

# the Master Course

{C0DENATION}

# Web Technologies

## CSS Flexbox

{CODENATION}

# Learning Objectives

**To be able to use CSS Flexbox to structure layouts**

# The Basics

# CSS

## What is it?

Flexbox is a one-dimensional layout method for layout out items in rows or columns

## It's NEW(ish)

Flexbox is a recent addition to CSS, included address common layout frustration

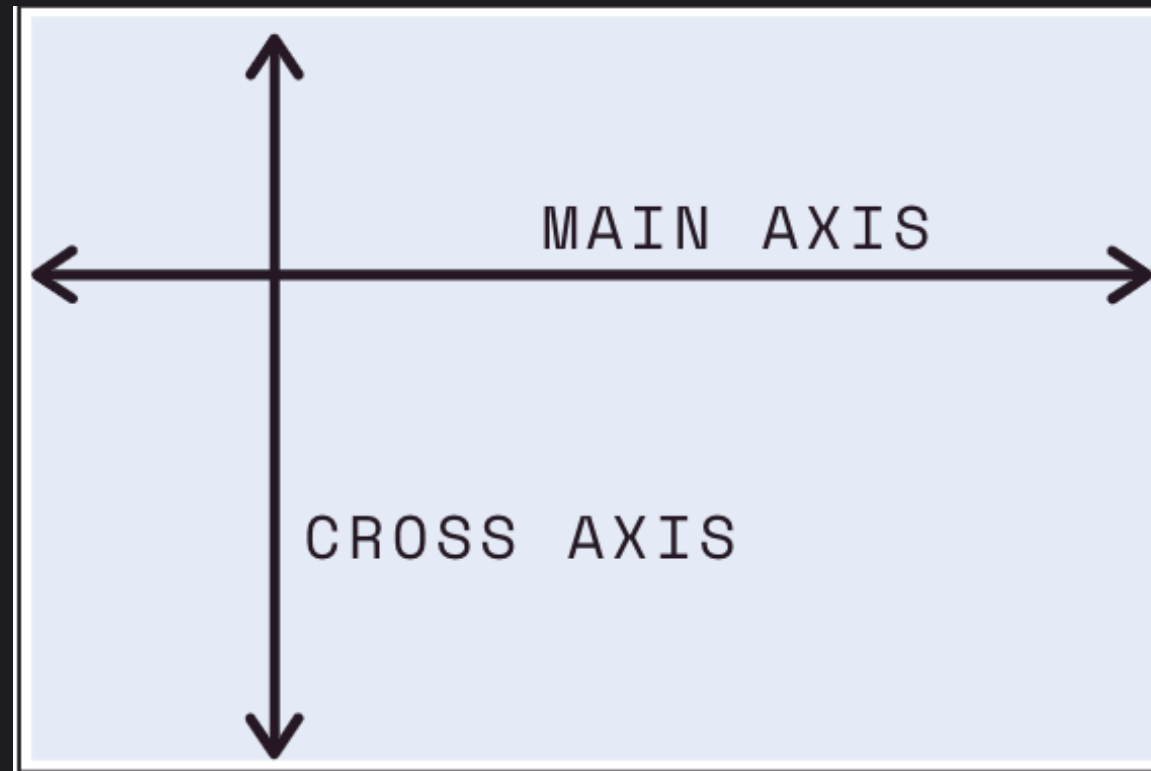
## Why Flex?

Flexbox allows us to distribute space dynamically across elements of an unknown size, hence the term 'flex'



# The Flex Model

CSS



CSS

**Download the files and  
follow along!**

```

<!DOCTYPE html>
<html lang="en">
<head>
  <link rel="stylesheet" href="style.css">
  <title>Flexbox</title>
</head>
<body>
  <div class="container">
    <div class="box box1">1</div>
    <div class="box box2">2</div>
    <div class="box box3">3</div>
    <div class="box box4">4</div>
    <div class="box box5">5</div>
    <div class="box box6">6</div>
    <div class="box box7">7</div>
    <div class="box box8">8</div>
    <div class="box box9">9</div>
    <div class="box box10">10</div>
  </div>
</body>
</html>

