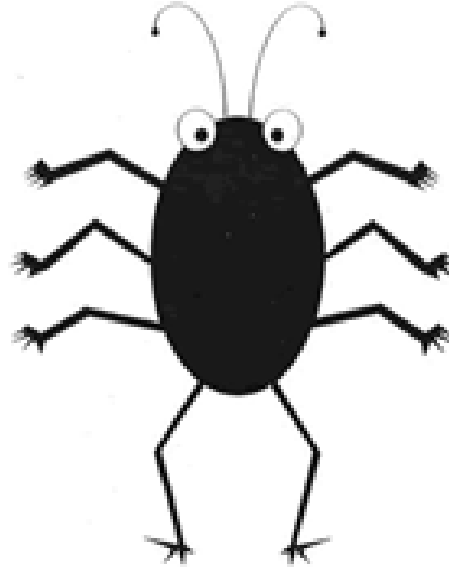# JavaScript Debuggen

BUGS

Syntax errors

Variable type errors
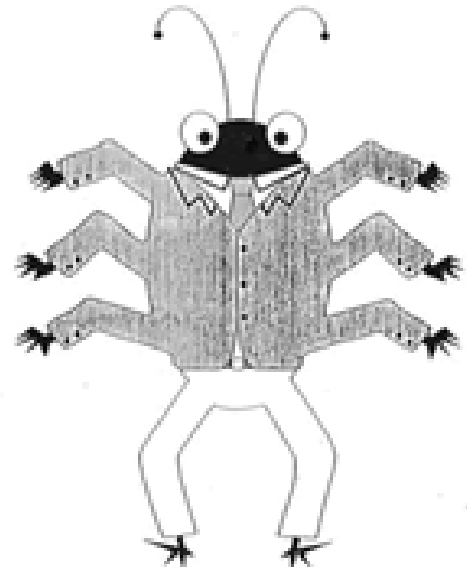
Timing errors

Logic errors

System errors

Unknown errors

BUG   FEATURE

Tracing
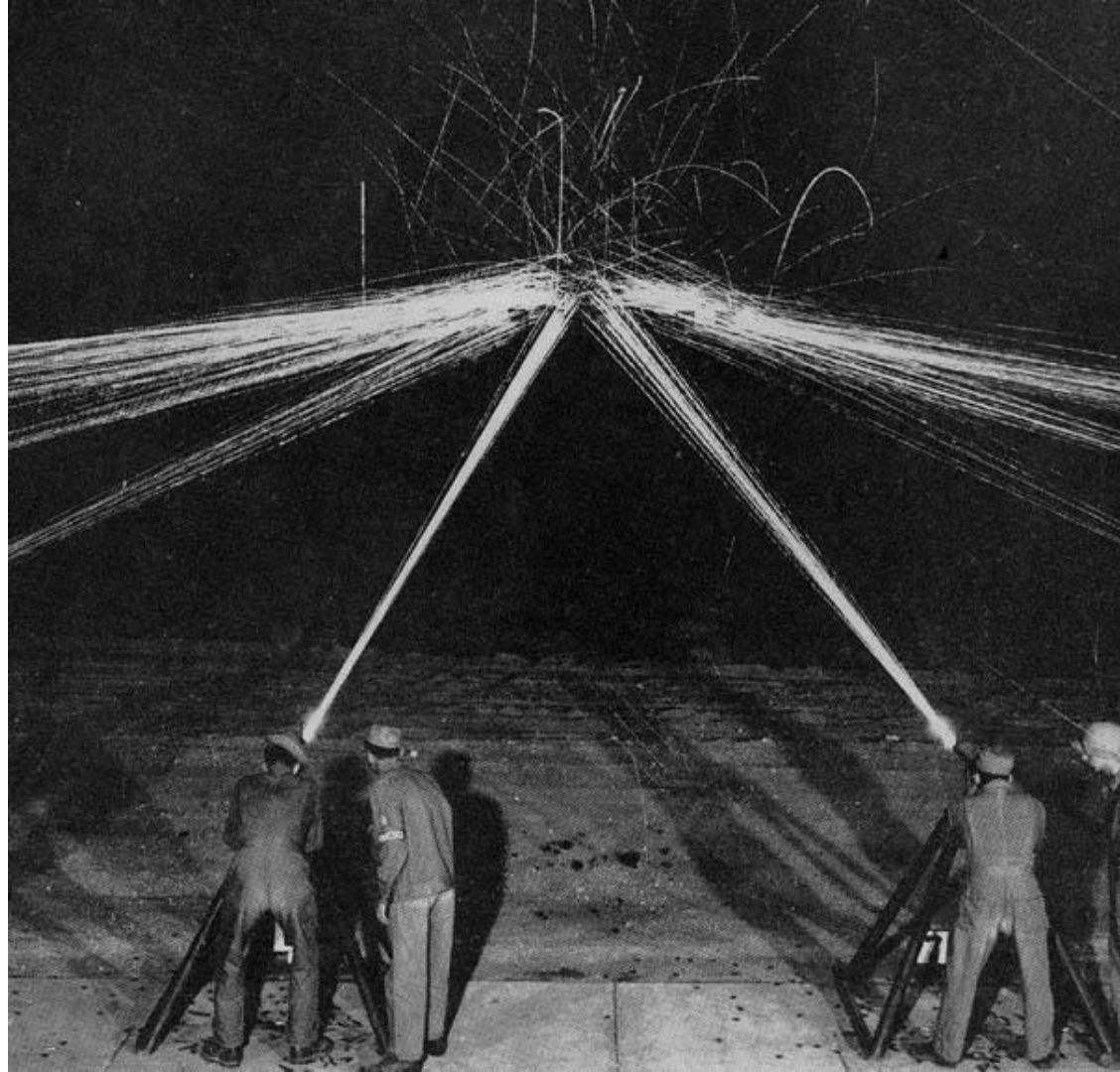
Console

Tool output naar
de debugger:
console.log()

Script werkt niet

```
<div id = "answer">hier komt het antwoord</div>
        <script>
          let a = "1";
          let b = 2;
          let c = a+b;
          let answer = document.getElementById("answer");
          if (c == 3){
            asnwer.innerHTML = c;
          }
        </script>
```

Script werkt niet

```
<div id = "answer">hier komt het antwoord</div>
