

CSS Flexbox



WEB 1.0

- Learning Outcomes
- Review: CSS Box Model
- Flex Box
 - It's all for the children
 - Using Direction
 - Nesting flex containers
- **BREAK**
- Flex Box Challenges
- Homework
- Lab Time

By the end of today, you should be able to...

1. **Create a Layout** with flex
2. **Create a plan** for creating content
3. **Use background-images**

Review: Box Model & Flexbox

Warm-Up (5 minutes)

Quick draw a picture of the box model

Label your drawing with the parts of the box model.

- Content
- Padding
- Border
- Margin



Students, draw anywhere on this slide!

Warm-Up (15 minutes)

Style the form in this Repl:

[https://repl.it/@MitchellHudson/flex-bo
x-practice](https://repl.it/@MitchellHudson/flex-box-practice)

The goal is to make it look like this image on the right.

TIP: Try out Repl.It's "Multiplayer" feature - click on "Share" to give your partner a link!

Log In

Name

Hello

Password

....



Login

Flexbox review

Flexbox arranges the child elements of a flex container.

- Use **display: flex** to declare a flex container

```
<section>
  <h1></h1>
  <p></p>
  <p></p>
  <footer></footer>
</section>
```

```
section {
  display: flex;
}
```


Flex box arranges elements along an axis.

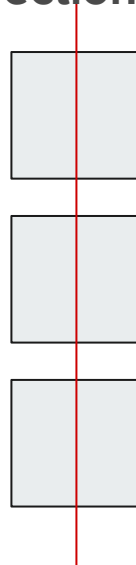
The axis can be **horizontal** or **vertical**.

- Use **flex-direction: row** | **column** to set the direction of the axis

flex-direction: row



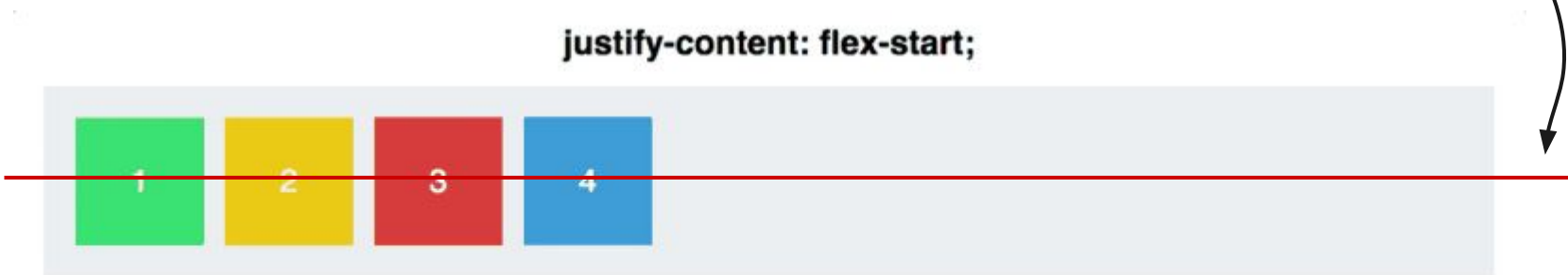
flex-direction: column



Elements can be arranged along the axis at the beginning, the end, the center, or be spread out.

Use justify-content to arrange elements along the axis.

