A closer look at Absolute and Relative flex-items

This is perhaps the shortest article in this interactive course. However, it is important. Remember the goal of this course is to truly "understand" the inner workings of the Flexbox model.

Having covered some ground in previous sections, it's important to clarify a few important concepts here too.

What really is the difference between an absolute and relative flex-item?

The major difference between these two is got to do with spacing and how they are computed.

The spacing within a relative flex item is computed based on it's content size. In an absolute flex item, it is based solely on "flex", not content.

Example isn't **another** way to teach, it is the **only** way to teach.

-Albert Einstein

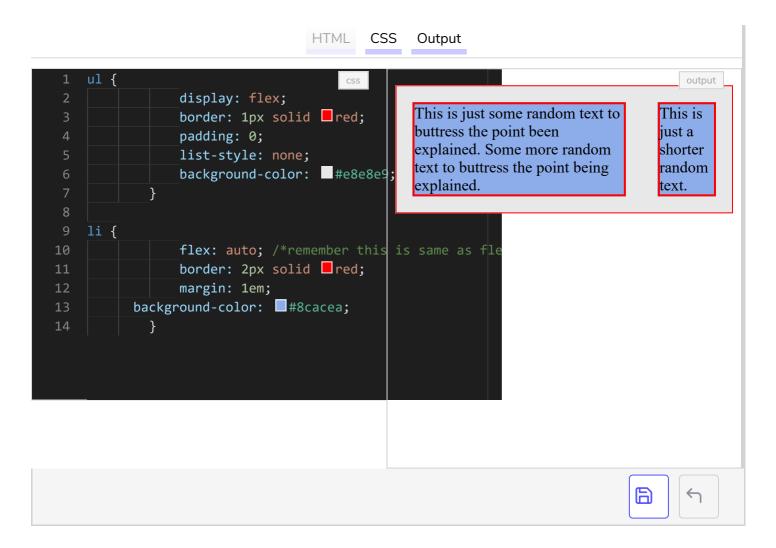
Here's a good example.

Consider the markup below.

```
ul {
         display: flex; /*flexbox activated*/
}

li {
        flex: auto; /*remember this is same as flex: 1 1 auto;*/
        border: 2px solid red;
        margin: 2em;
}
```

Here's the result:



```
If you already forgot, flex: 1 1 auto is the same as setting: flex-grow: 1 flex-shrink: 1 and flex-basis: auto
```

Using the framework I established earlier, the initial widths of the flex-items are automatically computed flex-basis: auto, and then they "grow" to fit the available space flex-grow: 1.

When flex-items have their widths computed automatically, flex-basis: auto, it is based on the size of the content contained within the flex-items.

The flex-items in the example above do NOT have contents of the same size. Hence, the sizes of the flex-items would be unequal.

Since the individual widths weren't equal in the first place (it was based off content), when the items grow, the widths also stay unequal.

```
HTML
                                            CSS
                                                   Output
    ul {
                                                                                         output
                 display: flex;
                                                   This is just some random text to
                                                                                     This is
                 border: 1px solid ■red;
                                                   buttress the point been
                                                                                     just a
                 padding: 0;
                                                   explained. Some more random
                                                                                     shorter
                 list-style: none;
                                                  text to buttress the point being
                                                                                     random
                 background-color: #e8e8e9;
                                                  explained.
                                                                                     text.
    li {
                 flex: auto; /*remember this is same as fle
11
                 border: 2px solid ■red;
12
                 margin: 1em;
13
           background-color: ■#8cacea;
```

The flex-items in the example above are relative flex-items.

Let's make the flex-items absolute—meaning this time their widths should be based on "flex" NOT content size.

A "one-liner" does the magic.

```
li {
    flex: 1; /*same as flex: 1 1 0. see flex: 'positive number'*/
}
```

Here's the result:

```
display: flex;
                 border: 1px solid ■red;
                 padding: 0;
                 list-style: none;
                 background-color: #e8e8e9;
                                                                          This is just a shorter
                                                  This is just some
                                                  random text to
                                                                          random text.
                                                  buttress the point
    li {
                                                  been explained.
                 flex: 1; /*same as flex: 1
                                                  Some more random
                 border: 2px solid ■red;
11
                                                  text to buttress the
                 margin: 1em;
12
                                                  point being
          background-color: ■#8cacea;
13
                                                  explained.
14
```

Do you see both flex-items have the same widths this time?

The initial widths of the flex-items is zero flex-basis: 0, and then they "grow" to fit the available space.

When there are two or more flex-items with zero based flex-basis values, they share the spacing available based on the flex-grow values.

I talked about this earlier.

Now the widths aren't computed based on content size. The widths are based on the flex value specified.

So you got that. Right?

Absolute flex-items have their widths based solely on flex, while relative flex items have their widths based on content size.