      <script>
        let a = "1";
        let b = 2;
        let c = a+b;
        let answer = document.getElementById("answer")
        if (c == 3){
            console.log("kom ik in deze if?")
            asnwer.innerHTML = c;
        }
      </script>
```

Tracer: test met
console.log of
je in de "if" komt

Script werkt niet

```
<div id = "answer">hier komt het antwoord</div>
      <script>
        let a = "1";
        let b = 2;
        let c = a+b;
        let answer = document.getElementById("answer")
        console.log(c);
        if (c == 3){
          asnwer.innerHTML = c;
        }
      </script>
```
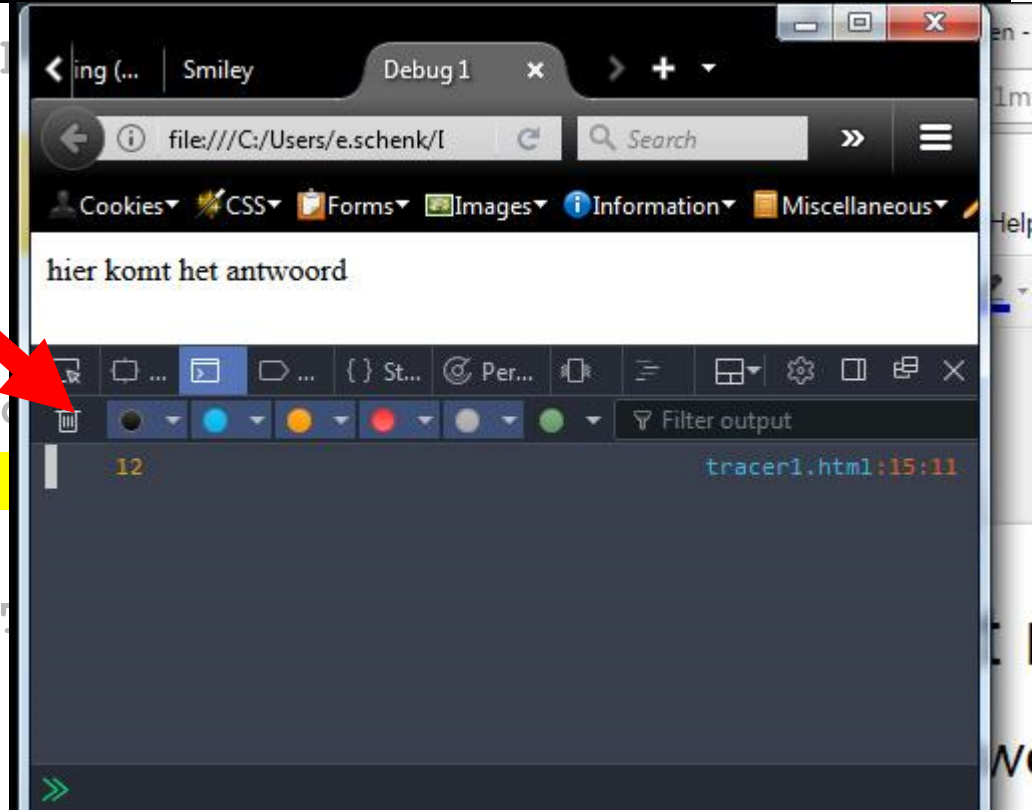
Tracer: bekijk met console.log de waarde van c

