Test-driven HTML development

bug detected.

Gunnar Bittersmann @g16n

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Test

Unit test, Komponententest
Funktionalität innerhalb einzelner abgrenzbarer Teile der Software
(Module, Programme oder Unterprogramme, Units oder Klassen)

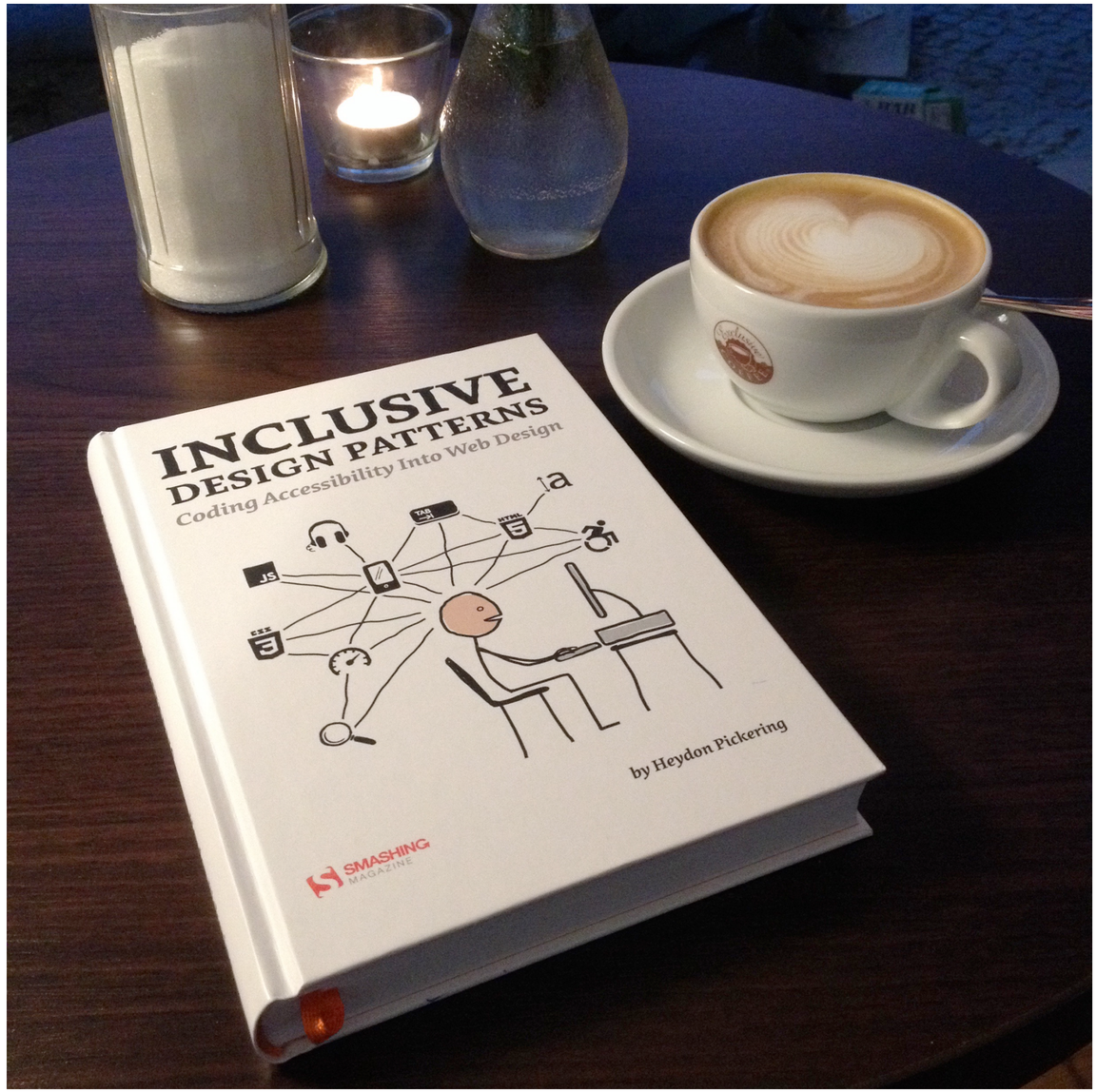
Integration test, Interaktionstest
Zusammenarbeit voneinander abhängiger Komponenten;
Schnittstellen

