

TypeScript

&&

Grails



dōjōs

JavaScript MVC

Spine



BACKBONE.JS

canjs



ANGULARJS
by Google

Ext JS

Knockout.

RailWayJS

Geddy.js

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Derby

Meteor

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Socket IO





TypeScript is

- ❖ *Language for application-scale JavaScript development*
- ❖ *Typed superset of JavaScript that compiles to plain JavaScript*
- ❖ *Any browser. Any host. Any OS. Open Source.*
- ❖ *Strong Tools for Large Applications*
- ❖ *Scalable*
- ❖ *ES6 based*

TypeScript has

Clear JS

```
function Greeter(greeting) {  
    this.greeting = greeting;  
}  
  
Greeter.prototype.greet = function () {  
    return "Hello, " + this.greeting;  
};  
  
var greeter = new Greeter("world");
```


Types

```
function Greeter(greeting: string) {  
    this.greeting = greeting;  
}  
  
var greeter = new Greeter("world");
```

Types

```
function Greeter(greeting: string) {  
    this.greeting = greeting;  
}  
  
var greeter = new Greeter("world"); // ok  
  
var bad    = new Greeter(5); // bad
```

More Types

- ❖ *Numbers*
- ❖ *Boolean*
- ❖ *Null*
- ❖ *Undefined*
- ❖ *Object*
- ❖ *Void*
- ❖ *Any*

Classes

```
class Greeter {  
    greeting: string;  
    constructor(message: string) {  
        this.greeting = message;  
    }  
    greet() {  
        return "Hello, " + this.greeting;  
    }  
}  
  
var greeter = new Greeter("world");
```

Inheritance

```
class Animal {  
    constructor(public name: string) { }  
    move(meters: number) {  
        alert(this.name + " moved " + meters + "m.");  
    }  
}
```

```
class Snake extends Animal {  
    constructor(name: string) { super(name); }  
    move() {  
        alert("Slithering...");  
        super.move(5);  
    }  
}
```

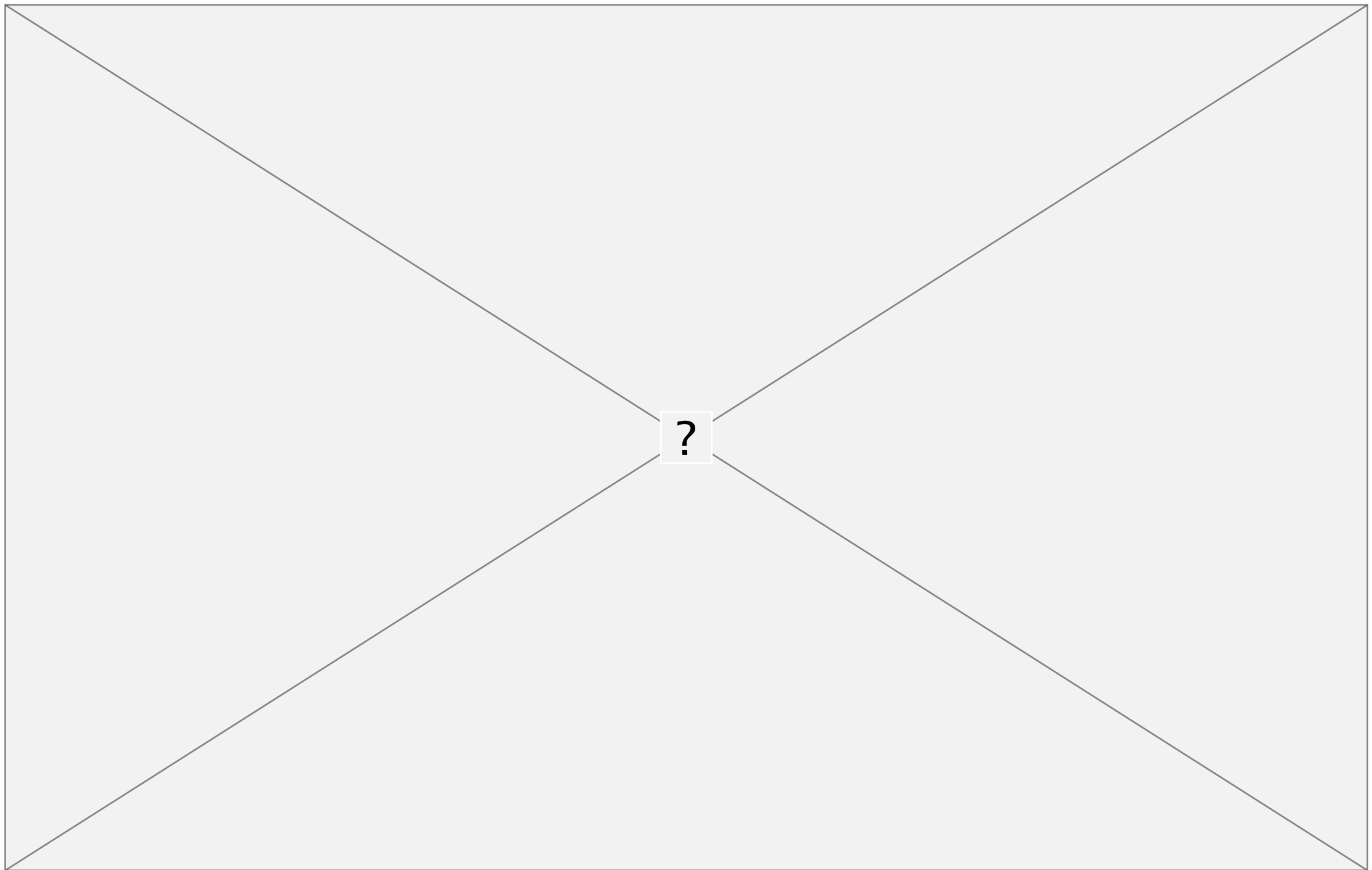
```
var sam = new Snake("Sammy the Python");
```

```
sam.move();
```


