Adaptação do merge semiestruturado para CSS

### Repositórios

- Pure: <a href="https://github.com/yahoo/pure">https://github.com/yahoo/pure</a>
  - A set of small, responsive CSS modules that you can use in every web project.
  - 51 contribuidores
  - 531 commits e 114 merges
- Bootstrap: <a href="https://github.com/twbs/bootstrap">https://github.com/twbs/bootstrap</a>
  - The most popular HTML, CSS, and JavaScript framework for developing responsive, mobile first projects on the web.
  - 957 contribuidores
  - 17.304 commits e 4,243 merges (400 usados)

## Possíveis falsos positivos do não estruturado

#### Remoção de seletores

```
.pure-menu.pure-menu-horizontal > .pure-menu-heading {
   display: inline-block;
    *display: inline;
    zoom: 1;
   margin: 0;
   vertical-align: middle;
<<<<<< > MINF
.pure-menu.pure-menu-horizontal > ul {
   display: inline-block;
   *display: inline;
    zoom: 1:
   vertical-align: middle;
>>>>> YOURS
/* FIXED MENU */
.pure-menu-fixed {
   position: fixed;
   top: 0;
   left: 0;
   width: 100%;
```

#### Remoção de seletores

```
.pure-menu.pure-menu-horizontal > .pure-menu-heading {
                                                         .pure-menu.pure-menu-horizontal > .pure-menu-heading {
   display: inline-block;
                                                             display: inline-block;
                                                                                                                      .pure-menu.pure-menu-horizontal > .pure-menu-heading {
   *display: inline;
                                                                                                                          display: inline-block;
                                                             *display: inline;
   zoom: 1;
                                                                                                                          *display: inline;
                                                             Z008: 1:
   margin: 0:
                                                                                                                          zoom: 1:
                                                             margin: 0:
   vertical-align: middle;
                                                                                                                          margin: 0;
                                                            vertical-align: middle;
                                                                                                                          vertical-align: middle;
                                                         .pure-menu.pure-menu-horizontal > ul {
                                                                                                                       .pure-menu.pure-menu-horizontal > ul {
/* FIXED MENU */
                                                             display: inline-block;
                                                                                                                          display: inline-block;
.pure-menu-fixed {
                                                             *display: inline;
                                                                                                                          *display: inline;
   position: fixed;
                                                             zoom: 1;
                                                                                                                          zoom: 1:
   top: 0;
                                                             vertical-align: middle;
                                                                                                                          vertical-align: middle;
   left: 0:
                                                             height: 2.4em;
   width: 100%;
```

Left Base Right

#### Adicionando seletores na mesma área do texto

```
cecce MINE
 Need to separate out the :not() selector from the rest of the CSS 2
 since IE8 won't execute CSS that contains a CSS3 selector.
.pure-form input:not([type]) {
     padding: 0.5em 0.6em;
     display: inline-block;
     border: 1px solid #ccc;
     font-size: 0.8em;
     box-shadow: inset 0 1px 3px #ddd;
    border-radius: 4px:
     -webkit-box-sizing: border-box;
     -moz-box-sizing: border-box;
     box-sizing: border-box;
 /* Chrome (as of v.32/34 on OS X) needs additional room for color t
 /* May be able to remove this tweak as color inputs become more sta
.pure-form input[type="color"] {
     padding: 0.2em 0.5em;
 .pure-form input: not ([type]): focus,
 >>>>> YOURS
 .pure-form input[type="text"]:focus,
 .pure-form input[type="password"]:focus,
  nure-form input [type="email"] : focus
```