System test
gesamtes System gegen die gesamten Anforderungen
(funktionale und nicht-funktionale Anforderungen)

Acceptance Test, User Acceptance Test
nicht am Code der Software, sondern am Verhalten der Software
bei spezifizierten Vorgängen

Test-driven development

Test-driven HTML development


INCLUSIVE
DESIGN PATTERNS
Coding Accessibility Into Web Design
by Heydon Pickering
SMASHING
MAGAZINE

For
Gunnar
A11Y

codepen.io/gunnarbittersmann/pen/KarBxW?editors=1100

Test-driven HTML development

A PEN BY Gunnar Bittersmann

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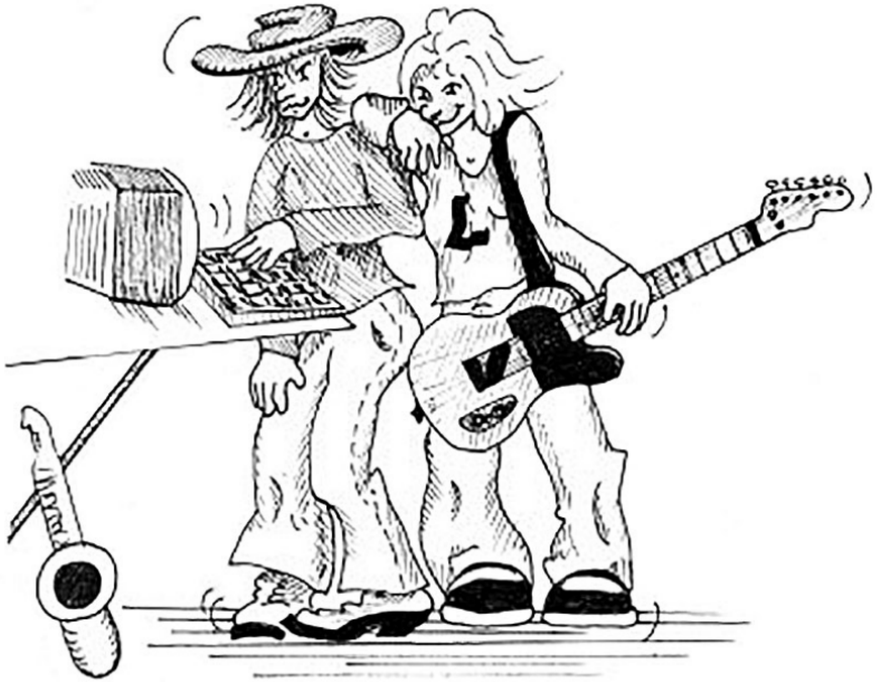
HTML

```html
<main>
  <img src="http://bittersmann.de/tmp/btra.jpg"/>
  <ol>
    <li>Side A</li>
      <ol>
        <li>Thunder Road</li>
        <li>Tenth Avenue Freeze-Out</li>
        <li>Night</li>
        <li>Backstreets</li>
      </ol>
    <li>Side B</li>
      <ol>
        <li>Born to Run</li>
        <li>She’s the One</li>
        <li>Meeting Across the River</li>
        <li>Jungleland</li>
      </ol>
  </ol>
</main>
```

CSS

```css
ol > *:not(li)
{
  outline: 0.25rem solid red;
}
```

JS



Drawing by Annette Prüfer

Side A
1. Thunder Road
2. Tenth Avenue Freeze-Out
3. Night
4. Backstreets

Side B
1. Born to Run
2. She's the One
3. Meeting Across the River
4. Jungleland

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Test-driven HTML development

A PEN BY Gunnar Bittersmann

Save | Fork | Settings | Change View

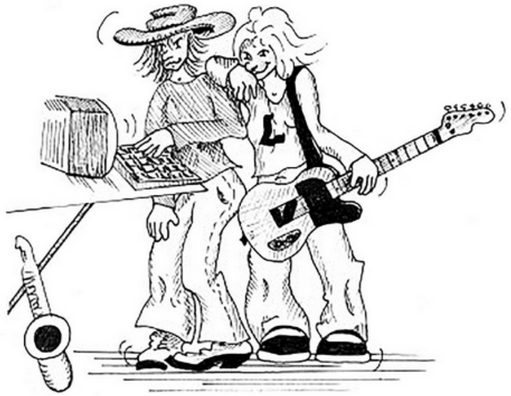
HTML

```
1  <main>
2    <img src="http://bittersmann.de/tmp/btra.jpg"/>
3    <ol>
4      <li>Side A</li>
5        <ol>
6          <li>Thunder Road</li>
7          <li>Tenth Avenue Freeze-Out</li>
```