Modules

```
module Sayings {  
    export class Greeter {  
        greeting: string;  
        constructor(message: string) {  
            this.greeting = message;  
        }  
        greet() {  
            return "Hello, " + this.greeting;  
        }  
    }  
}  
  
var greeter = new Sayings.Greeter("world");
```

Interface





Install Node.js on Ubuntu

##Install the dependencies:

```
$ sudo apt-get install g++ curl libssl-dev apache2-utils
```

```
$ sudo apt-get install git-core
```

##Run the following commands:

```
$ git clone git://github.com/ry/node.git
```

```
$ cd node
```

```
$ ./configure
```

```
$ make && sudo make install
```

##Check node:

```
$ node -v
```

Install Node.js on Mac

```
if (homebrew) {  
  brew upgrade  
  brew install node  
  node -v  
} else {  
  https://github.com/mxcl/homebrew/wiki/installation  
}
```


Install Node.js on Windows

<http://nodejs.org/#download>

Install NPM

##Ubuntu:

```
$ curl http://npmjs.org/install.sh | sh
```

##Mac

```
$ brew upgrade
```

```
$ brew install npm
```

##Windows:

```
$ http://npmjs.org/doc/README.html#Installing-on-Windows-Experimental
```

Install TypeScript

##Ubuntu && ##Mac && ##Win

```
$ npm install -g typescript
```

```
$ ts -v
```



Grails integration

- ❖ *Manual with console (\$ ts path/to/your/ts/file)*
- ❖ *IDE compilation*
- ❖ *TypeScript Resource plugin*

Resource plugin

TypeScript resource plugin

6 votes



Tags : [javascript](#), [resources](#), [typescript](#)  | Latest : **0.4.1** | Last Updated: **03 Апрель 2013** | Grails version : 2.0 > *

Authors : Dima Ovcharenko | License : [MIT License](#)

Dependency :

```
compile ":typescript:0.4.1"
```

[Documentation](#)[Source](#)[Issues](#)

Summary

Helps you manage typescript code in your Grails application.

Installation

```
grails install-plugin typescript
```

Configure:

Open `/grails-app/conf/BuildConfig.groovy`. In plugins hash after runtime `":resources:1.1.6"` add

```
runtime ":typescript:0.3.9"
```

And start your application:

```
grails run-app
```

Using:

Open `/grails-app/conf/ApplicationResources.groovy`. Put this lines in to it:

```
modules = {  
    application {  
        resource url:'js/application.js'  
        resource url:'js/app.ts', attrs: [type:'js']  
        resource url:'js/main.ts', attrs: [type:'js']  
    }  
}
```

After go to your `web-app/js` folder and create `app.ts` and `main.ts`

Questions???

**Thanks for your
attention!**