
Context & This

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Agenda

- Context
- This

Context

- Execution Context is the environment / scope the current code is being evaluated in.

```
// global context  
var sayHello = 'Hello';  
  
function person() { // execution context  
    var first = 'David',  
        last = 'Shariff';  
  
    function firstName() { // execution context  
        return first;  
    }  
  
    function lastName() { // execution context  
        return last;  
    }  
  
    alert(sayHello + firstName() + ' ' + lastName());  
}
```

Context vs Scope

- Context refers to the object within which a function is executed.
- Scope pertains to the visibility of variables, and scope refers to the context within which a function is executed.

Context & This

- In JavaScript, “context” refers to an object.
- Within an object, the keyword “this” refers to that object (i.e. “self”), and provides an interface to the properties and methods that are members of that object.
- When a function is executed, the keyword “this” refers to the object that the function is executed in.
- The JavaScript .call(), .apply() and .bind() methods allow to dynamically change the context in which a function is executed

Simple Rule of *this*

- *this* refers to the global object in the following cases:
 - in the outermost context, outside of any function block
 - in functions that are not methods of objects
 - in functions that are not object constructors

Ex:

```
function a() {  
    console.log(this)  
}  
  
...  
a: function () {  
    function () {  
        console.log(this)  
    }  
}
```

Simple Rule of *this*

- When a function is called as a property on a parent object, this refers to the parent object.
- When a function is called using call() or apply(), or bind(), this refers to the first argument passed to these methods. If the first argument is null or not an object, this refers to the global object.
- When a function is called with the new operator, this refers to the newly created object.

Assignment

1. Research about `.call()`, `.apply()` and `.bind()` and give what are same and differences. Write example to demo
2. Research about javascript patterns
3. Base on a js pattern from 2, write a module for validate email, phone, username, password
4. Presence about 1,2,3



Q&A



Thanks for your listening!
