

# Reactin lyhyt oppimäärä

koko **koodi101**-kurssi yhdessä slides-esityksessä

# Mikä ihmeen JavaScript

## Python

```
1  # variables
2  a = 1
3  b = 2
4
5  # functions
6  def sum(x, y):
7      |   return x + y
8
9
10 # printing
11 print("hello world")
12
13 # lists
14 list = []
15 list.append("kana") # list would be: ["kana"]
16
17 # lists
18 greetings = [
19     'Hello',
20     'Hi',
21     'Bye',
22     'Goodbye'
23 ]
24
```

## JavaScript

```
1  // variables
2  let a = 1
3  const b = 2
4
5  // functions
6  ✓ function sum(x, y) {
7      |   return x + y
8      }
9
10 // printing
11 console.log("hello world")
12
13 // lists
14 let list = []
15 list.push("kana") // list would be: ["kana"]
16
17 // lists
18 ✓ let greetings = [
19     'Hello',
20     'Hi',
21     'Bye',
22     'Goodbye'
23 ]
24
```

# Listat

## Python

```
17 # lists
18 greetings = [
19     'Hello',
20     'Hi',
21     'Bye',
22     'Goodbye'
23 ]
24
25 # iterate over every single one
26 for greeting in greetings:
27     print(greeting)
28
29 """
30 prints:
31     Hello
32     Hi
33     Bye
34     Goodbye
35 """
```

## JavaScript

```
17 // lists
18 √ let greetings = [
19     'Hello',
20     'Hi',
21     'Bye',
22     'Goodbye'
23 ]
24
25 // iterate over every single one
26 √ greetings.forEach( function(greeting) {
27     console.log(greeting)
28 })
29 /*
30 prints:
31     Hello
32     Hi
33     Bye
34     Goodbye
35 */
```

# Listojen muuttaminen

Python

```
37 # add "!" to every greeting
38 for i in range(len(greetings)):
39     greetings[i] = greetings[i] + "!"
40
41
42 print(greetings) # greetings is now ["Hello!", "Hi!", ...]
```

# Listojen muuttaminen

JavaScript

```
37 // add "!" to every greeting
38 for (let i = 0; i < greetings.length; i++) {
39     greetings[i] = greetings[i] + "!"
40 }
41
42 console.log(greetings); // greetings is now ["Hello!", "Hi!", ...]
```

# .map()

JavaScript

```
44 // add "!" to every greeting with map
45 let better_greetings = greetings.map( function(greeting) {
46 |     return (greeting + "!")
47 | })
48
49 console.log(better_greetings)
```

# HTML

Suomalaisittain “hötömölä”