#### Adicionando seletores na mesma área do texto

```
Need to separate out the :not() selector f
since IE8 won't execute CSS that contains
.pure-fors input:not([type]) {
    padding: 0.5em 0.6em;
   display: inline-block:
    border: 1px solid Wccc;
    font-size: 0.8em;
    box-shadow: inset 0 1px 3px #ddd;
    border-radius: 40x:
    -webkit-box-sizing: border-box;
    -moz-box-sizing: border-box:
    box-sizing; border-box;
.pure-form input[type="text"]:focus,
.pure-form input[type="password"]:focus,
.pure-form input[type="email"]:focus,
.pure-form input[type="url"]:focus,
pure-form input[type="date"]:focus,
.pure-form input[type="month"]:focus,
.pure-form input[type="time"]:focus.
.pure-form input[type="datetime"]:focus,
.pure-form input[type="datetime-local"]:focus,
.pure-form input[type="week"]:focus,
.pure-form input[type="number"]:focus.
.pure-form input[type="search"]:focus,
.pure-form input[type="tel"]:focus,
.pure-form input[type="color"]:focus,
pure-form select:focus.
.pure-form textarea:focus {
    outline: a:
    outline: thin dotted \9; /* IE6-9 */
    border-color: #129FEA;
```

```
.pure-form input:not([type]):focus,
.pure-form input[type="text"]:focus,
.pure-form input[type="password"]:focus,
.pure-form input[type="email"]:focus,
.pure-form input[type="url"]:focus,
.pure-form input[type="date"]:focus,
.pure-form Input[type="month"]:focus,
.pure-form input[type="time"]:focus,
.pure-form input[type="datetime"]:focus,
.pure-form input[type="datetime-local"]:focus,
.pure-form input[type="week"]:focus,
.pure-form input[type="number"]:focus,
.pure-form input[type="search"]:focus,
.pure-form input[type="tel"]:focus,
.pure-form input[type="color"]:focus,
.pure-form select:focus,
.pure-form textarea:focus {
   outline: 0;
   outline: thin dotted \9: /* IE6-9 */
    border-color: #129FEA;
```

```
Chrome (as of v.32/34 on OS X) needs additional room for color to display. */
       May be able to remove this tweak as color inputs become more standardized across browsers. */
      pure-form input[type="color"] {
        padding: 0.2em 0.5em;
.pure-form input:not([type]):focus,
    .pure-form input[type="text"]:focus,
    .pure-form input[type="password"]:focus,
    .pure-form input[type="email"]:focus,
 .pure-form input[type="url"]:focus,
48 .pure-form input[type="date"]:focus,
41 .pure-form input[type="month"]:focus,
42 .pure-form input[type="time"]:focus,
43 .pure-form input[type="datetime"]:focus,
    .pure-form input[type="datetime-local"]:focus,
45 .pure-form input[type="week"]:focus,
    .pure-form input[type="number"]:focus,
47 .pure-form input[type="search"]:focus,
48 .pure-form input[type="tel"]:focus,
49 .pure-form input[type="color"]:focus,
50 .pure-form select:focus.
51 .pure-form textarea:focus {
        outline: 0;
        outline: thin dotted \9: /* IE6-9 */
        border-color: #129FEA:
55 }
```

#### Mudanças no corpo dos seletores

```
.label {
 padding: 1px 3px 2px;
 font-size: 9.75px;
 font-weight: bold;
 color: #ffffff;
  text-transform: uppercase;
 white-space: nowrap;
<<<<<< MINE
 background-color: #bfbfbf;
>>>>> YOURS
  -webkit-border-radius: 3px;
 -moz-border-radius: 3px;
 border-radius: 3px;
```

#### Mudanças no corpo dos seletores

```
.label {
                                                           .label {
.label f
                                                                                                                        padding: 1px 3px 2px;
  padding: 1px 3px 2px;
                                                             padding: 1px 3px 2px;
                                                                                                                        background-color: #bfbfbf;
                                                             background-color: #bfbfbf;
  font-size: 9.75px;
                                                                                                                        font-size: 9.75px;
                                                             font-size: 9.75px;
  font-weight: bold;
                                                                                                                        font-weight: bold;
                                                             font-weight: bold;
 color: #ffffff;
                                                                                                                        color: #ffffff;
                                                             color: #ffffff;
 text-transform: uppercase;
                                                                                                                        text-transform: uppercase;
                                                             text-transform; uppercase;
 white-space: nowrap;
                                                                                                                        white-space: nowrap;
                                                             -webkit-border-radius: 3px;
 background-color: #bfbfbf;
                                                                                                                         -webkit-border-radius: 3px;
                                                             -moz-border-radius: 3px;
  -webkit-border-radius: 3px;
                                                                                                                         -moz-border-radius: 3px;
                                                            border-radius: 3px;
  -moz-border-radius: 3px;
                                                                                                                        border-radius: 3px;
 border-radius: 3px;
                                                             white-space: nowrap;
```

Left Base Right

#### Mudanças no nome do seletor + atributos

```
.com { color: #93a1a1; }
.lit { color: #195f91; }
.pun, .opn, .clo { color: #93a1a1; }
.fun { color: #dc322f; }
<<<<<< MINE
.str, .atv { color: #268bd2; }
.kwd, .tag { color: #195f91; }
.typ, .atn, .dec, .var { color: #CB4B16; }
.pln { color: #93a1a1; }
.prettyprint {
 background-color: #fefbf3;
 padding: 9px;
 border: 1px solid rgba(0,0,0,.2);
  -webkit-box-shadow: 0 1px 2px rgba(0,0,0,.1);
    -moz-box-shadow: 0 1px 2px rgba(0,0,0,.1);
         box-shadow: 0 1px 2px rgba(0,0,0,.1);
.str. .atv { color: #D14: }
.kwd, .linenums .tag { color: #1e347b; }
.typ, .atn, .dec, .var { color: teal; }
.pln { color: #48484c; }
.prettyprint {
 padding: 8px;
 background-color: #f7f7f9;
 border: 1px solid #elele8;
.prettyprint.linenums {
 -webkit-box-shadow: inset 40px 0 0 #fbfbfc, inset 41px 0 0 #ececf0:
    -moz-box-shadow: inset 40px 0 0 #fbfbfc, inset 41px 0 0 #ececf0;
         box-shadow: inset 40px 0 0 #fbfbfc, inset 41px 0 0 #ececf0;
>>>>> YOURS
```

