

Hubot

Chris Sims

Coffeescript
primer

Node.js basics

Project
structure

Main class

Practical

Hubot

Node.js IRC bot

Chris Sims

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Outline

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Sample

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Coffeescript is a language that compiles to Javascript. It tends to be quite a bit more concise.

Functions:

```
square = (x) -> x * x
```

Existence:

```
alert "I knew it!" if elvis?
```

Array comprehensions:

```
cubes = (math.cube num for num in list)
```

```
square = function(x) {  
  return x * x;  
};
```

```
if (typeof elvis !== "undefined" && elvis !== null) {  
  alert("I knew it!");  
}
```

```
cubes = (function() {  
  var _i, _len, _results;  
  _results = [];  
  for (_i = 0, _len = list.length; _i < _len; _i++) {  
    num = list[_i];  
    _results.push(math.cube(num));  
  }  
  return _results;  
})();
```

What is it?

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- Node is a software framework that allows you to write server-side applications in Javascript.
- Supposed to provide performant, asynchronous I/O in an easy-to-use package.
- Hubot was likely implemented on top of this because Coffeescript has been the *hot thing* lately.

Hello World!

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This simple example (pulled from <http://nodejs.org>) notifies the host OS that it wants to listen on a given address and port, and defines a callback for all requests. In this case, it returns Hello World.

```
var http = require('http');
http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/plain'});
  res.end('Hello World\n');
}).listen(1337, '127.0.0.1');
console.log('Server running at http://127.0.0.1:1337/');
```

The project

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```
1.9.3-p327 in hubot/ on master
> tree -L 1
.
├── Procfile
├── README.md
├── bin
├── hubot-scripts.json
├── node_modules
├── package.json
└── scripts

3 directories, 4 files
```

- Most everything is pulled in as dependencies by NPM (Node Package Manager)
- Scripts can be pulled in by listing them in `hubot-scripts.json`
- `hubot` itself is pulled in as a dependency

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Methods of note:

- `hear` - attempts to match words within a sentence
- `respond` - attempts to respond to directed requests
- `enter/leave` - performs action when a user enters/leaves the room
- `reply` - sends the built reply to the adaptor to handle

Build a plugin

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Steps to add a simple plugin:

- 1 Fork and clone `jcsims/hubot`

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- 6 Profit!!!