

Coding

ARTEZ

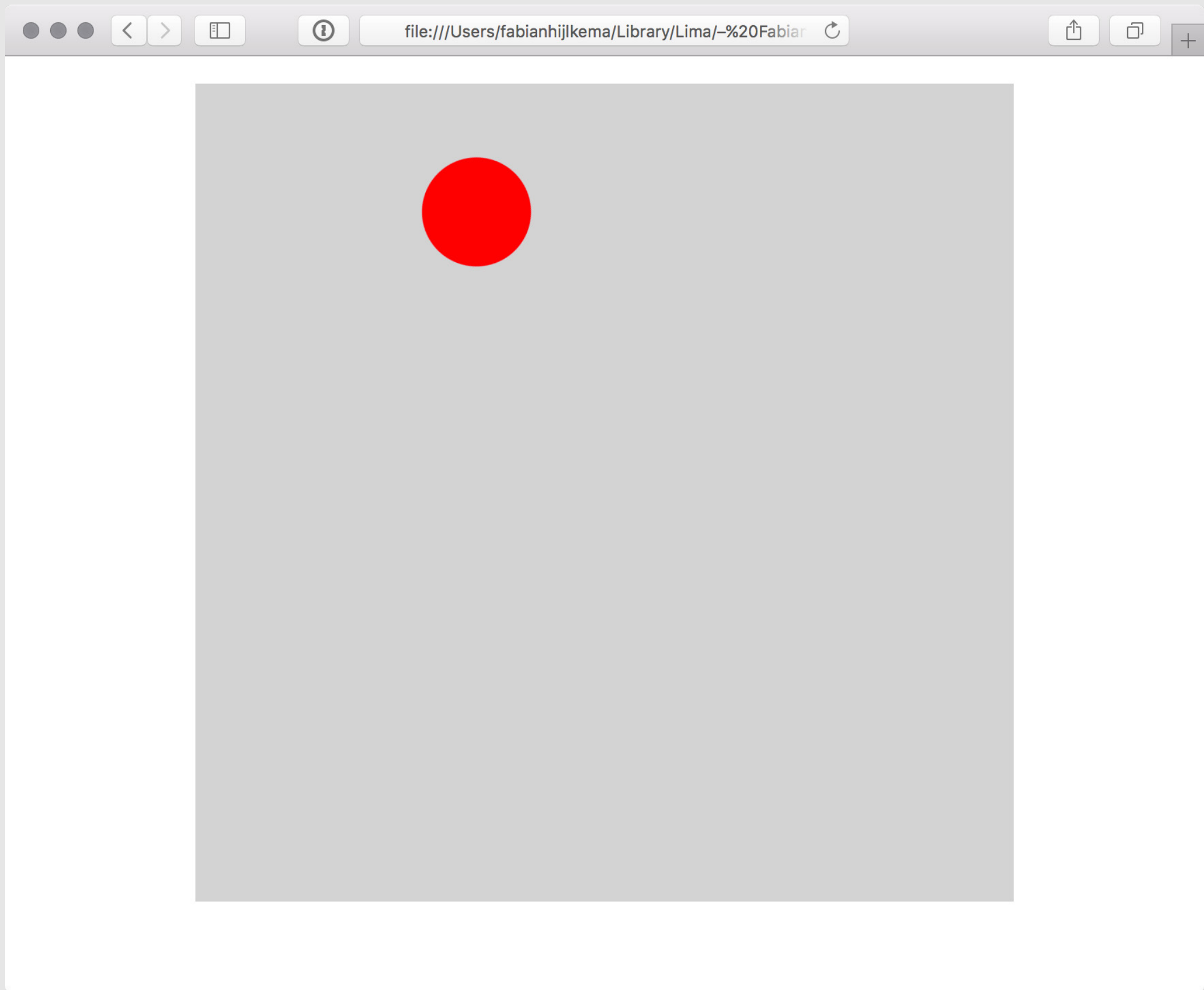
Specificity, transitions & animations in CSS

<doing>

Download lesson2.zip
from [http://artez.fabianhijlkema.nl/
projectweek/coding](http://artez.fabianhijlkema.nl/projectweek/coding)

<doing>

Open up example1.html
in both Brackets and
your browser.



Working Files

two.html

• Untitled-1

Getting Started ▾

index.html

main.css

► screenshots

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4    <style>
5      .container {
6        width: 600px;
7        height: 600px;
8        background-color: lightgrey;
9        margin: 20px auto;
10       position: relative;
11     }
12   </style>
13 </head>
14 <body>
15   <div class="container">
16     |
17   </div>
18 </body>
19 </html>
20
```

Line 16, Column 13 — 20 Lines

INS

HTML ▾



Spaces: 4

Working Files

• two.html

• Untitled-1

Getting Started ▾

index.html

main.css

► screenshots

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <style>
5          .container {
6              width: 600px;
7              height: 600px;
8              background-color: lightgrey;
9              margin: 20px auto;
10             position: relative;
11         }
12     </style>
13 </head>
14 <body>
15     <div class="container">
16         <div class="track">
17
18             </div>
19         </div>
20     </body>
21 </html>
22
```

Working Files

• two.html

• Untitled-1

Getting Started ▾

index.html

main.css

► screenshots

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4    <style>
5      .container {
6        width: 600px;
7        height: 600px;
8        background-color: lightgrey;
9        margin: 20px auto;
10       position: relative;
11     }
12
13     .track {
14       background-color: blue;
15       position: relative;
16       border-radius: 50%;
17       height: 100%;
18       width: 100%;
19     }
20
21   </style>
22 </head>
23 <body>
24   <div class="container">
25     <div class="track">
26
27     </div>
28   </div>
29 </body>
30 </html>
31
```

Working Files

• two.html

• Untitled-1

Getting Started ▾

index.html

main.css

▶ screenshots

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4    <style>
5      .container {
6        width: 600px;
7        height: 600px;
8        background-color: lightgrey;
9        margin: 20px auto;
10       position: relative;
11     }
12
13     .track {
14       background-color: blue;
15       position: relative;
16       border-radius: 50%;
17       height: 100%;
18       width: 100%;
19     }
20
21   </style>
22 </head>
23 <body>
24   <div class="container">
25     <div class="track">
26       <div class="circle"></div>
27     </div>
28   </div>
29 </body>
30 </html>
31
```

Working Files

• two.html

• Untitled-1

Getting Started ▾

index.html

main.css

▶ screenshots

```
1      height: 80px;
2
3      background-color: lightgrey;
4
5      margin: 20px auto;
6
7      position: relative;
8
9  }
10
11
12
13  .track {
14      background-color: blue;
15      position: relative;
16      border-radius: 50%;
17      height: 100%;
18      width: 100%;
19  }
20
21  .circle {
22      position: absolute;
23      top: 100px;
24      left: 100px;
25      height: 80px;
26      width: 80px;
27      background-color: red;
28      border-radius: 50%;
29  }
30
31  </style>
32  </head>
33  <body>
34  <div class="container">
35  <div class="track">
36      <div class="circle"></div>
37  </div>
38  </div>
39  </body>
40  </html>
41
```

