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2011-02-19

Efficiently creating JavaScript objects: closures versus prototypes

Labels: [dev](#), [javascript](#), [jslang](#)

In [“Closure Versus Prototypal Pattern Deathmatch”](#), Brendan Eich examines the question whether, when creating objects, the closure pattern or the prototypal pattern is more efficient.

The code below shows the closure pattern for creating objects.

```
function ClosurePattern() {  
  this.someMethod = function someMethod() {  
    console.log('foo');  
  }  
}  
  
var closurePattern = new ClosurePattern();
```

The code below shows the prototypal pattern for creating objects.

```
function PrototypalPattern() {}  
PrototypalPattern.prototype = {  
  someMethod: function () {  
    console.log('foo');  
  }  
}  
  
var prototypalPattern = new PrototypalPattern();
```

Summary of the post:

- Advantages of the closure pattern:
 - You can encapsulate private data.
- Advantages of the prototypal pattern:
 - Going up the prototype chain is highly optimized in most JavaScript engines and happens fast.
 - You save space, because no closure has to be created and someMethod is shared between objects (as opposed to added to each object).
 - I also find it more readable: Instance variables are defined in the constructor, instance methods are defined in the prototype.
 - Easier to analyze for tool builders. I feel for them, as they have to handle all of those JavaScript patterns and APIs out there.

Note that things will change in the not-too-distant future, as [ECMAScript Harmony](#) will bring many changes in this area.

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Dr. Axel Rauschmayer

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Deepak Anand • a year ago

the link to brendan eich's talk is broken, do you know if its available elsewhere

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Enjoying "Troll Hunters":
– "Let's call him 'Gnome Chomsky'"
– "Juliet dies in this? Nooo!"

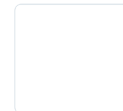
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A nice little shout out to
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JavaScr...
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14h

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Not a physics book!
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02 Feb

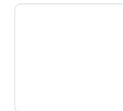
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Making our React components forbid extra props has caught SO many bugs. I highly recommend it.

npmjs.com/airbnb-prop-ty...



npm: air...
Custom ...
npmjs.com

02 Feb

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Seth Petry-Johnson
[@spetryjohnson](#)

Open strong. Be bold. Tell a story. Do something to get me interested. Opening w/ the "obligatory 'about me' slide" puts me to sleep :)

02 Feb

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Futurama's
Smelloscope
has actually
been invented

Soon from Apple:
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paradox: there
can be too
much of it

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