CSS

```
29 ol > *:not(li)
30 {
31   ERROR: ol must have only li children;
32   outline: 0.25rem solid red;
33 }
```

JS



Drawing by Annette Prüfer

Side A Thunder Road
2. Tenth Avenue Freeze-Out
3. Night
4. Backstreets

Side B Born to Run
2. She's the One
3. Meeting Across the River
4. Jungleland

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Inspektor | Konsole | Debugger | Stilbearbeit... | Laufzeitana... | Speicher | Netzwerka...

HTML durchsuchen

```
<ol>
  <li>Side A</li>
  <ol>
    <li>Thunder Road</li>
    <li>Tenth Avenue Freeze-Out</li>
    <li>Night</li>
    <li>Backstreets</li>
  </ol>
  <li>Side B</li>
  <ol></ol>
```

eKey-4a26e36e-fadd-479a-b582... > html > body > main > ol > ol

Regeln | Berechnet | Animationen | Schriftarten

Stile filtern

```
Element {                                   Inline
}
ol > :not(li) {                             Inline:29
    ERROR: ol must have only li children;
    outline: 0.25rem solid red;
}
ol ol {                                     Inline:18
    font-weight: 100;
    padding: 0;
}
```

codepen.io/gunnarbittersmann/pen/KarBxW?editors=1100

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HTML

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<main>
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        <li>Night</li>
        <li>Backstreets</li>
      </ol>
    </li>
    <li>Side B
      <ol>
        <li>Born to Run</li>
        <li>She’s the One</li>
        <li>Meeting Across the River</li>
        <li>Jungleland</li>
      </ol>
    </li>
  </ol>
```

CSS

```css
ol > *:not(li)
{
  ERROR: ol must have only li children;
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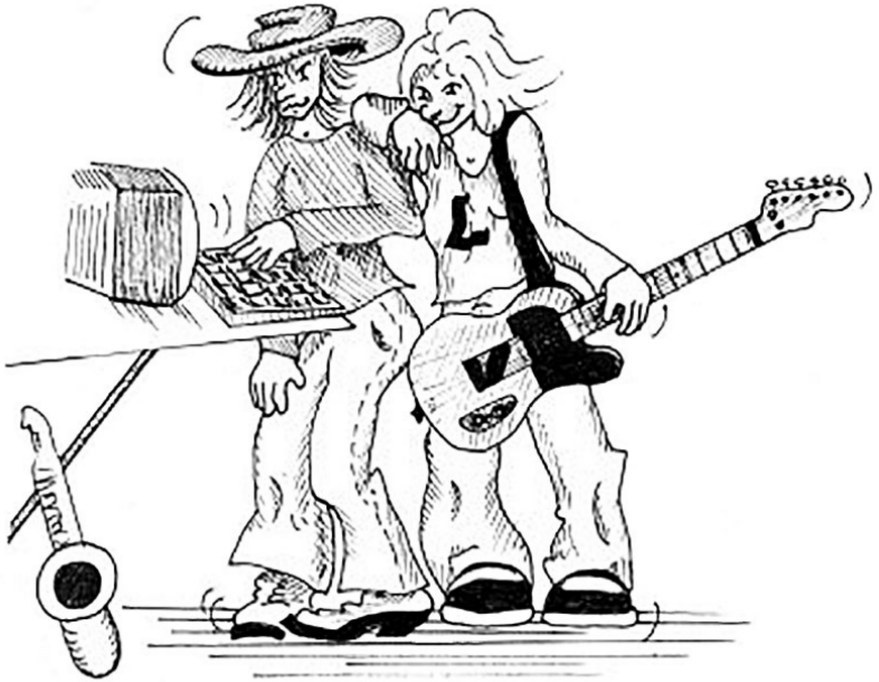
}
```

JS



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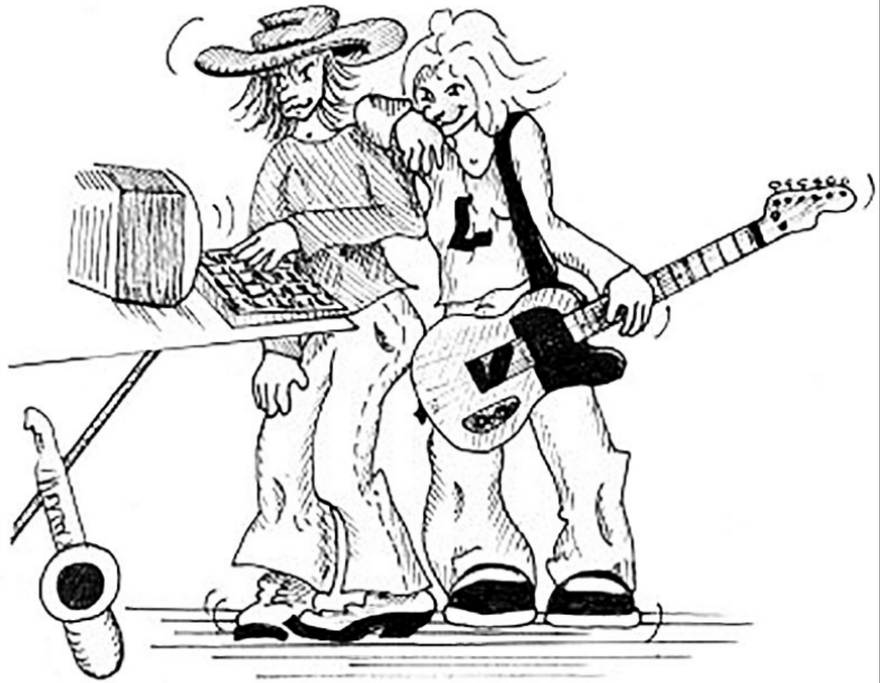
        <li>Tenth Avenue Freeze-Out</li>
```