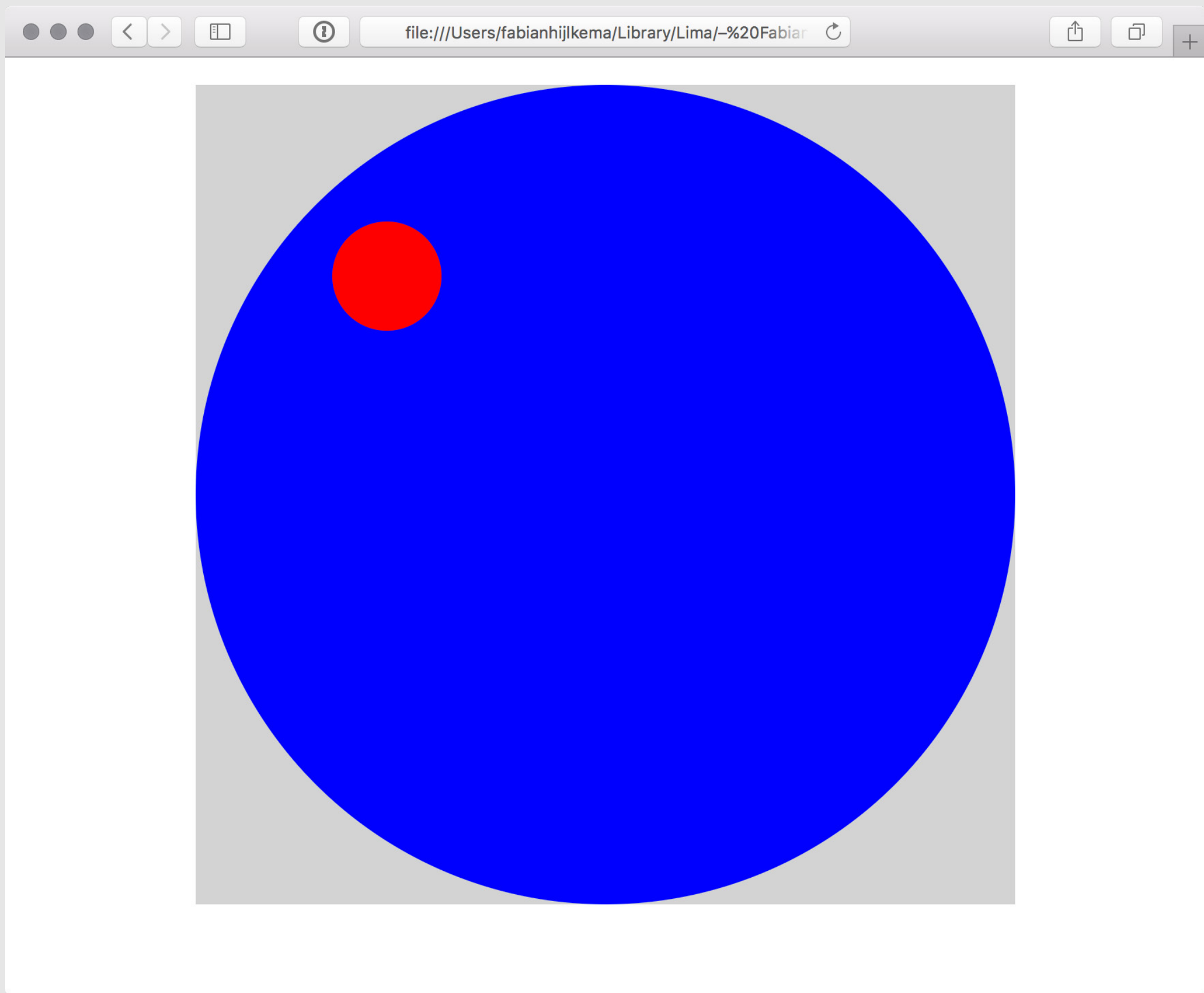
Line 21, Column 1 — Selected 9 lines — 41 Lines

INS

HTML ▾



Spaces: 4



Working Files

• two.html

• Untitled-1

Getting Started ▾

index.html

main.css

▸ screenshots

```
1      height: 800px;
2
3      background-color: lightgrey;
4      margin: 20px auto;
5      position: relative;
6
7  }
8
9
10
11
12
13  .track {
14      background-color: blue;
15      position: relative;
16      border-radius: 50%;
17      height: 100%;
18      width: 100%;
19  }
20
21  .circle {
22      position: absolute;
23      top: 100px;
24      left: 100px;
25      height: 80px;
26      width: 80px;
27      background-color: red;
28      border-radius: 50%;
29  }
30
31  @keyframes spin {
32      100% {
33          transform: rotate(360deg);
34      }
35  }
36
37  </style>
38  </head>
39  <body>
40      <div class="container">
41          <div class="track">
```

Line 35, Column 14 — Selected 5 lines — 47 Lines

INS

HTML ▾



Spaces: 4

• /Users/fabianhijlkema/Library/Lima/- Fabian/- Lessen/- Lessen 18:19 S1/Programming 101/Lesson 2/practice 2/two.html (Getting Started) — Brackets

Working Files

• two.html

• Untitled-1

Getting Started ▾

index.html

main.css

▶ screenshots

1

2

3

4

5

6

7

8

9

10

11

12

13 ▾

14

15

16

17

18

19

20

21

22 ▾

23

24

25

26

27

28

29

30

31

32 ▾

33 ▾

34

35

36

37

38

39

40 ▾

41 ▾

```
height: 80px;
background-color: lightgrey;
margin: 20px auto;
position: relative;
}

.track {
background-color: blue;
position: relative;
border-radius: 50%;
height: 100%;
width: 100%;
animation: spin 1.5s linear infinite;
}

.circle {
position: absolute;
top: 100px;
left: 100px;
height: 80px;
width: 80px;
background-color: red;
border-radius: 50%;
}

@keyframes spin {
100% {
transform: rotate(360deg);
}
}

</style>
</head>
<body>
<div class="container">
```

Line 20, Column 1 — Selected 1 line — 48 Lines

INSHTML ▾○Spaces: 4

Working Files

• two.html

• Untitled-1

Getting Started ▾

index.html

main.css

▶ screenshots

```
1      height: 80px;
2      background-color: lightgrey;
3      margin: 20px auto;
4      position: relative;
5  }
6
7  .track {
8      //background-color: blue;
9      position: relative;
10     border-radius: 50%;
11     height: 100%;
12     width: 100%;
13     animation: spin 1.5s linear infinite;
14 }
15
16 .circle {
17     position: absolute;
18     top: 100px;
19     left: 100px;
20     height: 80px;
21     width: 80px;
22     background-color: red;
23     border-radius: 50%;
24 }
25
26 @keyframes spin {
27     100% {
28         transform: rotate(360deg);
29     }
30 }
31
32 </style>
33 </head>
34 <body>
35     <div class="container">
```

Line 15, Column 1 — Selected 1 line — 48 Lines

INS

HTML ▾



Spaces: 4

<doing>

Right now create
the character
“T” with a css
transition or
animation.