- **flex-start | flex-end | center | space-around | space-between**

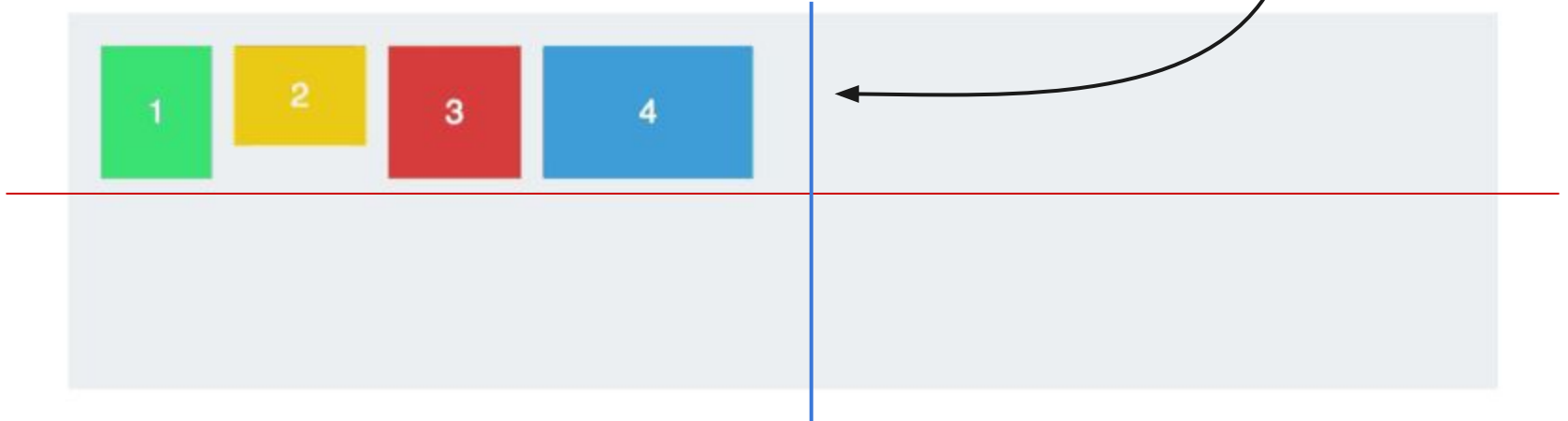


The cross axis is 90 degrees/perpendicular to the axis.

Arrange elements on the cross axis with align-items.

- flex-start | flex-end | center | stretch | baseline

align-items: flex-start;



Use this playground to study flex properties:

<https://make-school-courses.github.io/WEB-1.0-Web-Foundations/#/flex-box.html>

There's no need to memorize these properties!

Check out this guide for an instant refresher on all things flex:

<https://css-tricks.com/snippets/css/a-guide-to-flexbox/>

What questions do you still have about how to use Flexbox?

Play a Game with Flex

Try one of these games to **practice your flexbox skills.**

Tower defense: <http://www.flexboxdefense.com>

Flexbox Froggy: <https://flexboxfroggy.com>

Try these Challenges

Try these challenges:

<https://github.com/soggybag/learn-css-flex-box>

Look at the solution file in a browser to see the end results. Then work through the code samples to practice.

Break - 10 min

“Take a 10 minute break and wrap a tag around everything you see.”

Portfolio Workshop

Break out into pairs and choose who will be the **reviewer** and **reviewee** for your finished (and styled!) portfolio assignment.

- **Reviewee:** Share your screen and explain what your code does from top to bottom.
- **Reviewer:** Listen, ask questions, and make suggestions for improvement. Pay attention to the styles used.

After 7 minutes, switch roles.

Cast your vote for next activity:

1. Flex box challenges
2. I'm ready! Start the next homework assignment!
3. Other???

Single Page Site

Single Page Site (5 minutes)

The **Single Page Site** is a common modern web page design. All of the content fits on one page and we read it vertically.

Take a few minutes to **explore the One Page Love site**:

<https://onpagelove.com/>

Post your favorite in the chat!

Planning Content

Your project will be a web site that presents an idea.

You can present any idea.

Treat it like an essay.

- Intro
- Topic 1
- Topic 2
- Topic 3
- Conclusion

- Pick any topic.
- Use an idea from your S&L class (try and get credit for it in that class!)
- Choose something that interests you!

Imagine the page as made of a series of boxes. Plan it something like:

```
<main>  
  <nav id="nav"></nav>  
  <section id="banner"></section>  
  <section id="topic-1"></section>  
  <section id="topic-2"></section>  
  <section id="topic-3"></section>  
  <footer id="contact"></footer>  
</main>
```

Start with some styles:

```
body, html {  
  height: 100%;  
  margin: 0;  
}  
  
nav {  
  overflow: auto;  
}  
  
main > section {  
  display: block;  
  min-height: 100vh;  
  overflow: auto;  
}
```

```
#nav {  
  background-color: #FF3B30;  
}  
  
#banner {  
  background-color: #26B63E;  
}  
  
#topic-1 {  
  background-color: #007AFF;  
}  
  
#topic-2 {  
  background-color: #5856D6;  
}  
  
#topic-3 {  
  background-color: #FF00BE;  
}  
  
#contact {  
  background-color: #FF9500;  
}
```

Next class, we'll go over how to make Cards like in the example site.

Lab Time

This week's assignments:

- [CSS Challenges Part 2](#) - Due today
- [Portfolio Part 2: Styles](#) - Due today
- [Single Page Site](#) - Due in 1 week

Modify your Zoom name (hover over your photo and click the 3 dots) to put a "1" before your name if you'd like to work alone, "2" if you'd like to work with a partner.

Stay in the main Zoom room if you'd like to stay for more Q&A, homework help, etc.

Go to your individual breakout room if you'd prefer to work with a partner or have quiet time!