

Lecture 6 - Async - Handout

Additional materials:

Event loop:

Philip Roberts explaining the EventLoop:

<https://www.youtube.com/watch?v=8aGhZQkoFbQ>

His event loop simulator: <http://latentflip.com/loupe/>

Promises:

Promise documentation:

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Promise

Promise tutorial: <https://javascript.info/promise-basics>

Promise tutorial s with an example of advanced features of BlueBird (promise library)

<https://hackernoon.com/understanding-promises-in-javascript-13d99df067c1>

Railway oriented programming: <https://fsharpforfunandprofit.com/rop/>

Video is linked on the linked page...

There are loads of other videos on youtube taking on Promises. Here's one of them:

FunFunFunction promise tutorial:

<https://www.youtube.com/watch?v=2d7s3spWAzo>

(There's a second page...)

Async / Await

An amazing async/await tutorial with an example of why you might want to avoid it. The difference between these pieces of code is explained there:

```
8   async function run2() {
9     for (const i in [1, 2, 3]) {
10      const response = await fetch('https://randomuser.me/api/');
11      const obj = await response.json();
12      console.log(obj.results[0].name);
13    }
14  }
15
16  async function run() {
17    return await Promise.all([1, 2, 3].map(callbackfn: async () => {
18      const response = await fetch('https://randomuser.me/api/');
19      const obj = await response.json();
20      console.log(obj.results[0].name);
21    }));
22  }
23 }
```

<https://hackernoon.com/understanding-async-await-in-javascript-1d81bb079b2c>

There are loads of other videos on youtube taking on Async/Await. Here's one of them:
FunFunFunction async / await tutorial

<https://www.youtube.com/watch?v=568g8hxJJp4>