Second part
15.00 o'clock

ARTEZ

JavaScript and interactivity on the internet

Todo example

+

Do groceries

×

Design poster

×

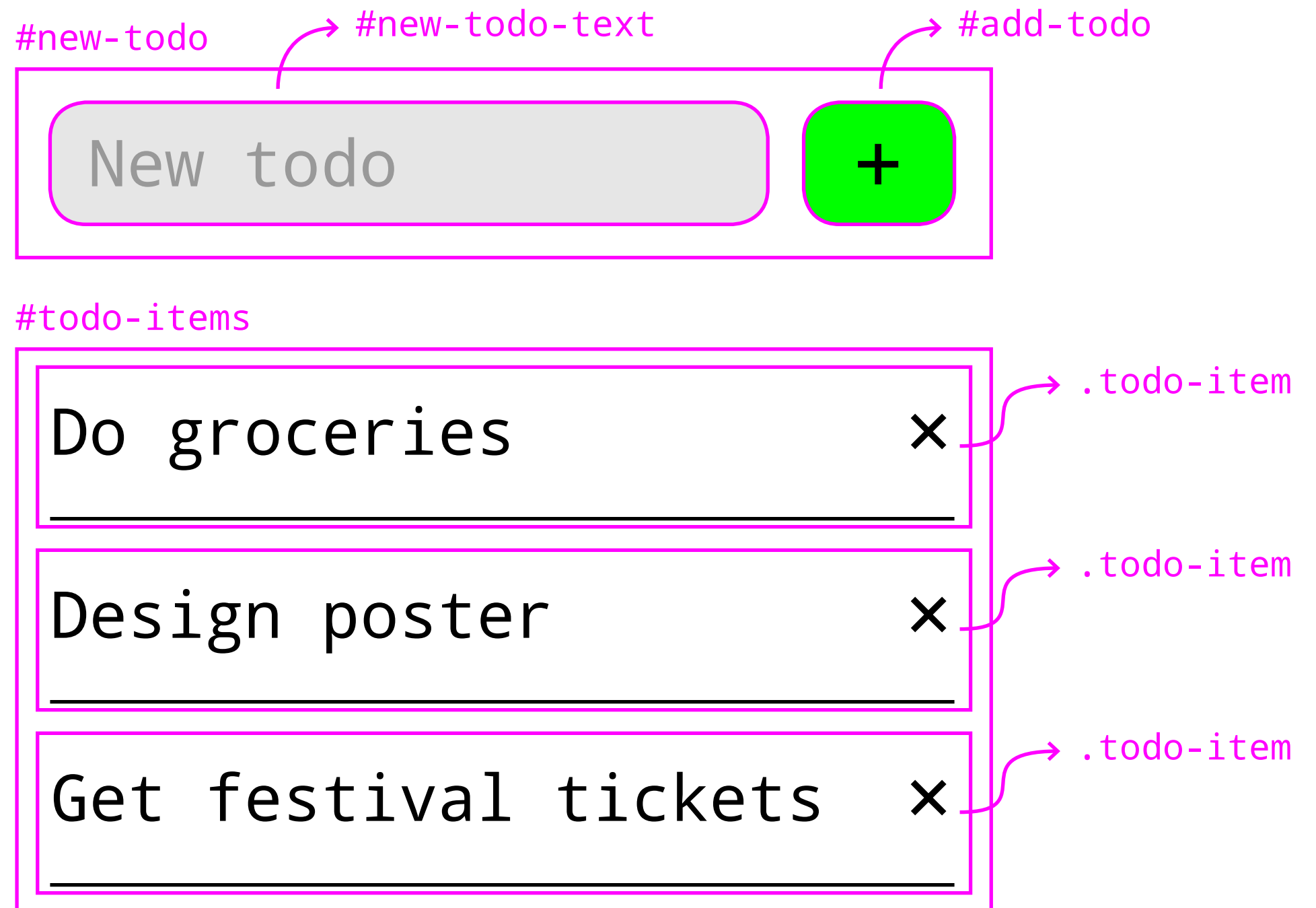
Get festival tickets

×

<https://codepen.io/fabianhijlkema/full/PoYM0Za>

JavaScript can add,
delete or change
elements/content in
your HTML document.

Html elements



Html elements

```
<body>
  <div id="new-todo">
    <input type="text" id="new-todo-text" />
    <div id="add-todo">+</div>
  </div>

  <div id="todo-items">
    <div class="todo-item">...</div>
    <div class="todo-item">...</div>
    <div class="todo-item">...</div>
  </div>
</body>
```

Css styling add button

```
<style>
  #add-todo {
    height: 25px;
    width: 35px;
    border-radius: 5px;
    background-color: green;
    text-align: center;
  }

  ...

</style>
```

Javascript actions for add button (using jQuery)

```
<script>  
    $( '#add-todo' ).on( 'click', function(){  
        //take input from #new-todo-text  
        //insert new .todo-item to #todo-items  
  
        //save new todo to database  
    })  
</script>
```

Todo example

New todo



Do groceries



~~Design poster~~



Get festival tickets



Css styling done .todo-item

```
<style>
  .todo-item {
    ...
  }

  .todo-item.done {
    text-decoration: line-through;
    color: grey;
  }
</style>
```

Javascript actions for todo items (using jQuery)

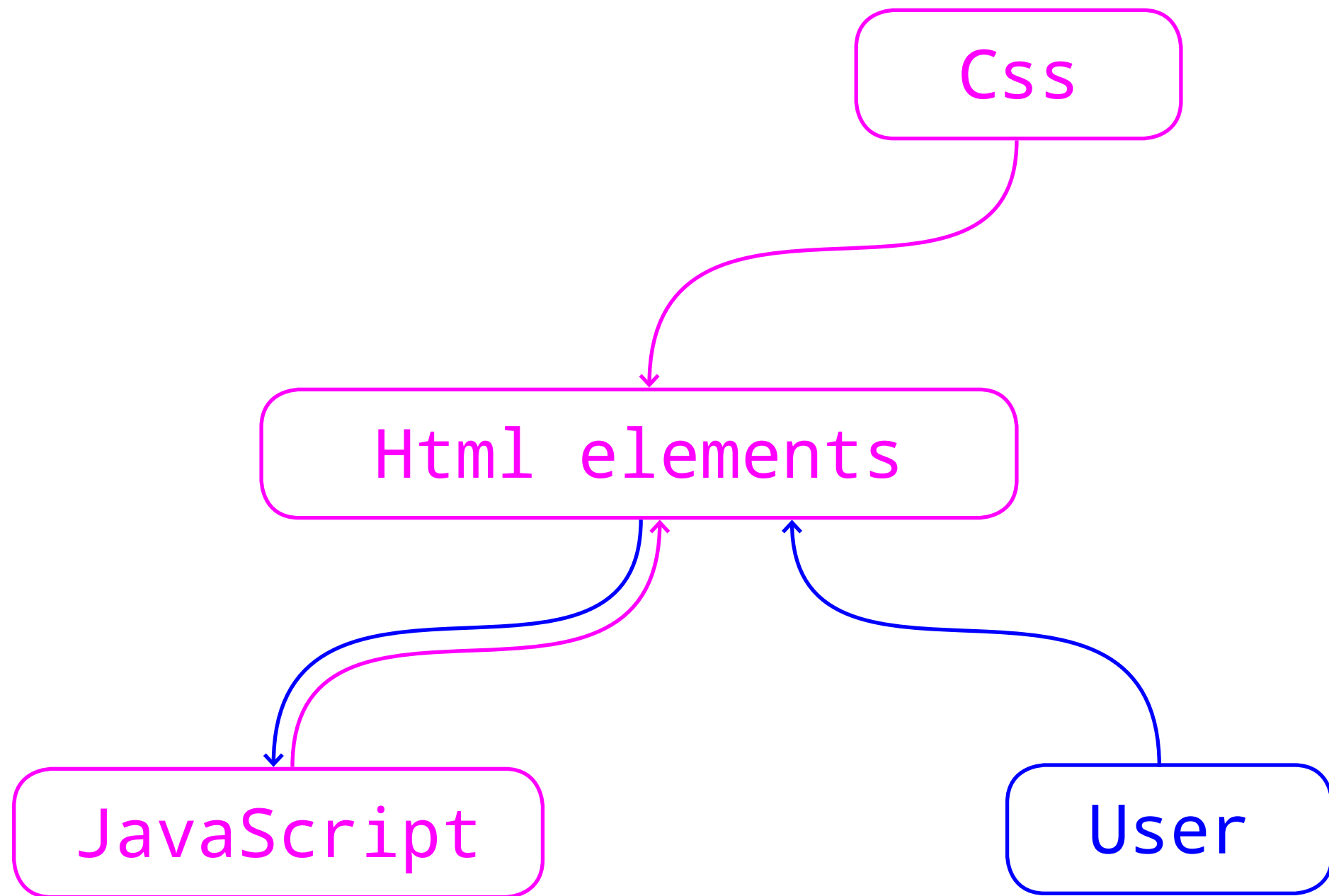
```
<script>
    $( '.todo-item' ).on( 'click', function(){

        $(this).toggleClass( 'done' )

        //save changes to database
    })

</script>
```