Tracer:
console.log(c)
geeft 12 . Dit had
3 moeten zijn.

```
                    hier
                    ';
                    ;
    let answer = doc
    console.log(c);
    if (c == 3){
        asnwer.innerH
    }
</script>
```
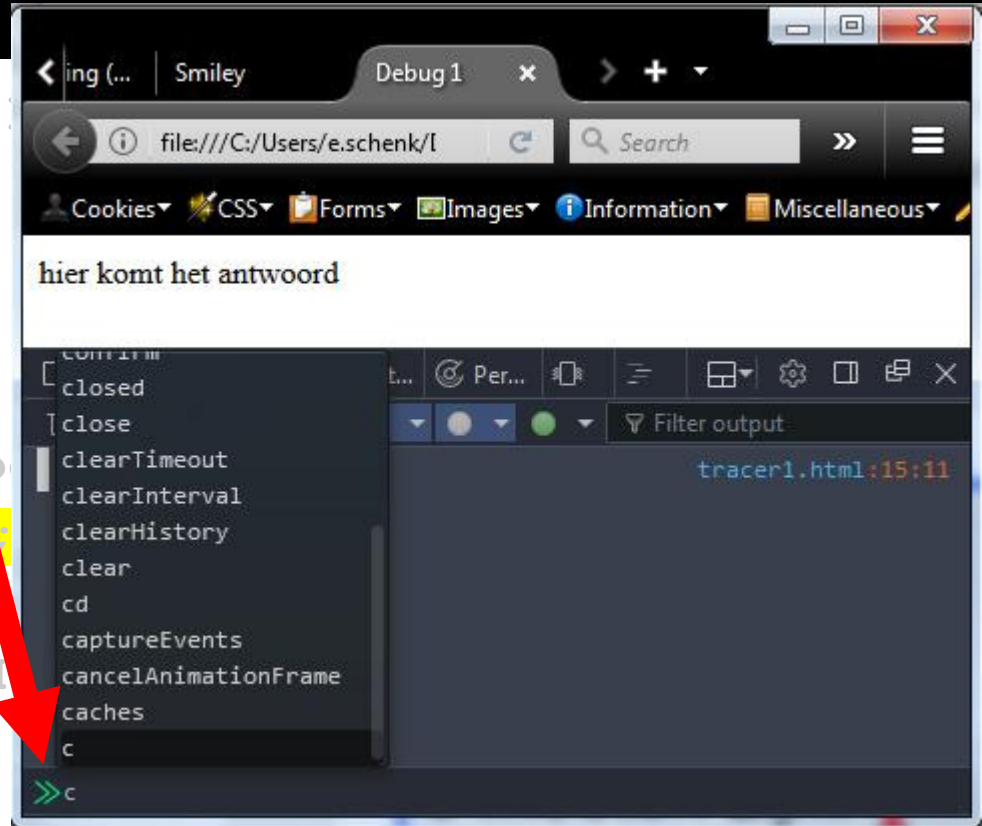

hier komt het antwoord

```
12                          tracer1.html:15:11
```

In de console, type c.

Hiermee vraag je de waarde van c op.

```
let c = a+b;
let answer = do
console.log(c);
if (c == 3){
    asnwer.innerH
}
</script>
```

hier komt het antwoord

Debug 1

file:///C:/Users/e.schenk/[

Cookies ▾ CSS ▾ Forms ▾ Images ▾ Information ▾ Miscellaneous ▾

confirm
closed
close
clearTimeout
clearInterval
clearHistory
clear
cd
captureEvents
cancelAnimationFrame
caches
c

c

tracer1.html:15:11

Amsterdam
TECH ACADEMY

In de console, type c.