CSS

```css
ol > *:not(li)
{
  ERROR: ol must have only li children;
  outline: 0.25rem solid red;
}

img:not([alt])
{
  ERROR: image must have alternative text;
  outline: 0.25rem solid red;
}
```

JS



Drawing by Annette Prüfer

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HTML

```html
<main>
  <img src="http://bittersmann.de/tmp/btra.jpg"/>
  <ol>
    <li>Side A
      <ol>
        <li>Thunder Road</li>
        <li>Tenth Avenue Freeze-Out</li>
```

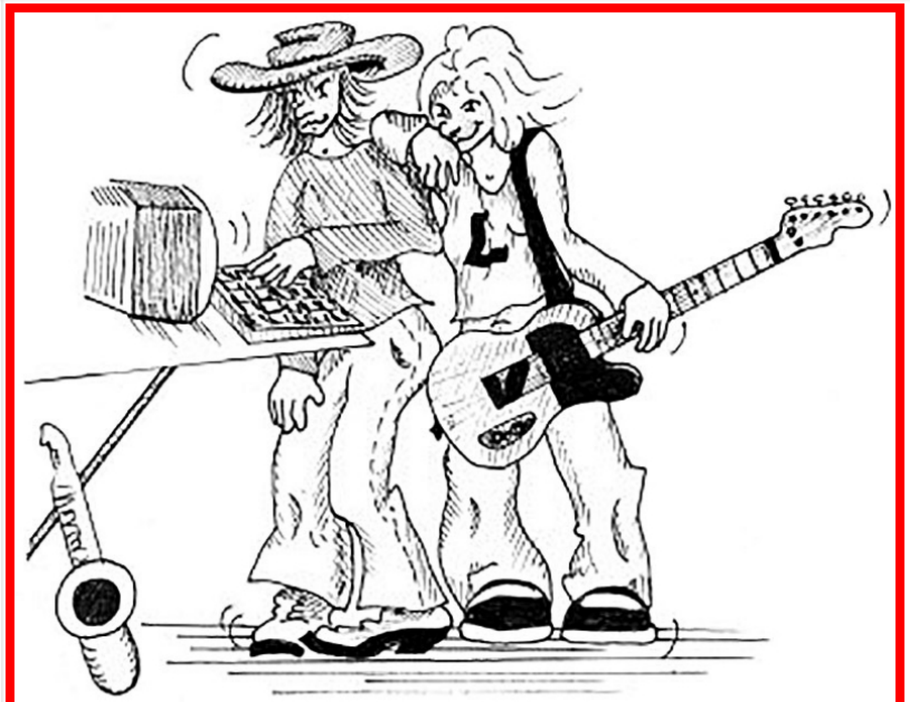
CSS

```css
:root
{
  --error-color: red;
  --error-outline: 0.25rem solid var(--error-color);
}

ol > *:not(li)
{
  ERROR: ol must have only li children;
  outline: var(--error-outline) !important;
}

img:not([alt])
{
  ERROR: image must have alternative text;
  outline: var(--error-outline) !important;
}
```