How Html, Css and JavaScript work together



Naming and selectors in CSS and JavaScript (using jQuery)

HTML `<div id="new-todo"></div>`

CSS
JavaScript (jQuery) `#new-todo { ... }`
`$( '#new-todo' )`



HTML `<div class="todo-item"></div>`

CSS
JavaScript (jQuery) `.todo-item { ... }`
`$( '.todo-item' )`



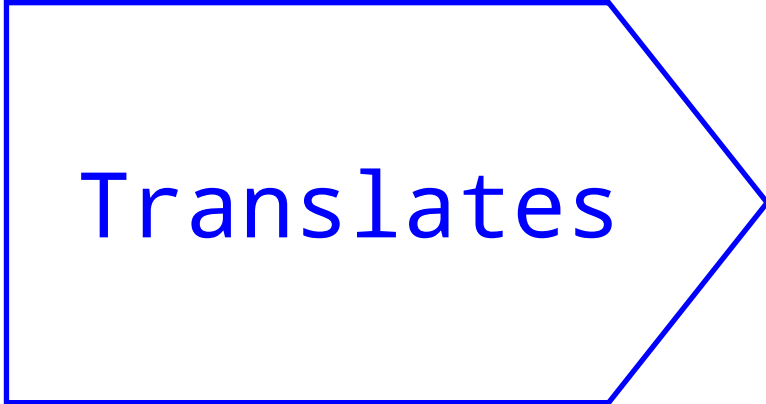
Javascript libraries and frameworks

This code was
actually jQuery
and not “real”
JavaScript

Javascript libraries and frameworks

Easier ways
of writing
JavaScript

- jQuery
- React
- Vuejs
- Angular
- ...
- ...



Translates

What browsers
need

real
JavaScript

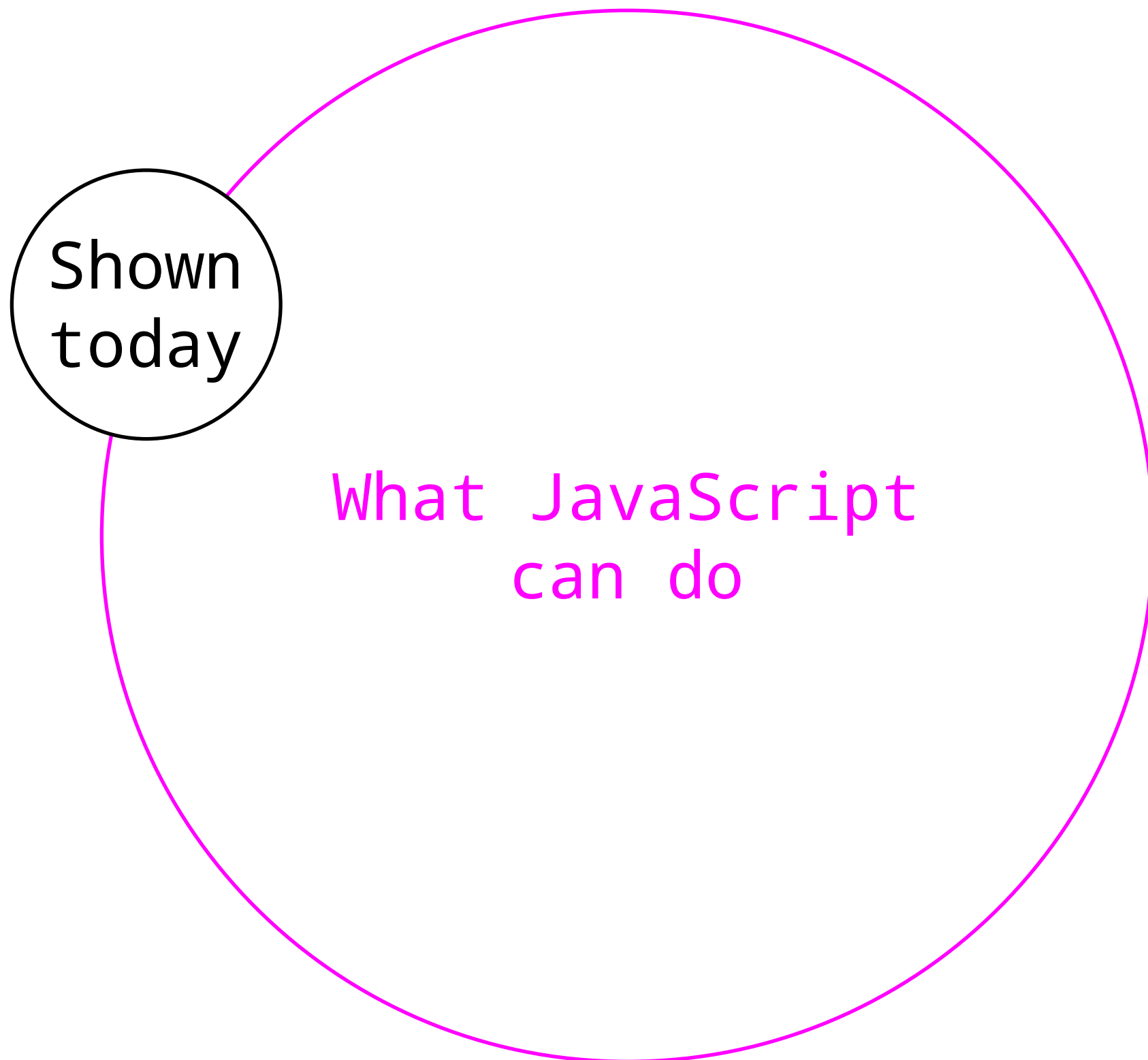
jQuery (and other libraries)

