

EP 8 : Throw and Try to Catch, Promise and Async-Await




Throw and Try to Catch



- Try คือส่วนที่วางโค้ดที่อาจเกิด Errors ขึ้นได้
- Catch คือส่วนที่จะทำงานเมื่อเกิด Errors ขึ้น
- Throw คือส่วนที่สร้าง Errors เมื่อเกิดการทำงานที่เราไม่ต้องการ
- Finally คือการทำงานส่วนสุดท้ายหลังจาก Try และ catch



```
1 try {  
2   // Block of code to try  
3 }  
4 catch(err) {  
5   // Block of code to handle errors  
6 }  
7 finally {  
8   // Block of code to be executed regardless of the try / catch result  
9 }
```



```
1  const x = 5
2  try {
3    if(x == "") throw "is empty";
4    if(isNaN(x)) throw "is not a number";
5    x = Number(x);
6    if(x > 10) throw "is too high";
7    if(x < 5) throw "is too low";
8  }
9  catch(error) {
10   console.error(`Error: ${error}`)
11 }
12 finally {
13   console.log('DONE')
14 }
```

Promise and Asynchronous



"I will finish later!"

Functions running in parallel with other functions are called asynchronous

A good example is JavaScript `setTimeout()`

"I Promise a Result!"


"Producing code" is code that can take some time

"Consuming code" is code that must wait for the result

A Promise is a JavaScript object that links producing code and consuming code



```
1 let promise = new Promise((resolve, reject) => {  
2   setTimeout(() => {  
3     resolve('Hello');  
4   }, 1000);  
5 });  
6  
7 promise.then(value => {  
8   console.log(`Resolved: ${value}`);  
9 });  
10  
11 console.log('Main program');
```



```
1 let myPromise = new Promise(function(myResolve, myReject) {
2   // "Producing Code" (May take some time)
3
4   myResolve(); // when successful
5   myReject();  // when error
6 });
7
8 // "Consuming Code" (Must wait for a fulfilled Promise)
9 myPromise.then(
10  function(value) { /* code if successful */ },
11  function(error) { /* code if some error */ }
12 );
```

Async and Await



"async and await make promises easier to write"

async makes a function return a Promise

await makes a function wait for a Promise

รูปจาก w3school



```
1  async function myPromise() {  
2    return new Promise(function(resolve, reject) {  
3      resolve("Javascript !!");  
4    });  
5  }  
6  
7  const response = await myPromise()
```

Let's **implement** some project



Rick and Morty Characters

Professor Sanchez



Professor Sanchez

Soulless Puppet



SEE YOU SOON ...