

## What are Mixins?

In this step we're going to start talking about the **mixins**. The mixins are like re-usable objects, that include a set of rules, that can be reused multiple times in your stylesheets. That allows to serve the same purpose of keeping the code DRY, clean and better organized.

## Custom Mixins

Here is the example of a mixin:

```
.bordered {
  border-top: @border;
  border-bottom: @border;
}
```

This includes two CSS properties: `border-top` and `border-bottom`. The variable `@border` itself includes three different values:

```
@border: 4px solid @dark;
```

Now let's add top and bottom borders the `h1` by using the mixin:

```
h1 {
  color: @lightgrey;
  padding: @padding;
  margin: 0;
  .bordered;
}
```

Remember to always finish a line with a semicolon.

Apply the same styling for the footer:

```
footer {
  .bordered;
}
```

But that's not enough. I'd like to have the exact same styling for the `footer` that we have for the `h1` apart from the padding:

```
footer {
  color: @lightgrey;
  margin: 0;
  .bordered;
}
```

However what we have done is we repeated ourselves. What we should do instead is to declare a mixin and then reuse it multiple times.

## How mixins work?

Let's name it `commonRules`:

```
.commonRules {
  padding: @padding;
  margin: 0;
  color: @lightgrey;
  background: @darkgrey;
  text-align: right;
}
```

```
.bordered;  
}
```

Now you can reuse it multiple times in your Less code this mixin:

```
header {  
  h1 {  
    .commonRules;  
  
    &:after {  
      content: @stringVar;  
    }  
  }  
}  
  
footer {  
  .commonRules;  
  padding: 0 @padding;  
  position: absolute;  
  left: 0;  
  right: 0;  
  bottom: 0;  
}
```

Now both the `header` and the `footer` will inherit from the CSS properties of the `commonRules` mixin. I had to apply additional padding for the `footer` to redefine padding provided by the mixin. This is the principle of the cascading stylesheet meaning that whichever comes last, will take precedence.

So that was one example of a mixin that you can declare once in your Less code and then reuse multiple times as an object.