Javascript

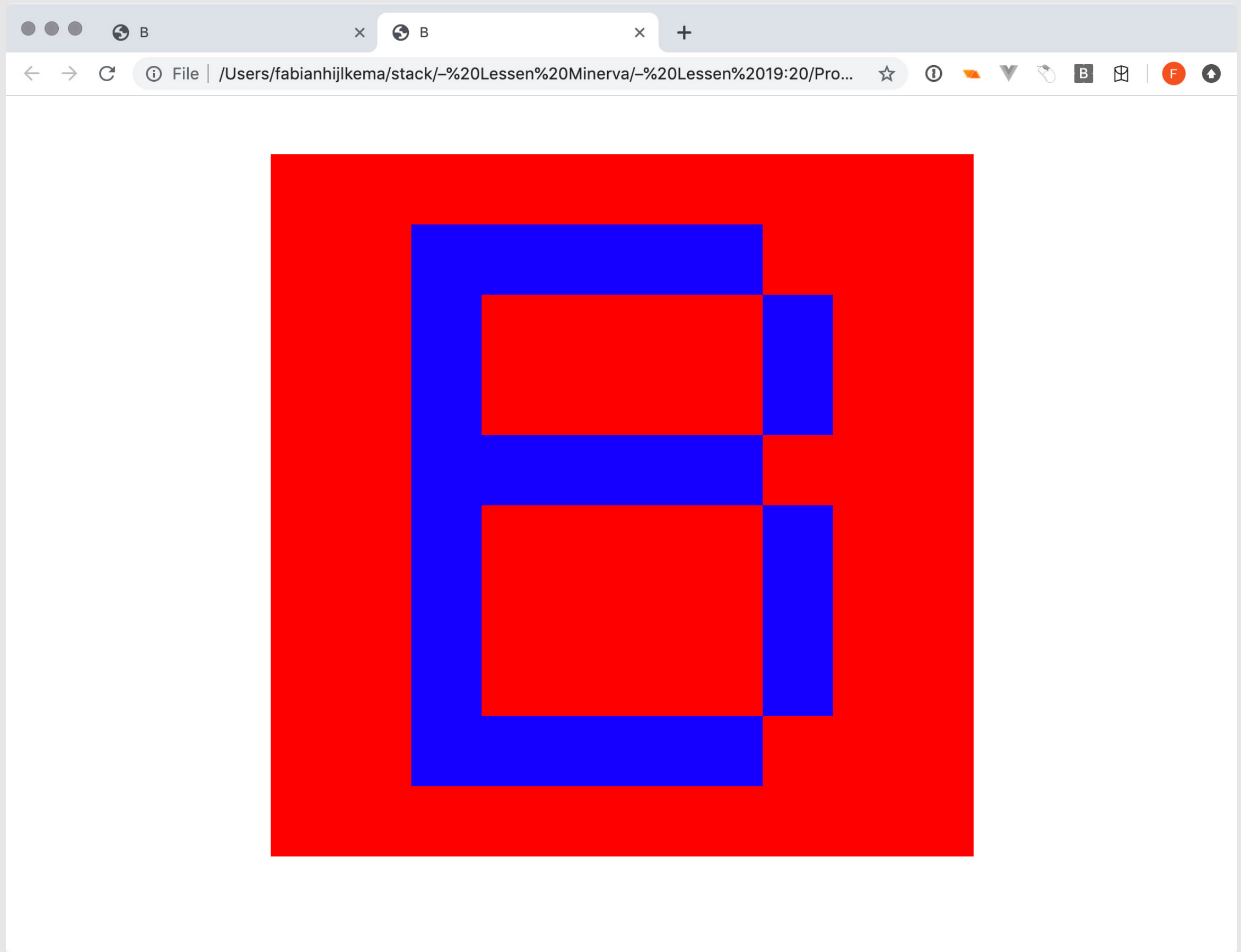


JavaScript can do a lot

Shown
today

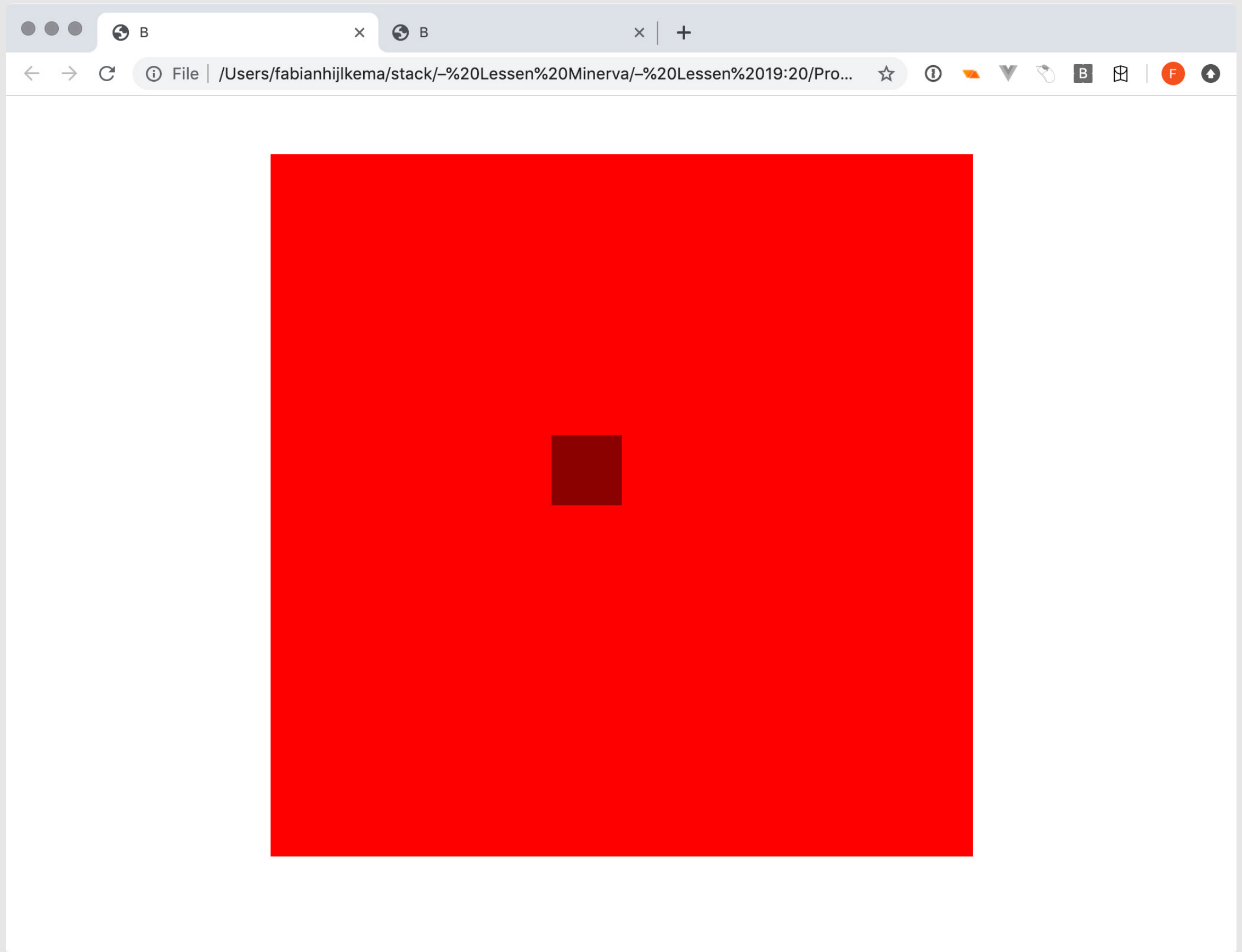


What JavaScript
can do



<doing>

Open up example2.html
in both Brackets and
your browser.



