

# precio fishbone



# Agenda

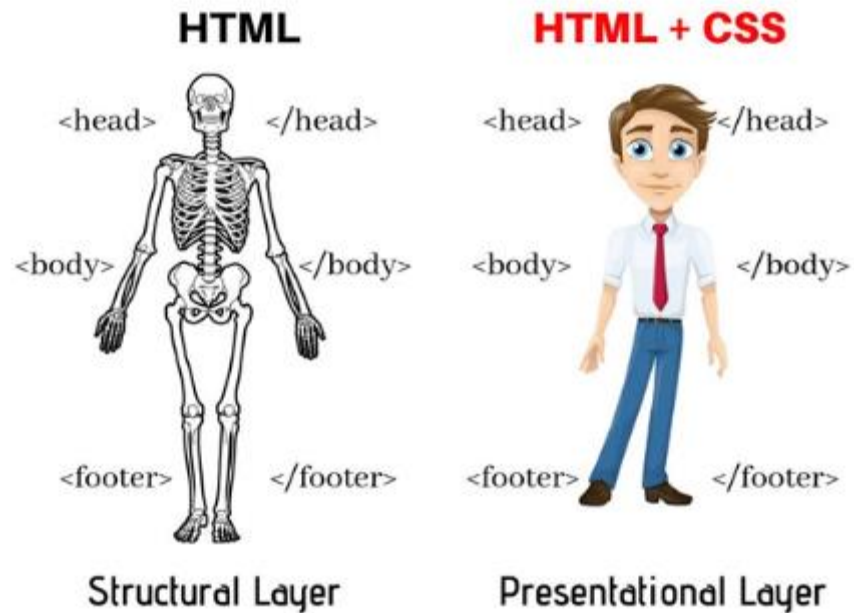
- About HTML, CSS
- CSS naming methodology
- Responsive web design
- SCSS introduction
- Tools and Others
- Assignment



# HTML5

# How do you understand about HTML & CSS?

## HTML Vs CSS



(Image source from Codexier)

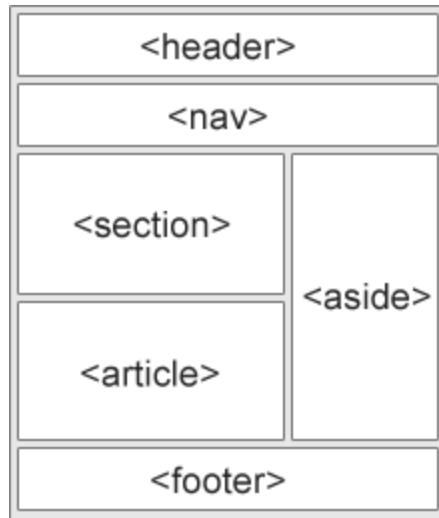
- HTML represents the content structure  
For example: headings, paragraphs, or images
- CSS represents the appearance of that content  
For example: fonts or colors

# Common HTML tags

- Basic HTML:
  - Common layout elements: <div>, <span>, <table>, <thead>, <th>, <tbody>, <tr>, <td>, <iframe>
  - Common form elements: <form>, <label>, <input>, <select>, <option>, <textarea>, <button>, <fieldset>, <legend>
  - Common article elements: <h1> -> <h6>, <p>, <img>, <a>, <br>, <ul>, <li>
- Use standard HTML tags and attributes in order to support web accessibility, SEO. Should avoid custom tags, custom attributes.



# Semantic layout elements



- `<header>` Defines a header for a document or a section
- `<nav>` Defines a set of navigation links
- `<section>` Defines a section in a document
- `<article>` Defines an independent, self-contained content
- `<aside>` Defines content aside from the content (like a sidebar)
- `<footer>` Defines a footer for a document or a section
- `<details>` Defines additional details that the user can open and close on demand
- `<summary>` Defines a heading for the `<details>` element

# References

- HTML document: <https://www.w3schools.com/html/default.asp>
- <https://seekbrevity.com/semantic-markup-important-web-design/>
- Best practice how to write beautiful HTML
  - <https://css-tricks.com/examples/CleanCode/Beautiful-HTML.png>

CSS/SCSS



# Common CSS rules

- Selectors: #id, .class, :hover, etc.
- Functions: calc(), rgb(), rgba()
- Flexbox
- Alignment item in container
- Position
- Display
- Transition
- Transform
- z-index
- Overflow

# Media

## Media syntax

```
@media not|only mediatype and (mediafeature and|or|not mediafeature) {  
    CSS-Code;  
}
```

## Example

```
@media only screen and (max-width: 600px) {  
    body {  
        background-color: lightblue;  
    }  
}
```

## Media types

Value	Description
all	Default. Used for all media type devices
print	Used for printers
screen	Used for computer screens, tablets, smart-phones etc.
speech	Used for screenreaders that "reads" the page out loud

