-basis'> ]  
}
```

# Align-Self

```
.item {  
  align-self: auto | flex-start | flex-end | center | baseline | stretch;  
}
```

# Take A Look Around The World Of FlexBox



Flexbox playground