**SASS**

* Installation
* Before we start SASS we will need to install Ruby, using Ruby Installer or we can install via npm.

gem install sass

* To check if its installed use.

sass –v

* To execute SASS file use.

sass –watch style.scss:style.css

* Start with the SASS
* Sass uses the $ symbol to make something a variable,

$font-family, $color…

* In Sass we can nest the class or id or tag name,

nav{

*write something…..*

ul{

*write something…..*

a{

*write something…..*

}

}

}

* In Sass if we have to use any pseudo classes we have to use in this way,

li{

*write something…..*

a{

*write something…..*

&:hover{

*write something…..*

}

}

}

* If we want to include external scss file we have to use @import in the beginning of the scss file no need to include the extension,

@import “\_style”

* For Mixins, in Sass we have a keyword “mixin” to add some mixin code,

@mixin border-radius($radius){

-webkit-border-radius: $radius;

-moz-border-radius: $radius;

border-radius: $radius;

}

And to include we have to use “include” keyword

.box{

@include border-radius(10px);

}

* For inheritance we can use “extend” keyword,

.box{

Border:1px solid #000;

Width:10px;

Height:10px;

}

.property{

@extend .box;

Color:#f20;

}

* We can use operators like +,-,\*,/,% for manipulation.
* We can use if, else, while and each loop in function,

@mixin triangle($width, $dir) {

@if $dir == up {

width:0;

height:0;

border-left: $width solid transparent;

} @else if $dir == down {

width:0;

height:0;

border-left: $width/2 solid transparent;

}

}

And for while,

$i:6;

@while $i >0{

.item-#{$i}{

Width:20px \* $i;

}

$i: $i – 2;

}

And for,each loop,

$icons:(twitter, facebook, google);

@each $social in $icons {

.#{$social}{

background:url(imgs/#{$social}.jpg) no-repeat;

}

}

Or

@each $p in (

one black,

two black +50,

three white

) {

.#{nth($p,1)} {

background:#{nth($p,2)};

}

}

* We can make functions using “function” keyword,

@function text-contrast($background) {

@if lightness($background) < 50% {

@return lighten( $background, 100% );

} @else {

@return darken( $background, 10% )

}

}

* There are some pre-define functions like,

Lightness, lighten, darken, etc

* There are math functions like,

Round, percentage, etc.

.success {

width: round(percentage(800px / 1440px));

}