

May 2021

Promise

```
const pait = new Promise((resolve, reject) => {
```

```
  setTimeout(() => {
    resolve(message)
  }, 2000);
```

```
  })
```

```
  console.log(pait);
```

```
  print
```

```
    .then((response) => {
```

```
      console.log(response);
```

```
    })
```

```
    .catch((message) => {
```

```
      console.log(message);
```

```
    })
```

then when a promise is successful, you can use the resolved data.

catch. when a promise fails, you catch the error and do something with the error information

finally when a promise settles (fails or passes), you can finally do something.

May	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
22	23	24	25	26	27	28	29	30	31											

May 2021

Promise is in one of the 3 different states

- Pending - The initial state of promise.
- Fulfilled - The state of a promise representing a successful operation.
- Rejected - The state of promise representing a failed operation.

```
function print() {
```

```
  return new Promise((res, rej) => {
```

```
    setTimeout(() => {
```

```
      message = 'print successful'
```

```
      res(message)
```

```
    }, 2000);
```

```
  })
```

```
  }
```

```
  print() .then((res) => { console.log(res); })
```

```
(new Promise(() => {3}) .then(). catch())
```

S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F
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22	23	24	25	26	27	28	29	30	31											

31

Monday

// fn handled by printee

function Print(data) {

return new Promise ((res, rej) => {

setTimeout(() => {

console.log('printing completed', data);
message = 'print successful';

res(message)

}, 2000);

})

}

// over fn to start printing

function callPrintee() {

const result = print('sample')

console.log(result);

}

and

→ async function callPrintee() {

const result = await print('sample')

console.log(result);

}

The async/await syntax enables you to handle promise without using .then() and .catch() method chaining, which also removes the need for nested callbacks.

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	22	23	24	25	26	27	28	29	30					

May 2021

June 2021

02

Wednesday

Async makes a fn return a promise.
await makes a fn wait for a promise.

function add(n1, n2) {

return new Promise ((res, rej) => {

setTimeout(() => {

let sum = n1 + n2

res(sum)

}, 2000)

})

}

function mult(n1) {

return new Promise ((res, rej) => {

setTimeout(() => {

let prod = n1 * 100

res(prod)

}, 2000)

})

}

function div(n1) {

return new Promise ((res, rej) => {

setTimeout(() => {

let value = n1 / 10

res(value)

}, 2000)

})

}

03

Thursday

June

June	T	W	T	F	S	S	M	T	W	T	F	S	S	M
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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04
Friday

June 2021

```

async function calculate() {
  const sum = await add(2,3)
  console.log({sum});

```

```

const prod = await mult(sum)
console.log({prod});

```

```

const result = await div(prod)
console.log({prod});
}

```

calculator()

only final o/p

05

Saturday

```

async function calculate() {
  const result = await add(2,3)
  const result = await mult(sum)
  const result = await div(prod)
  console.log({result});
}

```

while using .then

```

add(2,3).then((sum) => {
  mult(sum).then((prod) => {
    div(prod).then((result) => {
      console.log(result);
    })
  })
})

```

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June 2021

06
Sunday

Exception handling

```

1. try {
  2. catch (err) {
  }

```

```

try {
  console.log('start');
  let a=20, b=30
  let sum=a+b
  console.log(sum);
  console.log('end');
}

```

```

} catch (err) {
  console.log(err);
}

```

```

console.log('Hai');

```

07
Monday

```

2. finally {
  console.log('finally');
}

```

To intentionally make error

```

try {
  console.log('start');
  let a=20, b=30

```

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Throw

June 2021

The ~~throw~~ statement allows you to ~~throw~~ a custom error. The throw statement ~~throws~~ (generates) an error. The technical term for this is: The throw statement throws an exception. The throw statement throws a user-defined exception. The execution of the current function will stop (The statements after throw won't be executed), and the control will be passed to the first catch block in the call stack.

API (Application programming Interface)

Used to inter connect different softwares.

Browsers API

document.getElementById()

↓
API

DOM - Browser API

console -
local storage
geolocation

Fetch

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Location

Example navigator.geolocation . get current position (show pos)

function showPosition (p) {

const latitude = p.coords.latitude

const longitude = p.coords.longitude

console.log(latitude, longitude)

}

function getCoordinates () {

fetch('url').then((res) => {

3

• catch (err) => {

console.log(err)

3}

fetch is a promise

function getCoordinates () {

json.

fetch('url')

• then (res) => {

return res.json()

3

then (result) => {

console.log(result)

3}

June

T	W	T	F	S	S	M	T	W	T	F	S	S	M
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June 2021

Case 2) $\log_2 20000$
 $\{ \log_2 20000 \} 4440$

33

25 Jan

13

It is a flexible format for data exchange that enjoys wide support in modern programming languages and software systems. It allows developers to store variable data types as human-readable code. It is used in many commercial data objects.

Sunday

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