




STYLING WITH SASS AND THE BASICS OF BEM



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DOWNLOAD PROJECT FILES & INSTALL SCOUT

DOWNLOAD PROJECT FILES

Go to **bit.ly/startup-slam-sass-bem** and click Code > Download Zip to get a copy of the files. Unzip the package. Remember where you saved it as we'll be need it later. There is also a copy of these slides included.

INSTALL SCOUT

You can use various command line tools with SASS, but today we'll be using a free program called Scout. Go to **scout-app.io**, scroll to Downloads, and click OSX or Windows depending on your operating system. Open the downloaded file and install (we'll be using this later).

WHY USE SASS & BEM?



SAVES TIME

SASS and BEM making writing css a breeze, using predictable naming to keep your code organized



INCREASES EFFICIENCY

Decreases the amount of time required to create (and read) your stylesheets, both now and in the future



DRY CODE

Don't Repeat Yourself - Nesting styles means you avoid writing the same class names over and over again



HAPPY DEVELOPERS

Wasting less energy styling frees up your developers to spend their time on other things they enjoy!



1. **INTRODUCTION TO BEM**

Block Element Modifier

BENEFITS OF BEM

Easy to read & understand

Using BEM helps ensure that everyone working on a website is using the same language and structure to name elements.

Organized & efficient

Large, production websites need organized, optimized stylesheets, written as efficiently as possible, to increase site load speed.

Modular & reusable

BEM results in a library of independent, modular blocks that can be repurposed in strategic and/or creative ways.

Block

A standalone entity of object, usually the top level of a component.

Examples: logo, menu, header, container, footer, form, list, card

Element

A part or portion of a block that is a child (located inside) of the component.

Examples: menu link, form input, list item, card content

Modifier

A piece of additional information about an element, used to alter appearance or behaviour.

Example: highlighted, hidden, active, checked, fixed

```
<div class="block">  
  <div class="block__element"></div>  
  <div class="block__element block__element--modifier"></div>  
</div>
```

Block

Block names can consist of letters, digits, and dashes, and will be used for namespacing, so it's best to keep them short.

Any HTML element can be a block if it accepts a class name.

Element

Element names can consist of letters, digits, dashes and underscores. CSS class is the block name, followed by two underscores, then the element name.

Modifier

Modifier names can consist of letters, digits, dashes and underscores. CSS class is the block or element name followed by two dashes, then the modifier name.

Modifier classes are used in addition to the element class.

```
<div class="block">  
  <div class="block__element"></div>  
  <div class="block__element block__element--modifier"></div>  
</div>
```


ACTIVITY (5 MIN):

Open the project folder in your code editor, open the index.html file, and add BEM classes

Then, remove the HTML comments, copy the card div, and paste it in underneath until you have 3 card divs in total.

(see index-solution.html if you get stuck)



**QUESTIONS
SO FAR?**



2. **INTRODUCTION TO SASS**

Syntactically *Awesome* Style Sheets

ADVANTAGES OF SASS

Flexible

The nature of SASS makes it highly flexible to meet the needs of your projects, and allows you to organize your style rules into many different files as needed.

Powerful

In addition to nesting, SASS also allows the use of variables, mixins, functions, and other helpful tools that save you time and enable new possibilities.

CSS Compatible

You can always write regular CSS inside SASS files if you need to, or use a mix of css and scss files, and it will still compile properly!

Preprocessing

When stylesheets start to become more complex, they can become harder to maintain. SASS includes advanced features that make writing CSS fun.

SASS will take your code and compile it into CSS that the browser can read.

Nesting

You can nest CSS selectors in a similar way to how HTML tags are nested, following a visual hierarchy.

It's considered best practice not to nest deeper than about 3 or 4 levels when possible.

Partials

SASS files can be broken up into partials that correspond with pages, components, or whatever structure makes sense for your project.

Partials are named with an underscore at the beginning

Example: **`_cards.scss`**



HOW DO SASS & BEM WORK TOGETHER?

NESTED STYLES BASED ON BEM CLASSES

Using the classes added to your HTML, you can nest styles using the & character to target the element and modifier parts of classes that use underscores or dashes.

SASS PARTIALS FOR EACH BLOCK

To help keep stylesheets organized, it helps to make a new SASS partial file to correspond with each new block you create.