Naming  
methodology

# OOCSS

```
# OOCSS.css x
1  .sidebar {
2      padding: 2px;
3      left: 0;
4      margin: 3px;
5      position: absolute;
6      width: 140px;
7  }
8
9  .list {
10     margin: 3px;
11 }
12
13 .list-header {
14     font-size: 16px;
15     color: red;
16 }
17
18 .list-body {
19     font-size: 12px;
20     color: #FFF;
21     background-color: red;
22 }
```

```
# SMACSS.css x
1  #article {
2      width: 80%;
3      float: left;
4  }
5
6  #sidebar {
7      width: 20%;
8      float: right;
9  }
10
11 .l-fixed #article {
12     width: 600px;
13 }
14
15 .l-fixed #sidebar {
16     width: 200px;
17 }
```

# SMACSS



# Responsive web design

- Grid system
- Screen size: xs, sm, md, lg, xl
- Bootstrap framework

# Grid system

## Two Columns

1 of 2

1 of 2

## Three Columns

1 of 3

1 of 3

1 of 3

## Four Columns

1 of 4

1 of 4

1 of 4

1 of 4

## Five Columns

1 of 5

1 of 5

1 of 5

1 of 5

1 of 5

## Six Columns

1 of 6

1 of 6

1 of 6

1 of 6

1 of 6

1 of 6



# Responsive - screen size

// xs: Extra small devices (portrait phones, less than 576px)

// No media query since this is the default in Bootstrap

// sm: Small devices (landscape phones, 576px and up)

@media (min-width: 576px) { ... }

// md: Medium devices (tablets, 768px and up)

@media (min-width: 768px) { ... }

// lg: Large devices (desktops, 992px and up)

@media (min-width: 992px) { ... }

// xl: Extra large devices (large desktops, 1200px and up)

@media (min-width: 1200px) { ... }



# CSS references

- CSS selectors: [https://www.w3schools.com/cssref/css\\_selectors.asp](https://www.w3schools.com/cssref/css_selectors.asp)
- CSS functions: [https://www.w3schools.com/cssref/css\\_functions.asp](https://www.w3schools.com/cssref/css_functions.asp)
- CSS units: [https://www.w3schools.com/cssref/css\\_units.asp](https://www.w3schools.com/cssref/css_units.asp)
- Bootstrap framework: <https://getbootstrap.com/docs/4.5/getting-started/introduction/>
- Grid system: <https://getbootstrap.com/docs/4.5/layout/grid/>
- Screen sizes: <https://getbootstrap.com/docs/4.5/layout/overview/#responsive-breakpoints>

# SCSS

- Introduce SCSS
  - Variables
  - Nesting
  - Mixins
  - Functions
- Why need to use SCSS? Advantage when using SCSS compare to CSS.

# SCSS variable

SCSS Sass

```
$base-color: #c6538c;
$border-dark: rgba($base-color, 0.88);

.alert {
  border: 1px solid $border-dark;
}
```

CSS

```
.alert {
  border: 1px solid rgba(198, 83, 140, 0.88);
}
```

SCSS Sass

```
// _library.scss
$black: #000 !default;
$border-radius: 0.25rem !default;
$box-shadow: 0 0.5rem 1rem rgba($black, 0.15) !default;

code {
  border-radius: $border-radius;
  box-shadow: $box-shadow;
}
```

CSS

```
code {
  border-radius: 0.1rem;
  box-shadow: 0 0.5rem 1rem rgba(34, 34, 34, 0.15);
}
```

```
// style.scss
@use 'library' with (
  $black: #222,
  $border-radius: 0.1rem
);
```

# SCSS nesting

SCSS    Sass

```
nav {  
  ul {  
    margin: 0;  
    padding: 0;  
    list-style: none;  
  }  
  
  li { display: inline-block; }  
  
  a {  
    display: block;  
    padding: 6px 12px;  
    text-decoration: none;  
  }  
}
```

CSS

```
nav ul {  
  margin: 0;  
  padding: 0;  
  list-style: none;  
}  
nav li {  
  display: inline-block;  
}  
nav a {  
  display: block;  
  padding: 6px 12px;  
  text-decoration: none;  
}
```



# SCSS selector

SCSS

Sass

```
ul > {  
  li {  
    list-style-type: none;  
  }  
}  
  
h2 {  
  + p {  
    border-top: 1px solid gray;  
  }  
}  
  
p {  
  ~ {  
    span {  
      opacity: 0.8;  
    }  
  }  
}
```

CSS

```
ul > li {  
  list-style-type: none;  
}  
  
h2 + p {  
  border-top: 1px solid gray;  
}  
  
p ~ span {  
  opacity: 0.8;  
}
```