```

```

@import url('https://fonts.googleapis.com/css?
family=Montserrat+Alternates:900');

* {box-sizing: border-box;}

.box {
  color: white;
  font-size: 100px;
  font-family: 'Montserrat Alternates', sans-serif;
  text-align: center;
  padding: 15px;
}

/* Colours for each box */
.box1 { background: #eccc68;}
.box2 { background: #ff6348;}
.box3 { background: #ff7f50;}
.box4 { background: #ff4757;}
.box5 { background: #f1c40f;}
.box6 { background: #e67e22;}
.box7 { background: #2ed573;}
.box8 { background: #1e90ff;}
.box9 { background: #c56cf0;}
.box10 { background: #18dcff;}

```

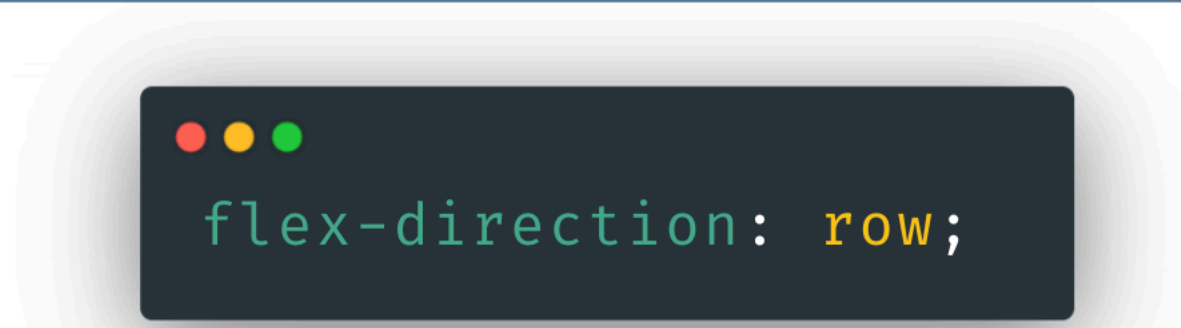




flex-direction is set to row as default. **Add this below.**

```
.container{  
    display: flex;  
    min-height: 100vh;  
    flex-direction: row;  
}
```

# FLEX DIRECTION



# FLEX DIRECTION



```
flex-direction: row-reverse;
```

# FLEX DIRECTION



```
flex-direction: column;
```



```
flex-direction: column-reverse;
```

# FLEX WRAP



```
flex-wrap: wrap;
```

# JUSTIFY CONTENT



```
justify-content: flex-start;
```

# JUSTIFY CONTENT



```
justify-content: flex-end;
```

# JUSTIFY CONTENT



```
justify-content: center;
```



# JUSTIFY CONTENT



```
justify-content: space-between;
```

# JUSTIFY CONTENT



```
justify-content: space-around;
```

## ALIGN ITEMS



```
align-items: center;
```

## ALIGN ITEMS



```
align-items: stretch;
```

## ALIGN CONTENT



```
align-content: space-between;
```

## ALIGN CONTENT



```
align-content: flex-start;
```

# ALIGN CONTENT



```
align-content: flex-end;
```

# ALIGN CONTENT



```
align-content: center;
```

# ALIGN SELF



```
align-self: flex-end;
```



CSS

# A LOT of Flex

... lets look at some **Flex Sizing**

# Flex Basis

...defines the initial size of an element before additional space is distributed

# Flex Grow

...controls the amount of available space an element should take up. Accepts a unit-less number value

# Flex Shrink

...if items are larger than the container, they shrink according to Flex Shrink

# Activity

Take a look at **Flexbox Froggy** (if you haven't already done so) and complete the levels.



# Stretch

See if you can incorporate flex box into your **portfolio website**.



CSS

## More info...

[https://www.w3schools.com/css/css3\\_flexbox.asp](https://www.w3schools.com/css/css3_flexbox.asp)

[https://developer.mozilla.org/en-US/docs/Learn/  
CSS/CSS\\_layout/Flexbox](https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout/Flexbox)