CSS

```
.block {  
}  
  
.block__element {  
}  
  
.block__element--modifier {  
}
```

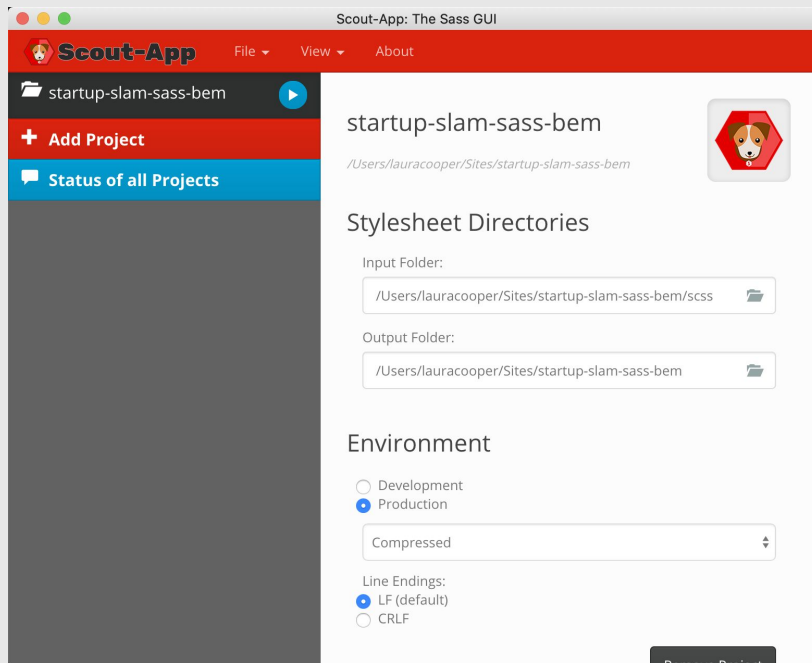
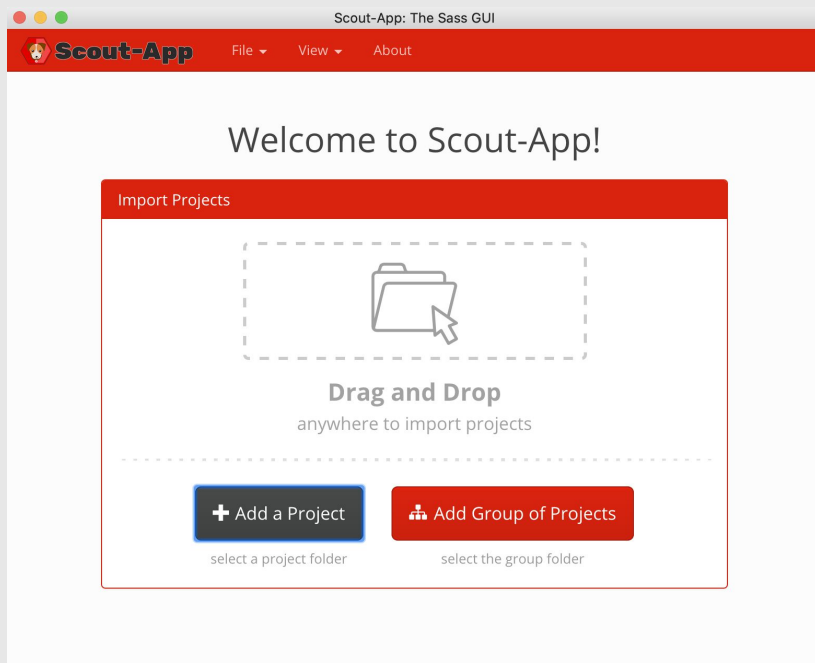
VS

SASS

```
.block {  
  &__element {  
    &--modifier {  
    }  
  }  
}
```


Open Scout. And click Add a Project. Navigate to wherever you downloaded the project files.

Select the scss folder as the Input folder and the root folder (one level up) as the Output folder.



ACTIVITY (5 MIN):

Nest the styles in `_card.scss` using the `&` character, then compile with Scout!

Hit the blue play button in Scout to enable file watch, which will automatically recompile whenever you save a SASS file. You can open `index.html` in your browser to view the results.

(see `_card-solution.scss` if you get stuck)

```
.cards {  
  display: flex;  
  
  .card {  
    flex: 1 1 0;  
    border: 1px solid black;  
  
    &__heading {  
      color: red;  
    }  
  
    &__content {  
      margin: 30px 0;  
    }  
  
    &__button {  
      background-color: lightpink;  
  
      &--highlighted {  
        background-color: darkred;  
        color: white;  
      }  
    }  
  }  
}
```

THE FINISHED CARDS

The Heading Goes Here

The content goes here. This is an example of a short paragraph with 1-2 sentences.

A BUTTON

A BUTTON

The Heading Goes Here

The content goes here. This is an example of a short paragraph with 1-2 sentences.

A BUTTON

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A BUTTON



ADDITIONAL RESOURCES

More SASS Features

Many other powerful features are included within SASS that we didn't have time to cover today, such as variables, modules, mixins, and math operators.

More info at: **sass-lang.com**

More About BEM

Further details, FAQs, examples, and links to even more resources are available on the BEM website.

More info at: **getbem.com**



QUESTIONS?

THANK YOU!

More questions or feedback?

You can find me on the YYJ Tech and YYJ Tech Ladies Slack communities, or on LinkedIn at [linkedin.com/in/lauracooper1](https://www.linkedin.com/in/lauracooper1)