JS



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Test-driven HTML development

A PEN BY Gunnar Bittersmann

Save | Fork | Settings | Change View

HTML

```html
<main>
  <img src="http://bittersmann.de/tmp/btra.jpg" alt=""/>
  <ol>
    <li>Side A
      <ol>
        <li>Thunder Road</li>
        <li>Tenth Avenue Freeze-Out</li>
```

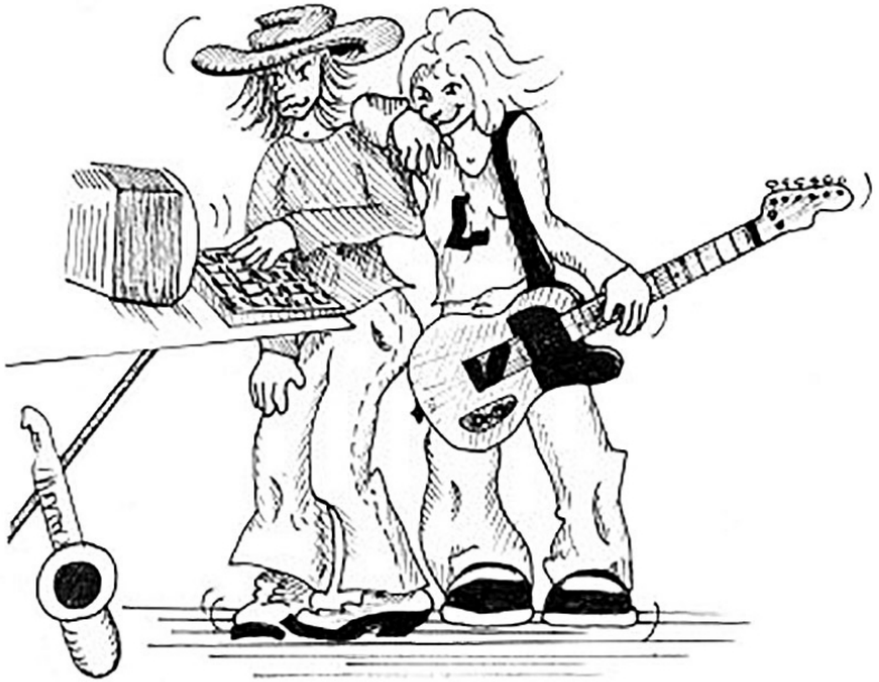
CSS

```css
:root
{
  --error-color: red;
  --error-outline: 0.25rem solid var(--error-color);
}

ol > *:not(li)
{
  ERROR: ol must have only li children;
  outline: var(--error-outline) !important;
}

img:not([alt])
{
  ERROR: image must have alternative text;
  outline: var(--error-outline) !important;
}
```

JS



Drawing by Annette Prüfer

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Test-driven HTML development

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HTML

```html
<main>
  <img src="http://bittersmann.de/tmp/btra.jpg" alt=""/>
  <ol>
    <li>Side A
      <ol>
        <li>Thunder Road</li>
        <li>Tenth Avenue Freeze-Out</li>
```