#### Mudanças no nome do seletor + atributos

```
.com { color: #93a1a1; }
.lit { color: #195f91; }
.pun, .opn, .clo { color: #93a1a1; }
.fun { color: #dc322f; }
.str, .atv { color: #268bd2; }
.kwd, .tag { color: #195f91; }
.typ, .atn, .dec, .var { color: #CB4B16; }
.pln { color: #93a1a1; }
pre.prettyprint {
  background: #fefbf3;
  padding: 9px;
  border: 1px solid rgba(0,0,0,2);
  -webkit-box-shadow: 0 1px 2px rgba(0,0,0,1);
  box-shadow: 0 1px 2px rgba(0,0,0,1);
  box-shadow: 0 1px 2px rgba(0,0,0,1);
```

```
.com { color: #93a1a1; }
.lit { color: #195f91; }
.pun, .opn, .clo { color: #93a1a1; }
.fun { color: #dc322f; }
.str, .atv { color: #D14; }
.kwd, .linenums .tag { color: #1e347b; }
.typ, .atn, .dec, .var { color: teal; }
.pln { color: #48484c; }
.prettyprint {
   padding: 8px;
   background-color: #f7f7f9;
   border: 1px solid #e1e1e8;
}
```

Left

Base

Right

## Mudanças de formatação (comentário e estrutura)

# Mudanças de formatação (comentário e estrutura)

/\* Specify class=linenums on a pre to get line numbering \*/
ol.linenums {
 margin: 0 0 0 40px; /\* IE indents via margin-left \*/
}

Left Base Right

# Possíveis falsos positivos do semiestruturado

## Atributo repetido

```
.pure-form input[type="file"]:focus,
.pure-form input[type="radio"]:focus,
.pure-form input[type="checkbox"]:focus {
   outline: thin solid #129FEA;
   outline: 1px auto #129FEA;
}
```

unstructured

```
.pure-form input[type="file"]:focus ,
.pure-form input[type="radio"]:focus ,
].pure-form input[type="checkbox"]:focus {
   outline: thin solid #129FEA;
   <<<<<< MINE
   outline: thin solid #129FEA;
   ======
   outline: 1px auto #129FEA;
   >>>>>> YOURS
}
```

ssmerge

### Atributo repetido

```
.pure-form input[type="file"]:focus,
.pure-form input[type="radio"]:focus,
.pure-form input[type="checkbox"]:focus {
   outline: thin solid #129FEA;
   outline: 1px auto #129FEA;
}
```

```
.pure-form input[type="file"]:focus,
.pure-form input[type="radio"]:focus,
.pure-form input[type="checkbox"]:focus {
  outline: thin dotted W333;
  outline: 1px auto W129FEA;
}
```

```
.pure-form input[type="file"]:focus,
.pure-form input[type="radio"]:focus,
.pure-form input[type="checkbox"]:focus {
   outline: thin dotted W333;
   outline: 1px auto W129FEA;
}
```

Left

Base

Right

# Conflito?

```
.pure-form input:not([type]):focus {
  outline: 0;
  border-color: #129FEA;
} .pure-form input:not([type]):focus {
  outline: 0;
  outline: 0;
  outline: thin dotted \9; /* IE6-9 */
  border-color: #129FEA;
} .pure-form input:not([type]):focus {
  outline: 0;
  outline: thin dotted \9; /* IE6-9 */
  border-color: #129FEA;
}
```

Left Base Right

## Reports iguais

 No conjunto de dados os conflitos iguais foram os quais left e base alteram o mesmo atributo em um seletor.

## Conflitos adicionais que o SS resolve

- imports
- media queries
- page

#### Links úteis

- ferramenta: <a href="https://github.com/ghpsantos/jFSTMerge">https://github.com/ghpsantos/jFSTMerge</a>
- minerador de repositórios:

https://github.com/guilhermejccavalcanti/GitMergesMiner/tree/minerpy

## Dúvidas?