

`Promise.allSettled(promises)` (recently added method) – waits for all promises to settle and returns their results as an array of objects with: `status`: "fulfilled" or "rejected" value (if fulfilled) or `reason` (if rejected).

`Promise.race(promises)` – waits for the first promise to settle, and its result/error becomes the outcome.

`Promise.any(promises)` (recently added method) – waits for the first promise to fulfill, and its result becomes the outcome. If all of the given promises are rejected, `AggregateError` becomes the error of `Promise.any`.

`Promise.resolve(value)` – makes a resolved promise with the given value.

`Promise.reject(error)` – makes a rejected promise with the given error. Of all these, `Promise.all` is probably the most common in practice.

Watch Live On Youtube below:



Episode 25 : this keyword in JavaScript

In JavaScript, the `this` keyword refers to an object, which object depends on how `this` is being invoked (used or called).

`this` in global space

Anything defined globally is said to be in a global space.

```
console.log(this); // refers to global object i.e. window in case of browser
// 💡 global object differs based on runtime environment,
```

this inside a function

```
function x() {
  // the below value depends on strict/non-strict mode
  console.log(this);
  // in strict mode - undefined
  // in non-strict mode - refers to global window object
}
x();
// 💡 Notes:

// On the first go feels like `this` keyword in global space and inside
function behaves same but in reality it's different.

// The moment you make JS run in strict mode by using: "use strict" at the
top, `this` keyword inside function returns `undefined` whereas global
space will still refers to global window object
```

this substitution -> According to this substitution, if the value of this keyword is null/undefined, it will be replaced by globalObject only in non-strict mode. This is the reason why this refers to global window object inside function in non-strict mode.

💡 So to summarize, the value of this keyword inside function is undefined, but because of this substitution in non-strict mode this keyword refers to globalWindowObject and in strict mode it will still be undefined

this keyword value depends on how the function is called. For eg:
In strict mode:

```
x(); // undefined
window.x(); // global window object
```

this inside a object's method

```
// `x` key below is a method as per terminology
const obj = {
  a: 10,
  x: function () {
    console.log(this); // {a: 10, x: f()}
    console.log(this.a); // 10
  }
}
obj.x(); // value of `this` is referring to current object i.e. `obj`
```

call, apply & bind methods

For detail around call, apply and bind method. Refer [here](#).

```

const student = {
  name: 'Alok',
  printName: function () {
    console.log(this.name);
  }
}
student.printName(); // Alok

const student2 = {
  name: 'Kajal',
}
student2.printName(); // throw error

// ? how to re-use printName method from `student` object
student.printName.call(student2); // Kajal
// Above `call` method is taking the value of `this` keyword
// So, Inside `printName` method value of `this` is now `student2` object

// So, call, bind and apply is used to set the value of this keyword.

```

this inside arrow function

Arrow function doesn't have their own this value, they take the value from enclosing lexical context.

```

const obj = {
  a: 10,
  x: () => {
    console.log(this); // window object
    // Above the value of `this` won't be obj anymore instead it will
    be enclosing lexical context i.e. window object in current scenario.
  }
}
obj.x();

const obj2 = {
  a: 10,
  x: function () {
    const y = () => {
      console.log(this);
      // Above the value of `this` will be obj2 as function y's
      enclosing lexical context is function `x`.
    };
    y();
  }
}
obj2.x();

```

this inside DOM

It refers to HTML element.

```

<button onclick="alert(this)">Click Me</button>
<!-- [object HTMLButtonElement] Button element -->

```

Watch Live On Youtube below: