



GWT & Angular Relatives or Foes

Agenda

- What are GWT and Angular
- Why these tools appeared
- Features Comparison
- Who rules
- The future of GWT
- Questions

GWT

Google Web Toolkit (GWT) is an open source set of tools that allows web developers to create and maintain complex JavaScript front-end applications in Java.

GWT version 1.0 was released on May 16, 2006.



GWT Sample

```
public class MyAppEntryPoint implements EntryPoint {  
  
    @Override  
    public void onModuleLoad() {  
        Button button = new Button("Click me!", new ClickHandler() {  
            @Override  
            public void onClick(ClickEvent event) {  
                Window.alert("Hello!");  
            }  
        });  
  
        RootPanel rootPanel = RootPanel.get();  
        rootPanel.add(button);  
    }  
}
```

Angular

AngularJS is an open-source web application framework mainly maintained by Google. It aims to simplify both the development and the testing of such applications by providing a framework for client-side model–view–controller (MVC) and model–view–viewmodel (MVVM) architectures, along with components commonly used in rich Internet applications.

Angular Sample

```
<html lang="en">
<head>
  <script src="js/libs/angular.js"></script>
</head>
<script>
  var angApp = angular.module("angApp", []);
  angApp.controller("angController", function ($scope) {
    $scope.clicker = function () {
      alert("Hello");
    }
  });
</script>
<body ng-app="angApp" ng-controller="angController">
  <button ng-click="clicker()">Click me!</button>
</body>
</html>
```

Why these tools appeared



Features Comparison

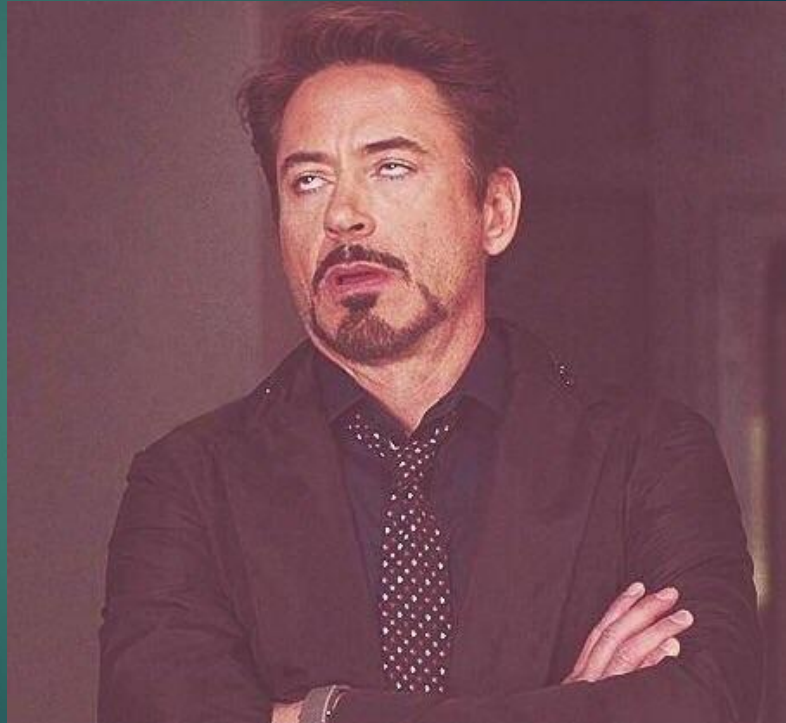
	Angular	GWT
SPA (Single-Page-App)	✓	✓
Dependency Injection	✓	✓
MVC/MVP	✓	✗
Compiler	✓	✓
Google	✓	✓
Bidirectional model-view binding	✓	✗
Widgets out of box	✗	✓
Speed of learning	✓	✗

Who rules



The future of GWT

or “Is GWT dead?”



JsInterop

Java

```
package com.foo;

@JsType
public class Bar {
    public boolean bool = true;
    public Bar(boolean bool) {this.bool = bool;}
    public String foo() { return "Hello ";}
    public static String baz() { return "GWTCon!";}
}
```

Expose your type definition to JavaScript world.

JavaScript

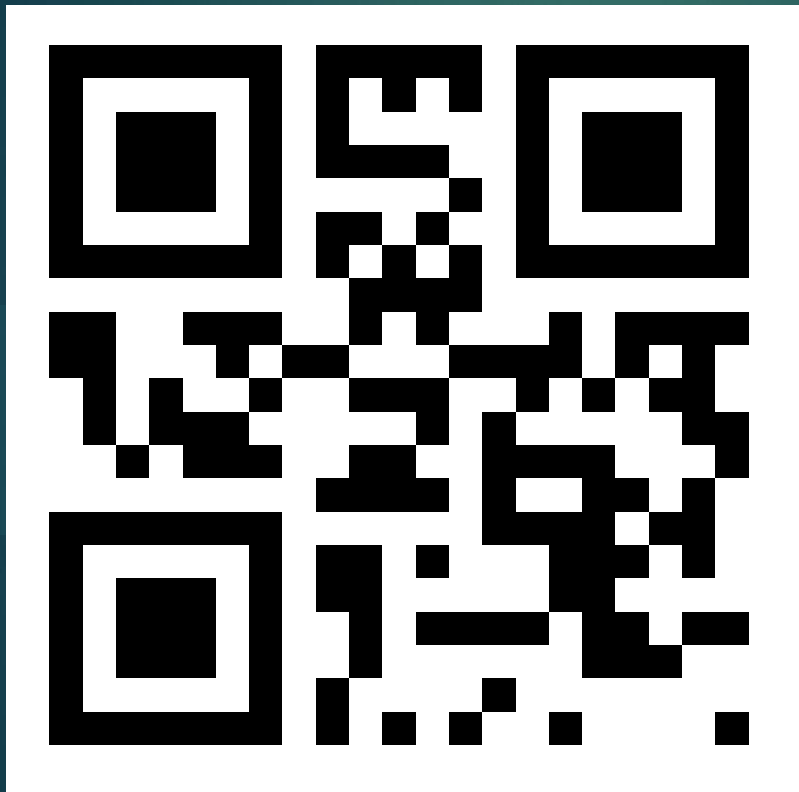
```
var bar = new com.foo.Bar();
if (bar.bool) {
    alert(bar.foo() + com.foo.Bar.baz());
}
```

JavaScript can use your public API of exposed Java objects.



Google Drive link with easy to try

helloworlds: goo.gl/RK0qXx



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