Working Files 

club_lapland_s

example2_sta

example2_end_

Getting Started

index.html

main.css

► screenshots

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>B</title>
5
6     <script
7       src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
8     </script>
9
10    <style>
11      #container {
12        background-color: lightgrey;
13        width: 600px;
14        height: 600px;
15        margin: 50px auto;
16        position: relative;
17      }
18
19      .grid-row {
20        display: flex;
21      }
22
23      .grid-item {
24        display: inline-block;
25        width: 60px;
26        height: 60px;
27        background-color: red;
28        transition: all 500ms ease;
29        cursor: pointer;
30      }
31
32      .grid-item:hover {
33        background-color: darkred;
34      }
35    </style>
36  </head>
37  <body>
38    <div id="container">
39      <div class="grid">
40        <div class="grid-item">1</div>
41        <div class="grid-item">2</div>
42        <div class="grid-item">3</div>
43        <div class="grid-item">4</div>
44        <div class="grid-item">5</div>
45        <div class="grid-item">6</div>
46        <div class="grid-item">7</div>
47        <div class="grid-item">8</div>
48        <div class="grid-item">9</div>
49        <div class="grid-item">10</div>
50        <div class="grid-item">11</div>
51        <div class="grid-item">12</div>
52        <div class="grid-item">13</div>
53        <div class="grid-item">14</div>
54        <div class="grid-item">15</div>
55        <div class="grid-item">16</div>
56        <div class="grid-item">17</div>
57        <div class="grid-item">18</div>
58        <div class="grid-item">19</div>
59        <div class="grid-item">20</div>
60        <div class="grid-item">21</div>
61        <div class="grid-item">22</div>
62        <div class="grid-item">23</div>
63        <div class="grid-item">24</div>
64        <div class="grid-item">25</div>
65        <div class="grid-item">26</div>
66        <div class="grid-item">27</div>
67        <div class="grid-item">28</div>
68        <div class="grid-item">29</div>
69        <div class="grid-item">30</div>
70        <div class="grid-item">31</div>
71        <div class="grid-item">32</div>
72        <div class="grid-item">33</div>
73        <div class="grid-item">34</div>
74        <div class="grid-item">35</div>
75        <div class="grid-item">36</div>
76        <div class="grid-item">37</div>
77        <div class="grid-item">38</div>
78        <div class="grid-item">39</div>
79        <div class="grid-item">40</div>
80        <div class="grid-item">41</div>
81        <div class="grid-item">42</div>
82        <div class="grid-item">43</div>
83        <div class="grid-item">44</div>
84        <div class="grid-item">45</div>
85        <div class="grid-item">46</div>
86        <div class="grid-item">47</div>
87        <div class="grid-item">48</div>
88        <div class="grid-item">49</div>
89        <div class="grid-item">50</div>
90        <div class="grid-item">51</div>
91        <div class="grid-item">52</div>
92        <div class="grid-item">53</div>
93        <div class="grid-item">54</div>
94        <div class="grid-item">55</div>
95        <div class="grid-item">56</div>
96        <div class="grid-item">57</div>
97        <div class="grid-item">58</div>
98        <div class="grid-item">59</div>
99        <div class="grid-item">60</div>
100      </div>
101    </div>
102  </body>
103 </html>
```

Working Files

club_lapland_s

example2_sta

example2_end

Getting Started ▾

index.html

main.css

▶ screenshots

```
10         background-color: lightgrey;
11         width: 600px;
12         height: 600px;
13         margin: 50px auto;
14         position: relative;
15     }
16
17     .grid-row {
18         display: flex;
19     }
20
21     .grid-item {
22         width: 60px;
23         height: 60px;
24         background-color: red;
25         transition: all 500ms ease;
26         cursor: pointer;
27     }
28
29     .grid-item:hover {
30         background-color: darkred;
31     }
32
33     </style>
34 </head>
35 <body>
36     <div id="container">
37         <div class="grid-row" id="row-one">
38             <div class="grid-item"></div>
39             <div class="grid-item"></div>
40             <div class="grid-item"></div>
41             <div class="grid-item"></div>
42             <div class="grid-item"></div>
43             <div class="grid-item"></div>
```

Working Files

club_lapland_s

example2_sta

example2_end

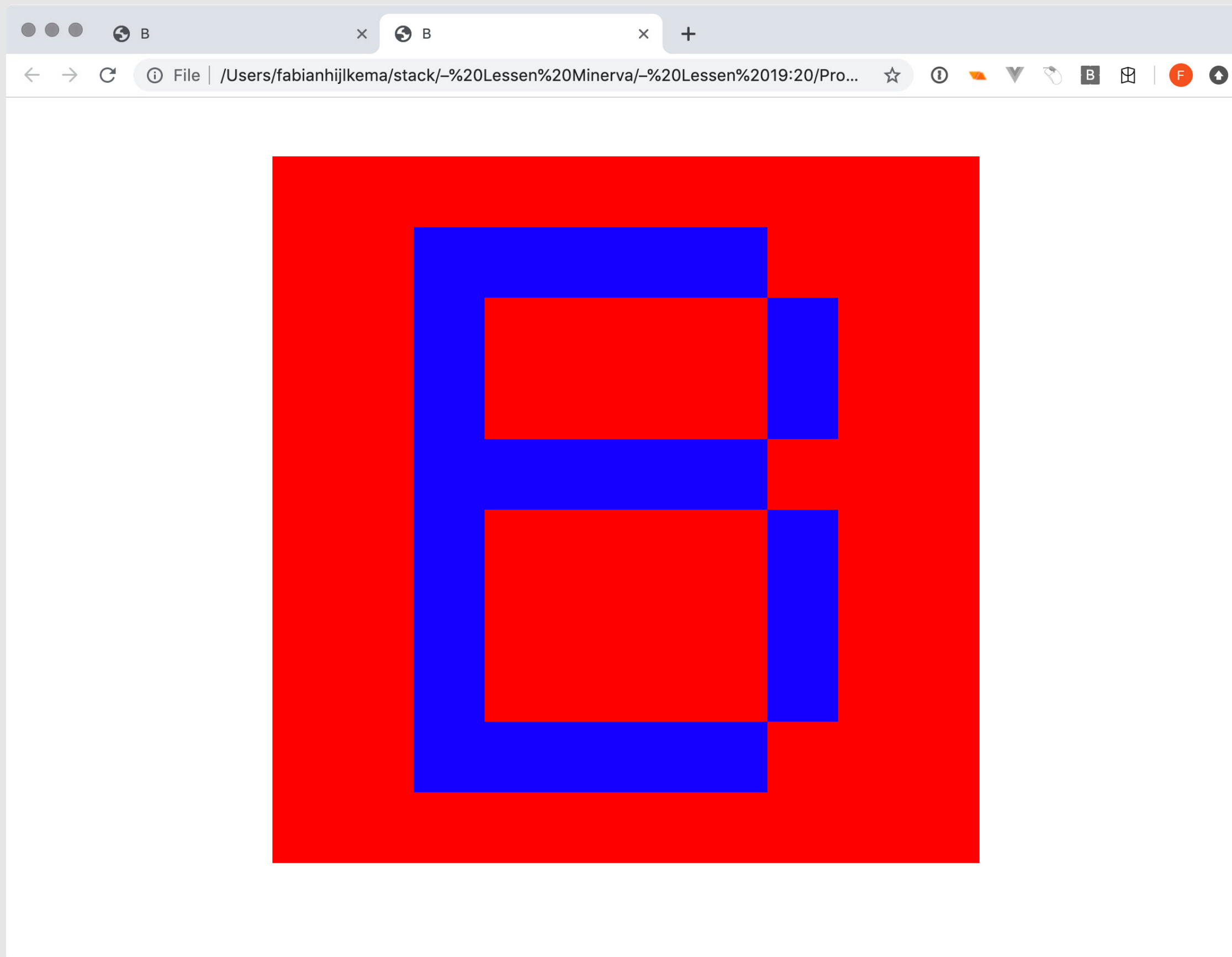
Getting Started

index.html

main.css

► screenshots

