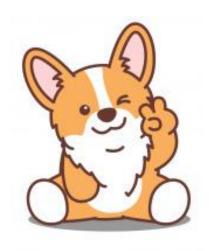


# **EP 8:** Throw and Try to Catch, Promise and Async-Await





## **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";
    x = Number(x);
if (x > 10) throw "is too high";
7 if(x < 5) throw "is too low";</pre>
9 catch(error) {
     console.error(`Error: ${error}`)
12 finally {
     console.log('DONE')
```



### **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





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



```
let myPromise = new Promise(function(myResolve, myReject) {
       myResolve(); // when successful
       myReject(); // when error
     });
     myPromise.then(
       function(value) { /* code if successful */ },
       function(error) { /* code if some error */ }
11
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





```
• • •
   async function myPromise() {
    return new Promise(function(resolve, reject) {
      resolve("Javascript !!");
   });
  const response = await myPromise()
```



### Let's implement some project





#### Rick and Morty Characters

Professor Sanchez



#### **Professor Sanchez**

Soulless Puppet





### **SEE YOU SOON ...**