De waarde van c is "12". Let op stringquotes, c is een string

```
let answer = doc
console.log(c);
if (c == 3){
    asnwer.innerHT
}
</script>
```

hier komt het antwoord

12
» c
← "12"

tracer1.html:15:11

Debug 1

Amsterdam
TECH ACADEMY

9

Script werkt niet

```
<div id = "answer">hier komt het antwoord</div>
    <script>
      let a = "1";
      let b = 2;
      let c = a+b;
      let answer = docume              ');
       console.log(c);
      if (c == 3){
        asnwer.innerHTML = c;
      }
    </script>
```

De waarde van c is "12". c is een string

```
<div id = "answer">hier komt het antwoord</div>
    <script>
        let a = "1";
        let b = 2;
        let c = a+b;
        let answer = docume
        console.log(c);
        if (c == 3){
            asnwer.innerHTML = c;
        }
    </script>
```

Probleem a is "1".
a is een string

Script werkt niet

```
<div id = "answer">hier komt het antwoord</div>
    <script>
        let a = 1;
        let b = 2;
        let c = a+b;
        let answer = docum
        console.log(c);
        if (c == 3){
            asnwer.innerHTML = c;
        }
    </script>
```

Fix

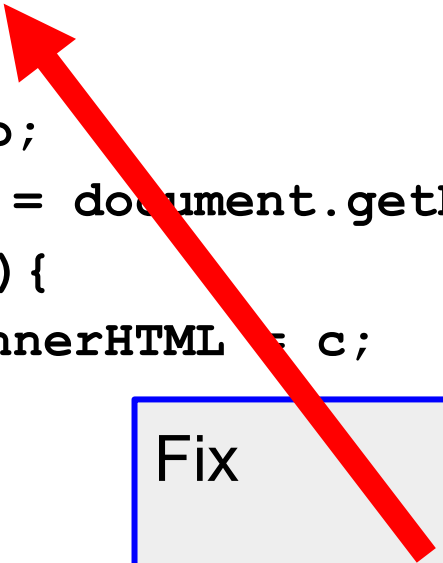a is een integer

Script werkt niet

```
<div id = "answer">hier komt het antwoord</div>
      <script>
        let a = 1;
        let b = 2;
        let c = a+b;
        let answer = document.getElementById("answer");
         if (c == 3){
           asnwer.innerHTML = c;
         }
      </script>
```
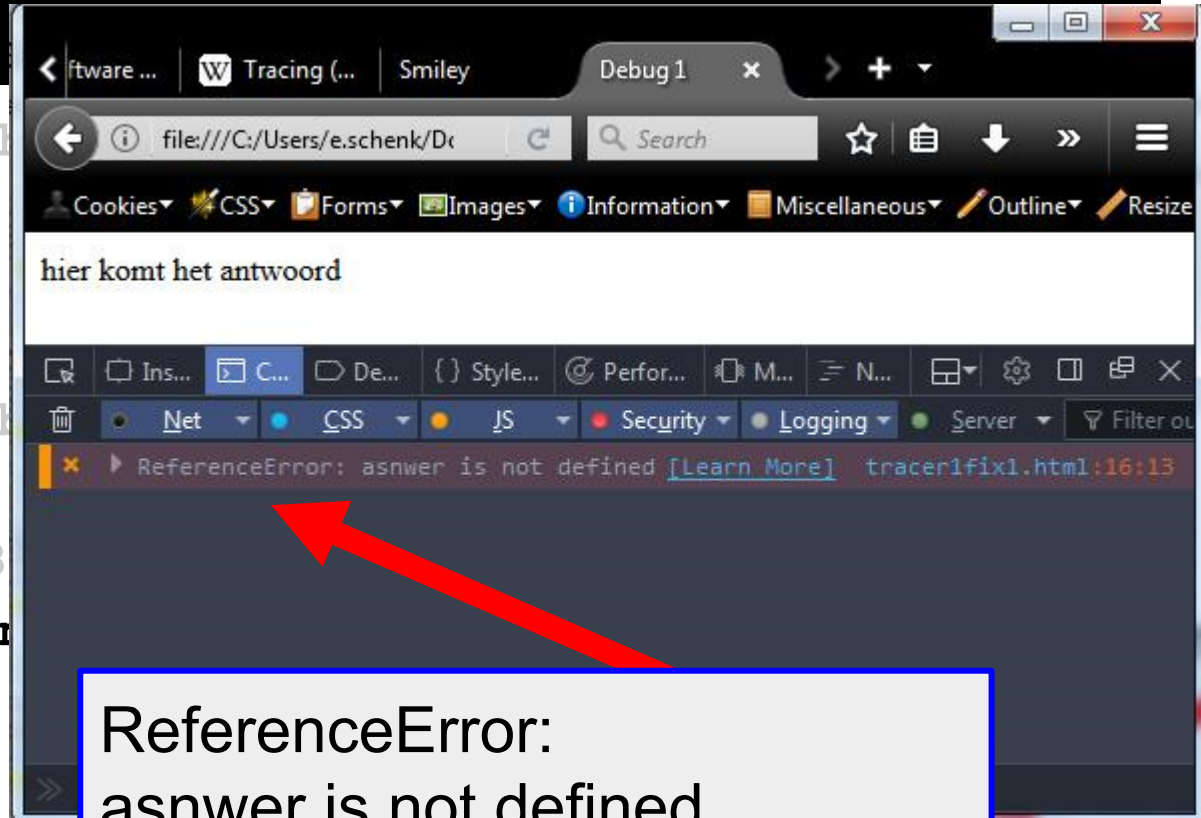
Fix

a is nu een integer

```
<div id = "answer">h
    <script>
        let a = 1;
        let b = 2;
        let c = a+b
        let answer
        if (c == 3
            asnwer.in
        }
    </script>
```

hier komt het antwoord

ReferenceError: asnwer is not defined [Learn More]   tracer1fix1.html:16:13

ReferenceError:
asnwer is not defined

14

Script werkt!!!


```
C:\Users\e.schenk\Documents\1MA 2016 2017\FRO\debuggen — Atom

Selection  Find  Packages  Help

tracer1fix1.html

1    <!doctype html>
2    <html>
3      <head>
4        <meta charset="utf-8">
5        <title>Debug 1</title>
6      </head>
7      <body>
8          <header></header>
9          <div id = "answer">hier komt het antwoord</div>
10         <script>
11           let a = 1;
12           let b = 2;
13           let c = a+b;
14           let answer = document.getElementById("answer")
15           if (c == 3){
16             answer.innerHTML = c;
17           }
18         </script>
19       </body>
20    </html>
```
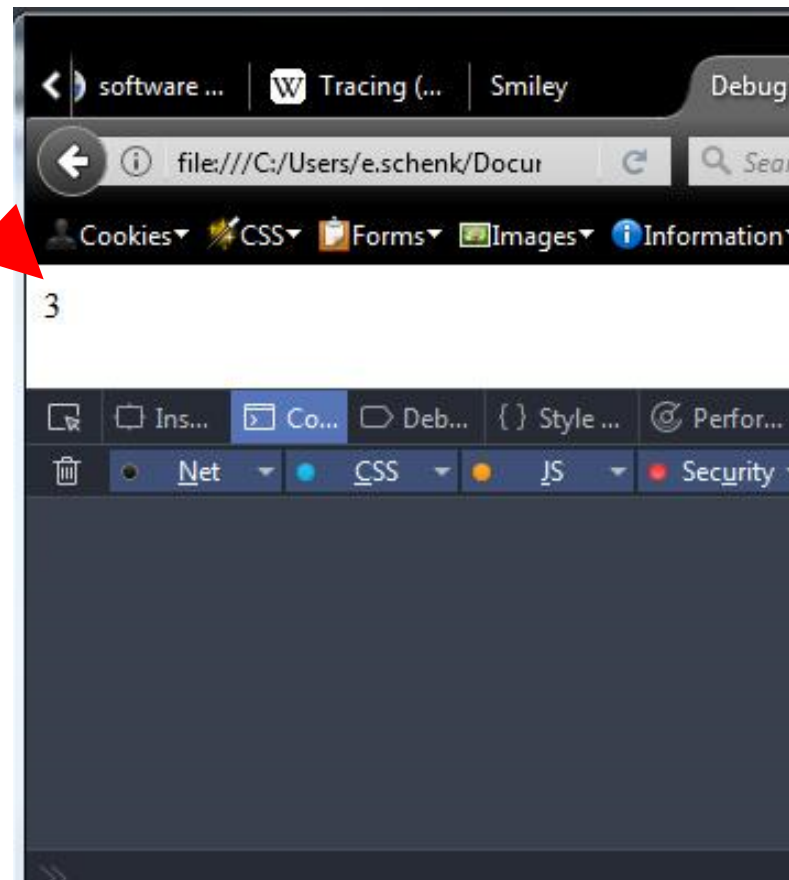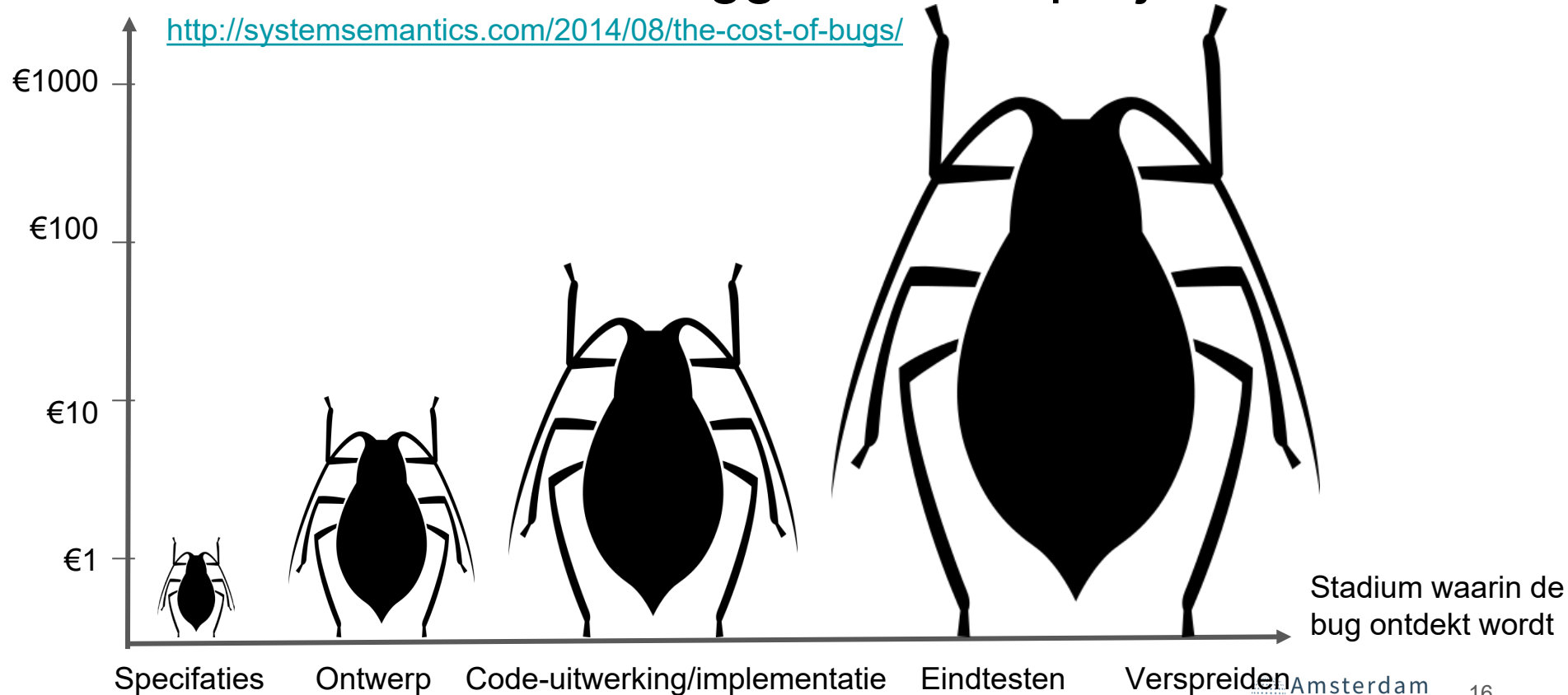
De kosten van het debuggen in een project

http://systemsemantics.com/2014/08/the-cost-of-bugs/

€1000

€100

€10

€1

Stadium waarin de bug ontdekt wordt

Specifaties   Ontwerp   Code-uitwerking/implementatie   Eindtesten   Verspreiden

Opdracht JavaScript debuggen 1

Download JS_debuggen_1.html, maak JS werkend

https://github.com/amsterdam-tech-academy/javascript_2022/tree/main/javascript_debuggen_1

Opdracht JavaScript debuggen 2

Download JS_debuggen_2.html, maak JS werkend
https://github.com/amsterdam-tech-academy/javascript_2022/tree/main/javascript_debuggen_1