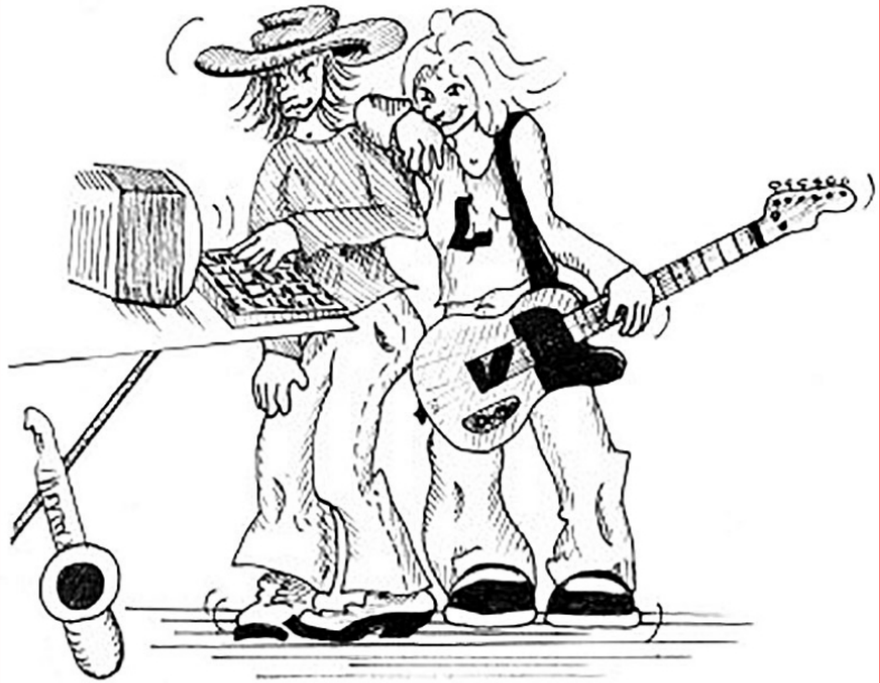
CSS

```css
:root
{
  --error-color: red;
  --error-outline: 0.25rem solid var(--error-color);
}

ol > *:not(li)
{
  ERROR: ol must have only li children;
  outline: var(--error-outline) !important;
}

img:not([alt]),
img[alt=""]
{
  ERROR: image must have alternative text;
  outline: var(--error-outline) !important;
}
```

JS



Drawing by Annette Prüfer

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Test-driven HTML development

A PEN BY Gunnar Bittersmann

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HTML

```html
<main>
  <img src="http://bittersmann.de/tmp/btra.jpg" alt="Parody of Bruce Springsteen’s Born to Run album cover, drawing by Annetter Prüfer"/>
  <ol>
    <li>Side A
      <ol>
        <li>Thunder Road</li>
```

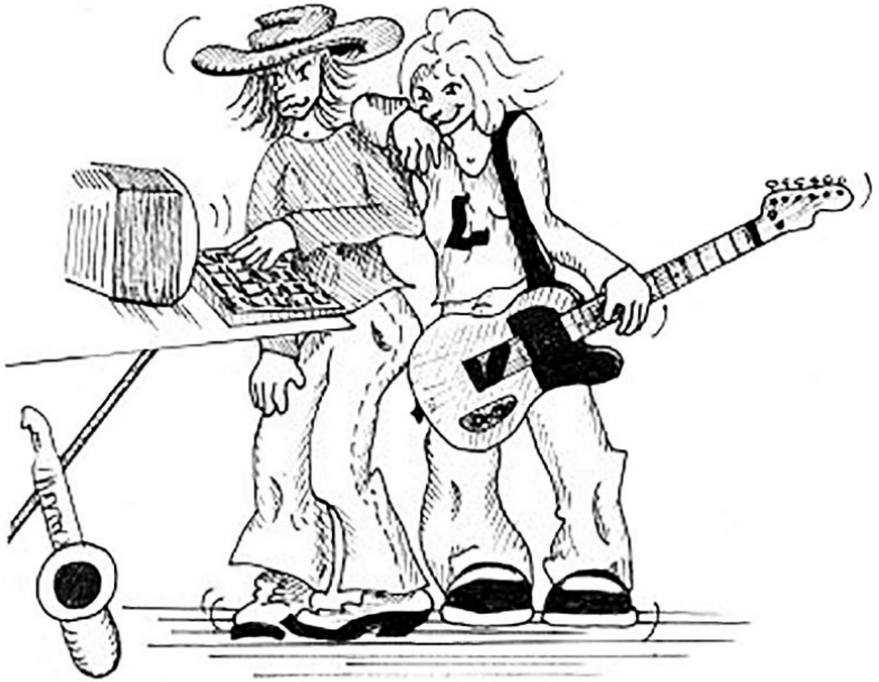
CSS

```css
:root
{
  --error-color: red;
  --error-outline: 0.25rem solid var(--error-color);
}

ol > *:not(li)
{
  ERROR: ol must have only li children;
  outline: var(--error-outline) !important;
}

img:not([alt]),
img[alt=""]
{
  ERROR: image must have alternative text;
  outline: var(--error-outline) !important;
}
```

