022 TypeScript - arrow function and this

TypeScript Kata List – Blog Page

[TypeScript Kata List on GitHub](https://github.com/robertdunaway/katas-typescript)

# Duration

10 minutes

# Brief

Using arrow functions.

You’ll notice that “this.userId” is undefined. Re-write the class using an arrow function so “this.userId” works.

### For More Information

BING/GOOGLE: “TypeScript arrow function this”

# Instructions

Get tutorial folder or the entire katas-typescript repo.

Open the [before/\*.sln] file and execute the kata.

Feel free to execute this kata multiple times because repetition creates motor memory.

# Github

* Before (start kata with this)
  + https://github.com/robertdunaway/katas-typescript/tree/master/022%20TypeScript%20-%20arrow%20function%20and%20this/before
* After
  + https://github.com/robertdunaway/katas-typescript/tree/master/022%20TypeScript%20-%20arrow%20function%20and%20this/after

# Kata

Run the application with the following code and make not of the value returned by “this.userId”.

(function () {

// Let's get started!

console.log("Let's get started!");

// "this" works differently in different circumstances.

// In this class "this" works in a way you might now expect.

class employee {

userId: string;

displayUserId() {

setTimeout(function () {

console.log(`"this.UserId" is: ${this.userId}`);

}, 1000);

}

}

// Creating an object of type employee.

var myEmployee = new employee();

myEmployee.userId = 'abc123';

// Calling the displayUserId method.

// Notice "this.userId" returns "undefined".

myEmployee.displayUserId();

})();

Create a new class with the “displayUserId” function as an arrow function to allow “this” to work as expected.

class employee2 {

userId: string;

displayUserId() {

setTimeout(() => {

console.log(`"this.UserId" with an arror function is: ${this.userId}`);

}, 1000);

}

}

// Creating an object of type employee.

var myEmployee2 = new employee2();

myEmployee2.userId = 'abc123';

// Calling the displayUserId method.

// Notice "this.userId" returns "abc123".

myEmployee2.displayUserId();

# Next

Take a few minutes and imagine more examples.