```
36 <div id="container">
37   <div class="grid-row" id="row-one">
38     <div class="grid-item"></div>
39     <div class="grid-item"></div>
40     <div class="grid-item"></div>
41     <div class="grid-item"></div>
42     <div class="grid-item"></div>
43     <div class="grid-item"></div>
44     <div class="grid-item"></div>
45     <div class="grid-item"></div>
46     <div class="grid-item"></div>
47     <div class="grid-item"></div>
48   </div>
49
50   <div class="grid-row" id="row-two">
51     <div class="grid-item"></div>
52     <div class="grid-item"></div>
53     <div class="grid-item"></div>
54     <div class="grid-item"></div>
55     <div class="grid-item"></div>
56     <div class="grid-item"></div>
57     <div class="grid-item"></div>
58     <div class="grid-item"></div>
59     <div class="grid-item"></div>
60     <div class="grid-item"></div>
61   </div>
62
63   <div class="grid-row" id="row-three">
64     <div class="grid-item"></div>
65     <div class="grid-item"></div>
66     <div class="grid-item"></div>
67     <div class="grid-item"></div>
68     <div class="grid-item"></div>
69     <div class="grid-item"></div>
```



Working Files

club_lapland_s

• example2_sta

example2_end

Getting Started ▾

index.html

main.css

▶ screenshots

```
16
17 ▾      .grid-row {
18          display: flex;
19      }
20
21 ▾      .grid-item {
22          width: 60px;
23          height: 60px;
24          background-color: red;
25          transition: all 500ms ease;
26          cursor: pointer;
27      }
28
29 ▾      .grid-item:hover {
30          background-color: darkred;
31      }
32
33 ▾      .grid-item.active {
34          background-color: blue;
35      }
36
37      </style>
38  </head>
39  <body>
40  <div id="container">
41  <div class="grid-row" id="row-one">
42      <div class="grid-item"></div>
43      <div class="grid-item"></div>
44      <div class="grid-item"></div>
45      <div class="grid-item"></div>
46      <div class="grid-item"></div>
47      <div class="grid-item"></div>
48      <div class="grid-item"></div>
49      <div class="grid-item"></div>
```

Working Files

club_lapland_s

example2_sta

example2_end

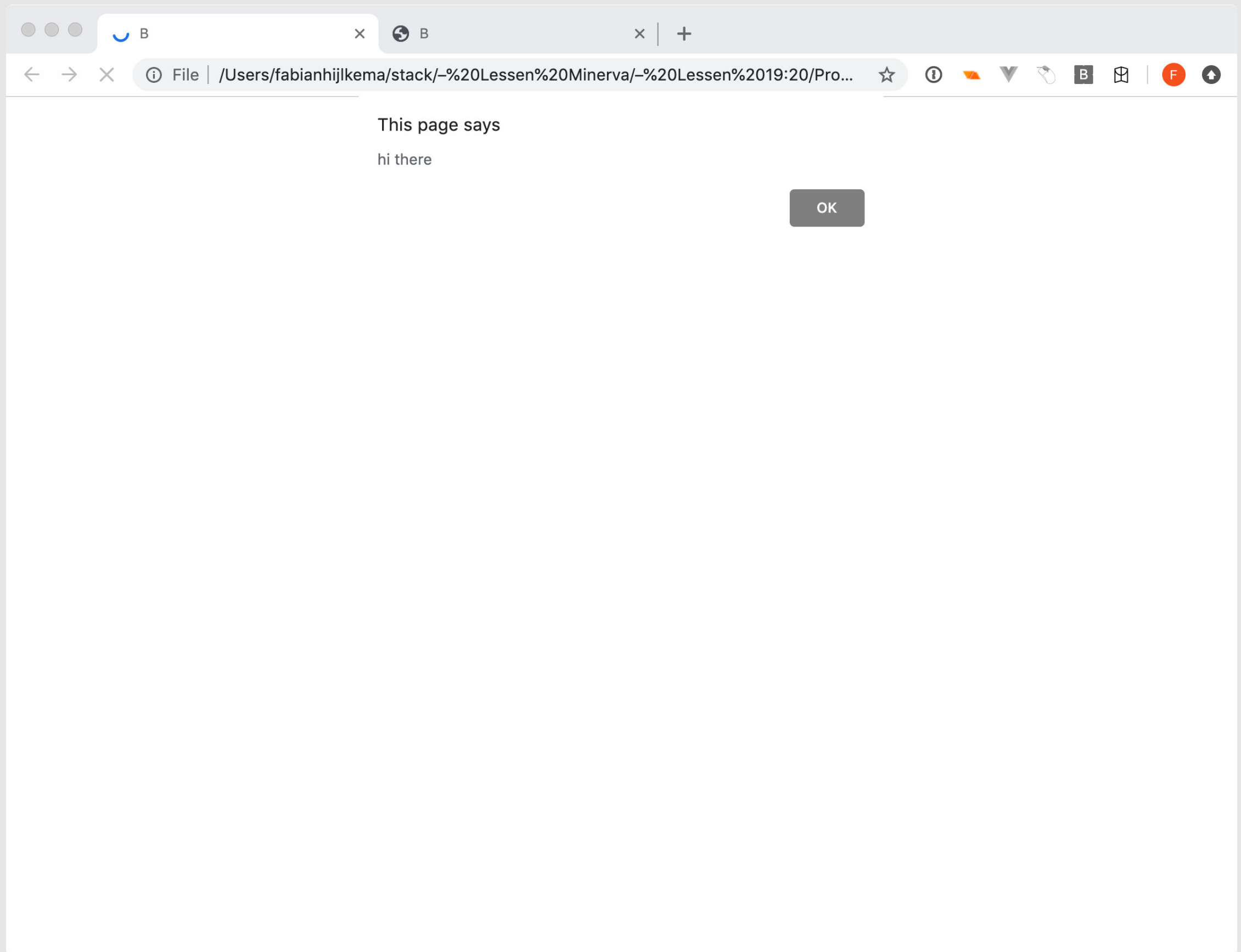
Getting Started

index.html

main.css

▶ screenshots

```
16
17 ▼      .grid-row {
18          display: flex;
19      }
20
21 ▼      .grid-item {
22          width: 60px;
23          height: 60px;
24          background-color: red;
25          transition: all 500ms ease;
26          cursor: pointer;
27      }
28
29 ▼      .grid-item:hover {
30          background-color: darkred;
31      }
32
33 ▼      .grid-item.active {
34          background-color: blue;
35      }
36
37      </style>
38
39 ▼      <script>
40          alert('hi there')
41      </script>
42
43      </head>
44 ▼      <body>
45 ▼          <div id="container">
46 ▼              <div class="grid-row" id="row-one">
47                  <div class="grid-item"></div>
48                  <div class="grid-item"></div>
49                  <div class="grid-item"></div>
```



Working Files

club_lapland_s

• example2_sta

example2_end

Getting Started ▾

index.html

main.css

▶ screenshots

```
16
17 ▾      .grid-row {
18          display: flex;
19      }
20
21 ▾      .grid-item {
22          width: 60px;
23          height: 60px;
24          background-color: red;
25          transition: all 500ms ease;
26          cursor: pointer;
27      }
28
29 ▾      .grid-item:hover {
30          background-color: darkred;
31      }
32
33 ▾      .grid-item.active {
34          background-color: blue;
35      }
36
37      </style>
38
39      <script>
40 ▾      $(document).ready(function(){
41
42          })
43      </script>
44
45      </head>
46 ▾      <body>
47 ▾          <div id="container">
48 ▾              <div class="grid-row" id="row-one">
49                  <div class="grid-item"></div>
```

Working Files

club_lapland_s

• example2_sta

example2_end

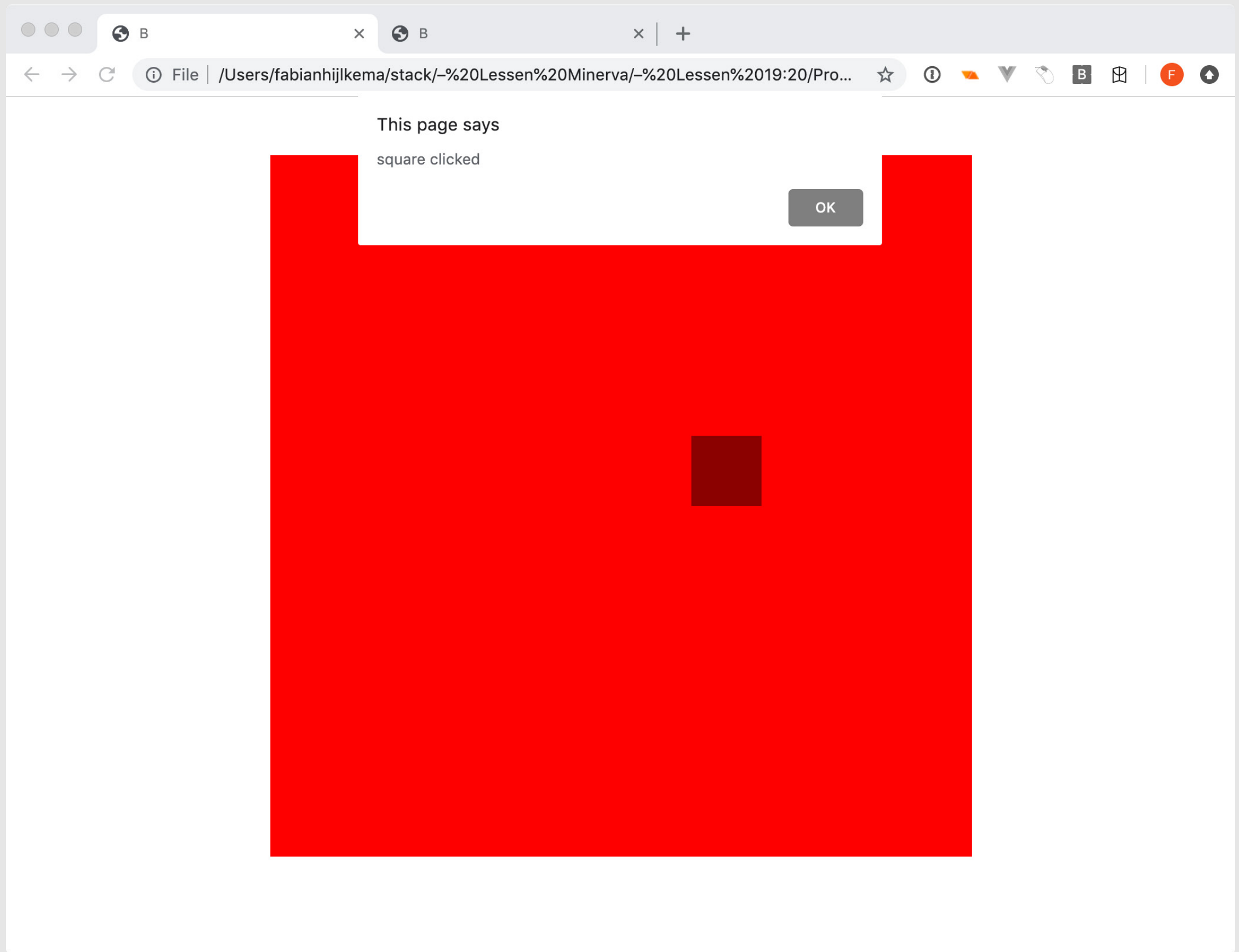
Getting Started ▾

index.html

main.css

▶ screenshots

```
16
17 ▾      .grid-row {
18          display: flex;
19      }
20
21 ▾      .grid-item {
22          width: 60px;
23          height: 60px;
24          background-color: red;
25          transition: all 500ms ease;
26          cursor: pointer;
27      }
28
29 ▾      .grid-item:hover {
30          background-color: darkred;
31      }
32
33 ▾      .grid-item.active {
34          background-color: blue;
35      }
36
37      </style>
38
39      <script>
40 ▾      $(document).ready(function(){
41 ▾          $('.grid-item').on('click', function(){
42              alert('square clicked')
43          })
44      })
45      </script>
46
47      </head>
48 ▾      <body>
49 ▾          <div id="container">
```



Working Files

club_lapland_s

example2_sta

example2_end

Getting Started

index.html

main.css

▶ screenshots

```
16
17 ▼      .grid-row {
18          display: flex;
19      }
20
21 ▼      .grid-item {
22          width: 60px;
23          height: 60px;
24          background-color: red;
25          transition: all 500ms ease;
26          cursor: pointer;
27      }
28
29 ▼      .grid-item:hover {
30          background-color: darkred;
31      }
32
33 ▼      .grid-item.active {
34          background-color: blue;
35      }
36
37      </style>
38
39      <script>
40 ▼          $(document).ready(function(){
41 ▼              $('.grid-item').on('click', function(){
42                  $(this).toggleClass('active')
43              })
44          })
45      </script>
46
47      </head>
48 ▼      <body>
49 ▼          <div id="container">
```

<doing>

Tomorrow create
the character "E"
using JavaScript to
change a classname,
and therefore its
appearance.

ARTEZ

Next lesson on
Thursday at 10.00
o'clock