JS



Drawing by Annette Prüfer

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Test-driven HTML development

A PEN BY Gunnar Bittersmann

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HTML

```html
<main>
  <figure>
    <img src="http://bittersmann.de/tmp/btraa.jpg" alt="" aria-labelledby="caption"/>
    <figcaption id="caption">Parody of Bruce Springsteen's <i>Born to Run</i> album cover, drawing by Annetter Prüfer</figcaption>
  </figure>
```

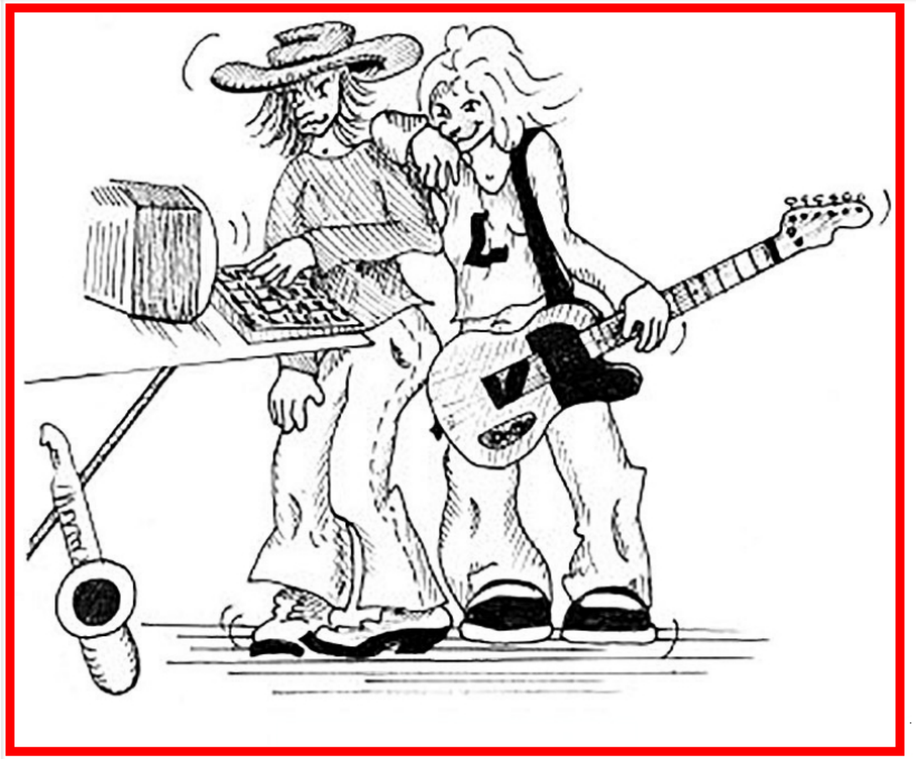
CSS

```css
:root
{
  --error-color: red;
  --error-outline: 0.25rem solid var(--error-color);
}

ol > *:not(li)
{
  ERROR: ol must have only li children;
  outline: var(--error-outline) !important;
}

img:not([alt]),
img[alt=""]
{
  ERROR: image must have alternative text;
  outline: var(--error-outline) !important;
}
```

JS



Parody of Bruce Springsteen's *Born to Run* album cover, drawing by Annetter Prüfer

Side A	Side B
1. Thunder Road	1. Born to Run
2. Tenth Avenue Freeze-Out	2. She's the One
3. Night	3. Meeting Across the River
4. Backstreets	4. Jungleland

Console | Assets | Comments | Delete | Keyboard

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Test-driven HTML development

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HTML

```html
<main>
  <figure>
    <img src="http://bittersmann.de/tmp/btraa.jpg" alt="" aria-labelledby="caption"/>
    <figcaption id="caption">Parody of Bruce Springsteen's <i>Born to Run</i> album cover, drawing by Annetter Prüfer</figcaption>
  </figure>
```

