

02

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凹凸实验室

# async/await

ES(N)异步编程

by Simba

实现一个sleep

# sleep

```
function sleep(delay, callback) {  
    setTimeout(callback, delay)  
}
```

```
sleep(5000, function(){  
    //...  
})
```

# sleep

```
sleep(5000, function(){  
    // do sth  
  
    ...  
    // one more time  
    sleep(5000, function(){  
        ...  
    })  
})
```

通过Promise来实现

# Promise

```
function sleep(delay) {  
  return new Promise(function(resolve, reject){  
    setTimeout(function(){  
      resolve();  
    }, delay)  
  })  
}  
  
sleep(5000).then(function(){  
  //...  
  
  return sleep(5000)  
}).then(do)
```

# Promise

```
function sleep(delay) {  
  return function(){  
    return new Promise(function(resolve, reject){  
      setTimeout(function(){  
        resolve();  
      }, delay)  
    })  
  }  
}
```

```
sleep(5000).then(do).then(sleep(5000)).then(...)
```

async/await

async/await



# async/await

```
function sleep(delay) {  
  return new Promise(function(resolve, reject){  
    setTimeout(function(){  
      resolve();  
    }, delay)  
  })  
}
```

```
async function do(){  
  await sleep(5000);  
  ...  
}
```

# async/await

```
async function do(){  
  try{  
    //返回resolve结果  
    var a = await sleep(5000);  
    ...  
  }
```

```
    for(var i=0; i<10; i++){  
      await sleep();  
    }
```

```
  }catch(e){}  
}
```

# async/await

- async模块
- Babel
- Node7+

**目标：写更高效更优雅的代码**

# async/await

```
桌面 — -bash — 74x38
bogon:Desktop Simba$ node -v
v7.0.0
bogon:Desktop Simba$ 
3  function sleep(delay){
4      return new Promise(function(resolve, reject){
5          setTimeout(function(){
6              resolve('times: ' + times++)
7          }, delay)
8      })
9  }
10
11  var list = async function (){
12      console.log(await sleep(1000));
13      console.log('after times: 0');
14
15      for(var i=0; i< 3; i++){
16          console.log(await sleep(1000));
17      }
18  }
19
20  list();
```

写一个符合 Promises/A+ 规范并可配合 ES7 async/await 使用的 Promise

<https://zhuanlan.zhihu.com/p/23312442>

关于Promise

<https://aotu.io/notes/2016/01/08/promise/>

THANKS

FOR YOUR WATCHING

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