

JAVASCRIPT

ES6 Features-1

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JS HISTORY

ECMAScript 5 (**ES5**) or ECMAScript 2009

ECMAScript 6 (**ES6**) or ECMAScript 2015

ECMAScript 7 (**ES7**) or ECMAScript 2017

ES7 is the latest version of JS.

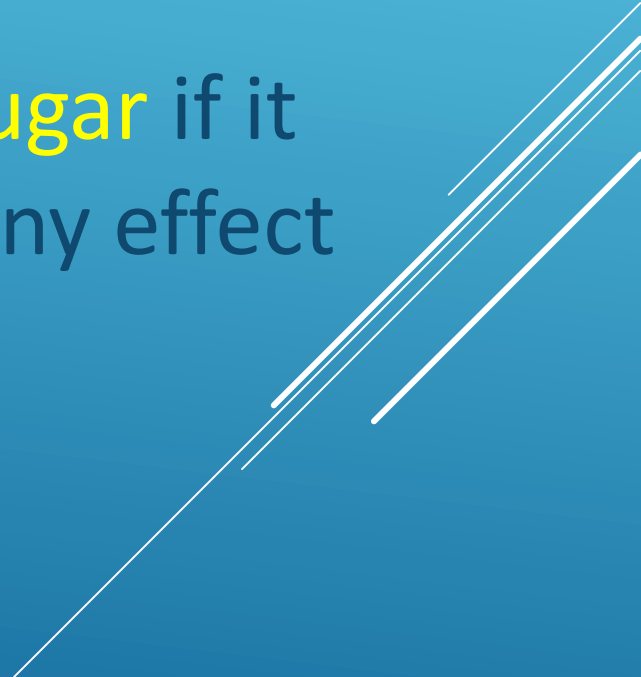
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Many of the new ES6 / ES7 features are syntactic sugar.

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In computer science, **syntactic sugar** is syntax within a programming language that is designed to make things easier (for humans) to read or to express.


A construct in a language is called **syntactic sugar** if it can be removed from the language without any effect on what the language can do

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Almost all browsers, in use today, support ES5.

But ES6 support is mixed.

Tools like **Babel** can be used to write JS code in ES6 and still ensure it runs in all browsers.

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LET & CONST




The `let` statement declares a variable, optionally initializing it to a value.



The `const` statement declares a constant, **mandatorily** initialized to a value.

The value of a constant cannot change through re-assignment, and it cannot be redeclared.

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Let & **const** are block-scoped. They only exists within the current block.

var is function-scoped.

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When an object is made a constant, assigning another object will cause an error as expected.

But, it is still possible to modify its properties.

Use `Object.freeze()` method to prevent modification.

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With **let** (unlike **var**), variables must be both declared and initialized before they can be accessed.

Otherwise an error occurs.

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TEMPLATE LITERALS



Template Literals provide syntactic sugar for constructing strings.



Template literals are enclosed by the back-tick (`) (grave accent) character instead of double or single quotes.

Template literals can contain place holders which are indicated by the Dollar sign and curly braces (**`${expression}`**).

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Template literals support Multi-line strings.



DEFAULT PARAMETERS



Default function parameters allow parameters to be initialized with default values if **no value** or **undefined** is passed

```
function foo(x=0, y=0) {  
    ...  
}
```

ENHANCED OBJECT LITERALS



PROPERTY VALUE SHORTHAND

The property value shorthand allows writing only the property name(key), if the property name matches an existing variable name .

```
let obj = { x, y };
```

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METHOD DEFINITION SHORTHAND

The method definition shorthand allows writing only the method name(key) without the **function** keyword.

ES6:

```
obj = {  
  foo (a, b) {  
    ...  
  },  
}
```

ES5:

```
obj = {  
  foo: function (a, b) {  
    ...  
  },  
};
```

COMPUTED PROPERTY KEYS

ES6 allows **property keys** of object literals to use **expressions**, making them computed property keys.

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END OF CHAPTER



APPENDIX

