### Box Model



border-box

### CSS Terminology

```
selector
       declaration block
    font-size: 16pt;
                value
    property
```

Selector "Targets" a CSS rule **Specificity** The more specific the selector it is, the more likely it is to win against other selectors targeting the same element

Responsive design Looking good on mobile and desktop

Media queries If statements for CSS, apply CSS to browser sizes.

## DOM TREE TERMINOLOGY

```
• Parent: <div class="Main">
   - Sibling: <div>Sib</div>
    – Element: <div>
       * Child: a
       * Child: <hr />
       * Child: b
         </div>
    - Sibling: <img src="s.png"/>
      </div>
```

### CSS Variables

```
/* Definition */
 --bg: #FEAAFE;
 --gap: 20px;
.MainContent \{ /* Use */
 background: var(--bg);
 margin: calc(var(--gap) + 5px);
```

## GRID CONTAINER

```
display: grid
                       and
                              specify
columns/rows.
grid-template-columns grid-template-rows
      1fr 1fr 1fr
                        1fr 1fr 1fr
50px auto 50px
                      50px auto 90px
   20% 20% auto
                      100px auto 20%
.Container {
  display: grid;
  grid-template-columns: 50px auto 50px; p:nth-child(1) {
  grid-template-rows: 50px auto 90px;
```

#### GRID CHILD POSITIONING

Optional: Child elements can be custom positioned and sized.

```
grid-column
                                  grid-row
             2 / 3
           2/ \text{span } 2
                                    1 / 3
                                 1 / span 2
          1 / span 2
. {\tt ChildElement} \ \{
```

```
grid-column: 1 / span 2;
grid-row: 1 / span 2;
```

#### BEM

```
convention for CSS
Block Standalone entity meaningful
    on its own.
                    Use camel-case:
     ComponentName.
Element A
             single
                      part
                           of
                 has no stan-
     block
            _{\mathrm{that}}
                       Use a dash:
     dalone meaning.
     ComponentName-descendentName.
Modifier A variant of a block (or
     element).
                  Use two dashes:
     ComponentName--modifier.
```

Block-Element-Modifier Naming

```
.OkBtn { background: orange; }
.OkBtn-icon { width: 12px; }
.OkBtn--disabled { color: gray; }
<div class="OkBtn--disabled">
    <img src="ok.png"</pre>
        class="OkBtn--icon" />
   Okay
</div>
```

# CSS Pseudo-selectors

# Pseudo-elements

```
h1:before {
    content: "-":
    color: blue;
```

#### Pseudo-classes

```
a:hover { color: blue; }
/* First p margin */
    margin-left: 10px;
/* Striped table rows */
tr:nth-child (odd) {
    background: gray;
```

# CSS Animation

```
.Link {
   color: blue;
   padding-left: 10px;
   transition: color 1s,
                padding-left 3s;
.Link:hover {
   color: green;
   padding-left: 20px;
```

#### Adding JavaScript to HTML

### Responding to clicks

```
<div onclick="alert('Hello')">
   Click for annoying pop-up
```

### Modifying DOM

```
<div id="a" onclick="
  document.querySelector('#a')
     .innerHTML += '+'
">Plus</div>
```

# Running on page load

```
<script src="http://ex.amp/le.js">
</script>
                   // Print to dev
<script>
console.log("hi"); // tools console
</script>
```