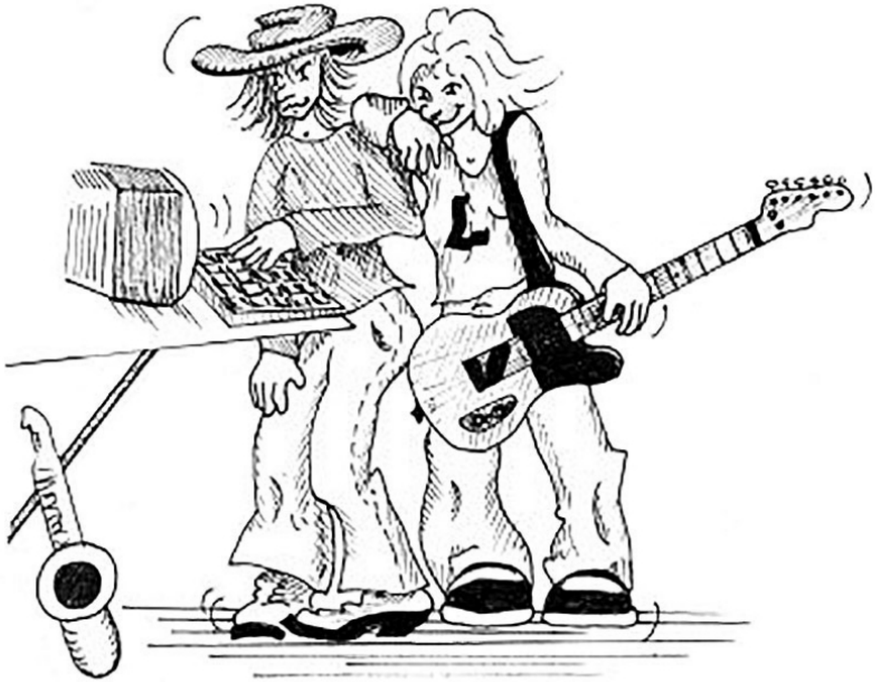
CSS

```css
:root
{
  --error-color: red;
  --error-outline: 0.25rem solid var(--error-color);
}

ol > *:not(li)
{
  ERROR: ol must have only li children;
  outline: var(--error-outline) !important;
}

img:not([alt]),
img[alt=""]:not([aria-label]):not([aria-labelledby])
{
  ERROR: image must have alternative text;
  outline: var(--error-outline) !important;
}
```

JS



Parody of Bruce Springsteen's *Born to Run* album cover, drawing by Annetter Prüfer

Side A	Side B
1. Thunder Road	1. Born to Run
2. Tenth Avenue Freeze-Out	2. She's the One
3. Night	3. Meeting Across the River
4. Backstreets	4. Jungleland

Console | Assets | Comments | Delete | Keyboard

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standard.test.css | application.test.css

```
:root
{
    --error-color: orange;
    --error-outline: 0.5rem solid var(--error-color);
    --warning-color: yellow;
    --warning-outline: 0.5rem solid var(--warning-color);
}

html:not([lang]),
html:not([lang]) > body
{
    ERROR: im html-Element sollte die Sprache des Inhalts im lang-Attribut angegeben werden;
    background: var(--error-color) !important;
}

ul > *:not(li),
ol > *:not(li)
{
    ERROR: ul, ol darf nur li-Kinder haben;
    outline: var(--error-outline) !important;
    background: var(--error-color) !important;
}
```

Line: 1 | CSS | Tab Size: 4 | :root

standard.test.css | application.test.css

```
23
24 img:not([alt]),
25 img[alt=""]:not([role~="none"]):not([role~="presentation"]):not([aria-label]):not(
26 [aria-labelledby])
27 {
28     ERROR: img muss Alternativtext haben;
29     outline: var(--error-outline) !important;
30 }
31
32 [onclick]:not(a):not(button):not(input):not([tabindex]),
33 [onclick][tabindex^="-"],
34 [ng-click]:not(a):not(button):not(input):not([tabindex]),
35 [ng-click][tabindex^="-"]
36 {
37     ERROR: click-Event für nicht fokussierbares Element;
38     outline: var(--error-outline) !important;
39 }
40
41 [tabindex]:not([tabindex="0"]):not([tabindex="-1"])
42 {
43     WARNING: tabindex sollte 0 bzw. -1 sein;
44     outline: var(--warning-outline);
45 }
```

Line: 1 | CSS | Tab Size: 4 | :root

Zeichnung: Annette Prüfer
BRUCE
SPRINGSTEEN