JAVASCRIPT

Arrow Functions

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Arrow functions are a new ES6 syntax for writing JavaScript functions.

Arrow functions always have to be function expressions.

Not function declarations.

Arrow function expressions are also called fat arrow functions because they utilize a new token that looks like a fat arrow.

No need for function keyword.

Arrow functions are anonymous.

There are two benefits to arrow functions over traditional function expressions:

- First, they are less verbose.
- Second, their this is picked up from surroundings (lexical scope). Therefore no need to use bind() or use that = this anymore

BASIC SYNTAX

```
(param1, param2, …, paramN) => { statements }
```

Parentheses are optional in case of only one parameter:

```
(singleParam) => { statements }
```

or

```
singleParam => { statements }
```

BASIC SYNTAX

A function with no parameters must be enclosed in parentheses :

```
() => { statements }
```

BASIC SYNTAX

Body of function that returns an object literal expression must be enclosed in parentheses :

```
params => ({foo: bar})
```

BASIC SYNTAX

Arrow functions can have either a concise body or a block body.

In a concise body, only an expression is needed, and an implicit return is attached. In a block body, there must be an explicit return statement.

```
(param1, param2, …, paramN) => expression
```

or

```
(param1, param2, …, paramN) => { return expression; }
```

Arrow functions cannot be used as constructors and will throw an error when used with new keyword.

Arrow functions do not have a prototype property.

Arrow functions do not have arguments object available. Using rest parameters is a good alternative.

Using arrow functions with promises/callbacks reduces the confusion surrounding the this keyword and promises/callbacks .

WHERE TO USE WHAT

- Use traditional functions in the global scope and for object methods.
- Use class for object constructors.
- Use arrow functions everywhere else.

END OF CHAPTER

APPENDIX