# HTML:n perusteet

## HTML

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width, initial-scale=1.0">
7      <title>Koodi101</title>
8  </head>
9  <body>
10     <h1>Hello World</h1>
11     <p>you can format webpages with html</p>
12 </body>
13 </html>
```



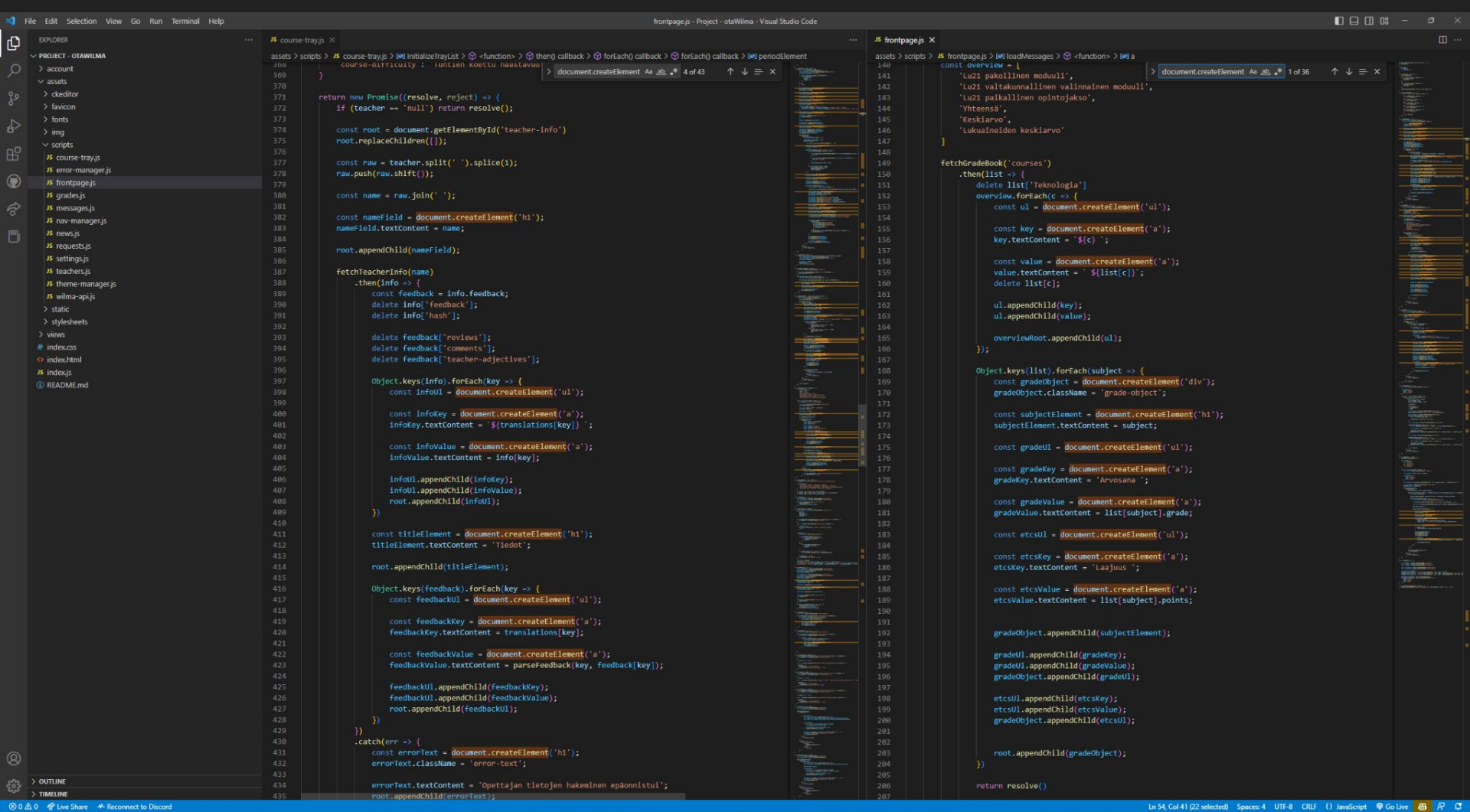
# Hello World

you can format webpages with html

## HTML:n muokkaaminen

```
58 // you can modify webpage with JavaScript
59 let header = document.createElement('h1');
60 header.textContent = "Hello from JavaScript";
61
62 document.appendChild(header);
```

Ongelma?



## Ratkaisu ongelmaa: React

```
1  function App() {  
2      |    return (  
3          |    <h1>Hello From React</h1>  
4          |    )  
5  }  
    |
```

# hötömölöä ja javascriptiä

```
7   function Variable() {  
8       |   let kana = "kissa"  
9   ✓   |   return (  
10      |       <h1>{kana}</h1>  
11      |   )  
12      }
```

palautetaan elementtejä

```
33  ✓ function HelloElement() {  
34      |     return <h1>Hello World</h1>  
35      | }  
36  
37  ✓ function App() {  
38      |     return <HelloElement />  
39      | }
```

# palautetaan lista hötömölöä

```
14  ∨ function Greetings() {  
15  ∨      let greetings = [  
16          'Hello',  
17          'Hi',  
18          'Bye',  
19          'Goodbye'  
20      ]  
21  
22  ∨      return (  
23  ∨          <>  
24          {  
25  ∨          greetings.map( function(greeting) {  
26              return <p>{greeting}</p>  
27          })  
28          }  
29          </>  
30      )  
31  }
```

Hello

Hi

Bye

Goodbye