# SCSS mixins

SCSS

Sass

```
@mixin corner-icon($name, $top-or-bottom, $left-or-right) {  
  .icon-#{ $name } {  
    background-image: url("/icons/#{ $name }.svg");  
    position: absolute;  
    #{ $top-or-bottom }: 0;  
    #{ $left-or-right }: 0;  
  }  
}  
  
@include corner-icon("mail", top, left);
```

CSS

```
.icon-mail {  
  background-image: url("/icons/mail.svg");  
  position: absolute;  
  top: 0;  
  left: 0;  
}
```

# SCSS function

SCSS    Sass

```
@function pow($base, $exponent) {  
  $result: 1;  
  @for $_ from 1 through $exponent {  
    $result: $result * $base;  
  }  
  @return $result;  
}  
  
.sidebar {  
  float: left;  
  margin-left: pow(4, 3) * 1px;  
}
```

CSS

```
.sidebar {  
  float: left;  
  margin-left: 64px;  
}
```

# References

- Sass document: <https://sass-lang.com/documentation>



# Tools and Others

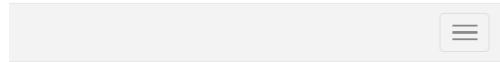
- Visual Studio Code
- Visual Studio
- Support multiple browsers like Chrome, IE, Edge, Firefox
- GUI have to be as same as design
- Training project template repository:
  - <https://github.com/preciofishbone-training/training-project-template>

# Assignment (Desktop)

+ New ▾ ↑ Upload ▾ ↺ Sync 📄 Export to Excel 📊 Flow ▾ ...			
Documents			
📄 Name ▾	Modified ▾	Modified By ▾	+ Add column
📁 CAS	April 30	Megan Bowen	
📄 🚨 CoasterAndBargeLoading.xlsx	A few seconds ago	Administrator MOD	
📄 🚨 RevenueByServices.xlsx	A few seconds ago	Administrator MOD	
📄 🚨 RevenueByServices2016.xlsx	A few seconds ago	Administrator MOD	
📄 🚨 RevenueByServices2017.xlsx	A few seconds ago	Administrator MOD	


Using Bootstrap and SCSS to create a simple html page as the image


# Assignment (Mobile)





## Documents

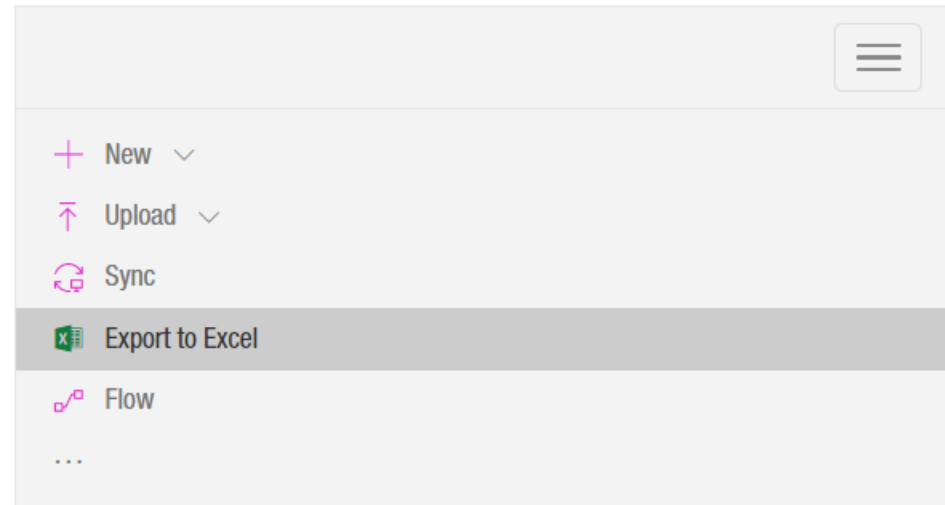
File Type 	
Name	CAS
Modified	April 30
Modified By	Megan Bowen

File Type 	
Name	CoasterAndBargeLoading.xlsx
Modified	A few seconds ago
Modified By	Administrator MOD

File Type 	
Name	RevenueByServices
Modified	A few seconds ago
Modified By	Administrator MOD

File Type 	
Name	RevenueByServices2016
Modified	A few seconds ago
Modified By	Administrator MOD

File Type 	
Name	RevenueByServices2017
Modified	A few seconds ago
Modified By	Administrator MOD



# Reference resources

- <https://www.w3schools.com/css/default.asp>
- [https://developer.mozilla.org/en-US/docs/Learn/Getting\\_started\\_with\\_the\\_web/CSS\\_basics](https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/CSS_basics)
- <https://tutorialzine.com/2016/08/20-protips-for-writing-modern-css>
- <https://css-tricks.com/>
- <https://www.tothenew.com/blog/10-best-practices-in-css/>