



AngularJS Workshop



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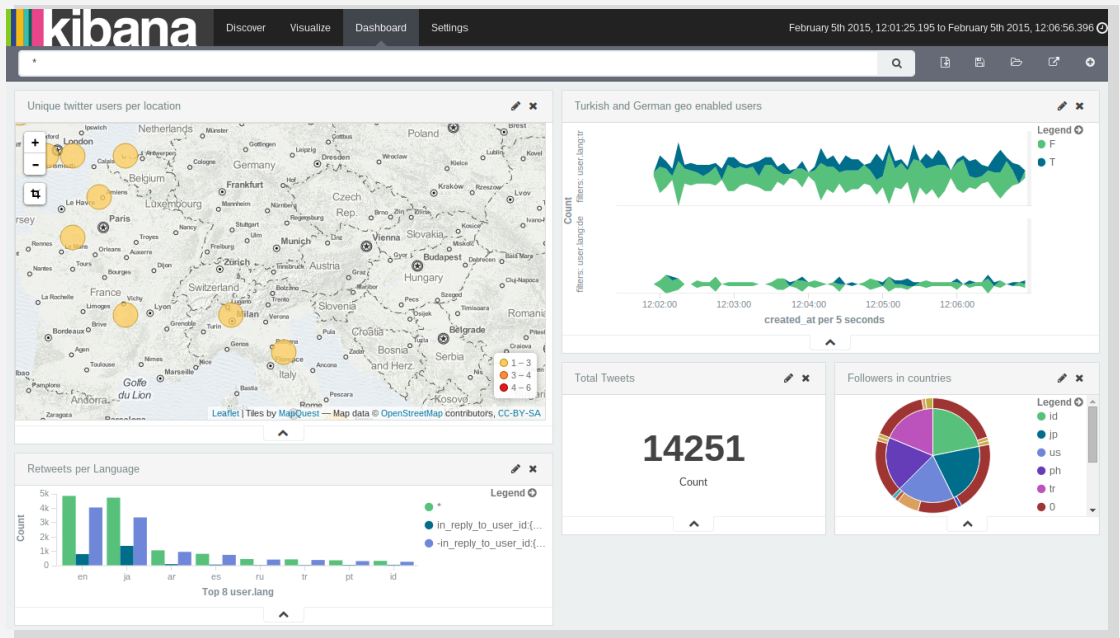
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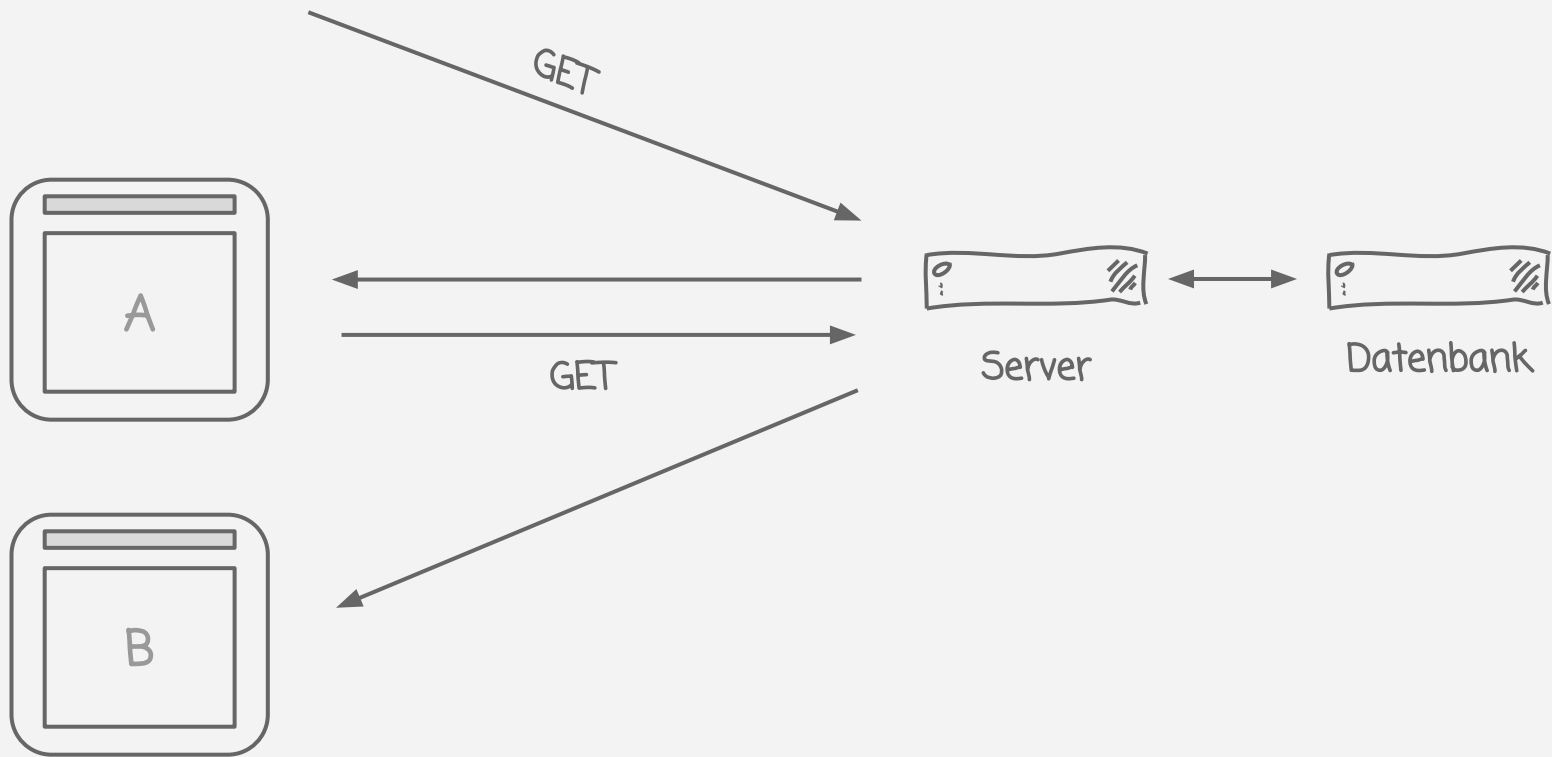
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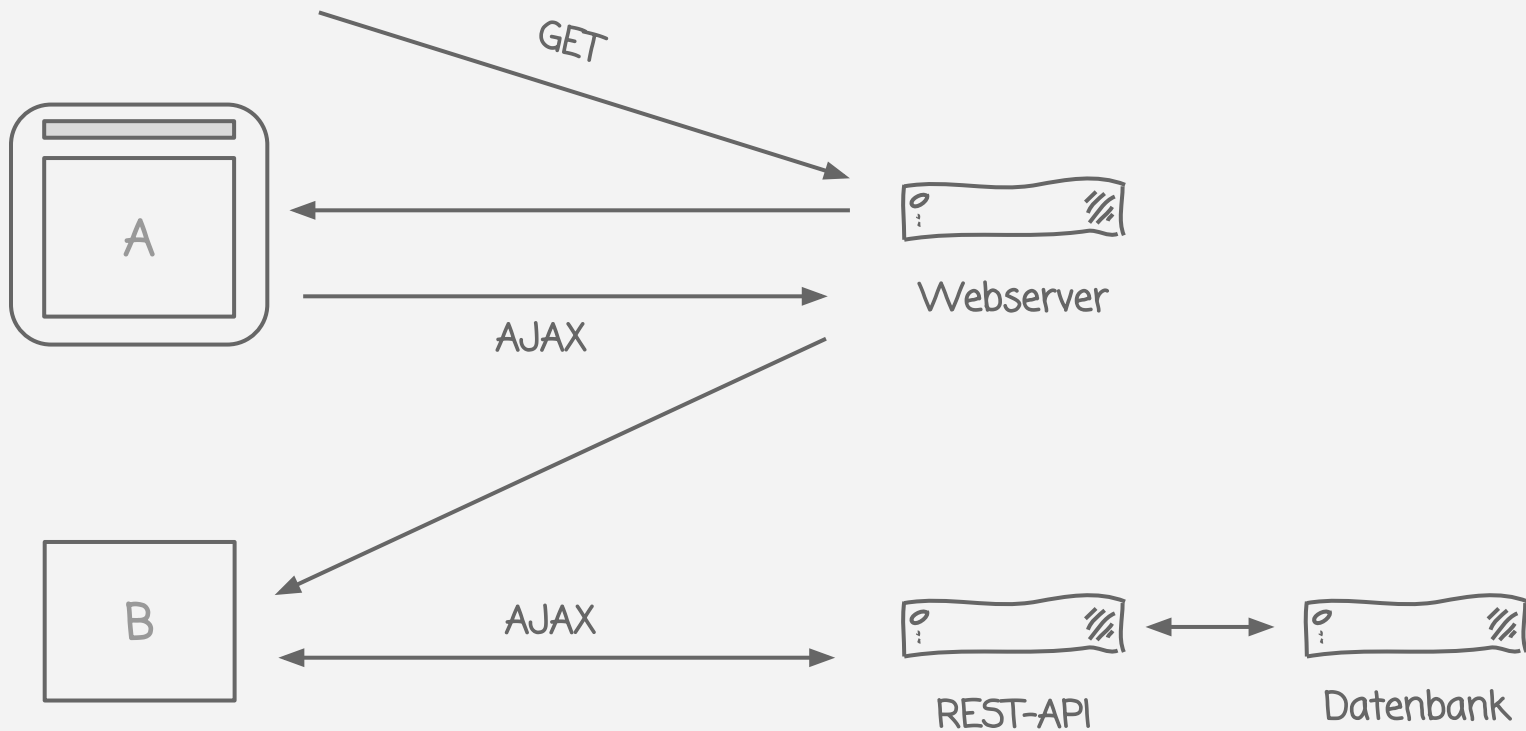
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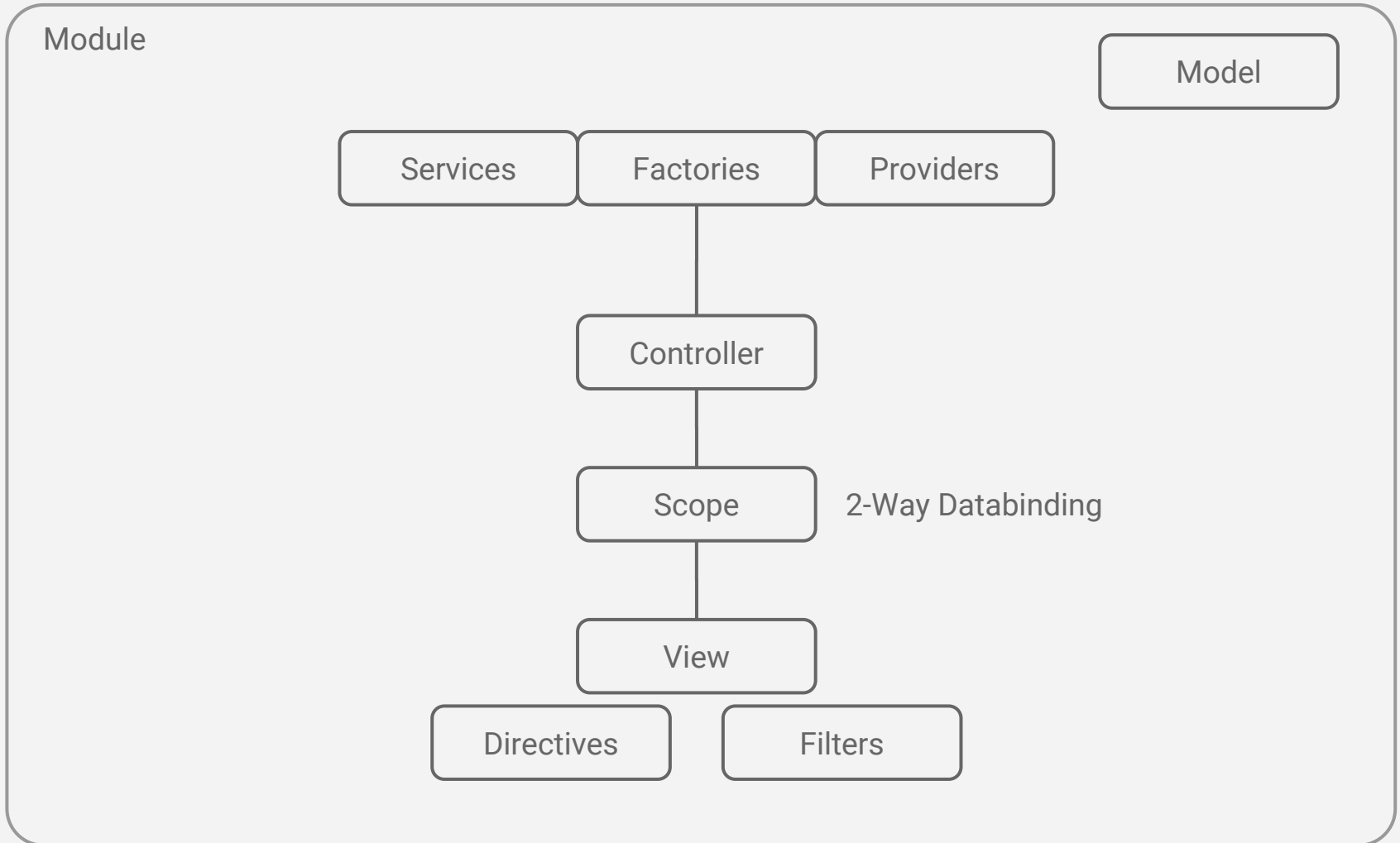
Multipage Application



Single Page Application (SPA)



Angular Terminology



Angular Modules ng-app

HTML

```
<!DOCTYPE html>  
<html ng-app="demo">  
...  
</html>
```

Module Name

JavaScript

```
angular.module('demo', []);
```

Dependencies / Required modules

Angular binding values

HTML

```
...  
<div>  
  {{ 2 + 2 }}  
</div>  
...
```

JavaScript binding



Angular Controller / Scope

HTML

```
<body ng-controller="MainController">
  Hello {{ name }}
</body>
```

**"name" variable on
the scope**

Controller name

JavaScript

```
var app = angular.module('demo', []);
app.controller('MainController', function($scope) {
  $scope.name = "World";
});
```

Injected dependencies (Services, Filters, etc.)

ng-model

HTML

ng-model directive

```
<body ng-controller="MainController">
  <input type="text" ng-model="name" placeholder="Your name ...">
  Hello {{ name }}
</body>
```

2-way databind "name" to input of text field

JavaScript

```
var app = angular.module('demo', []);
app.controller('MainController', function($scope) {
  $scope.name = "World";
});
```

ng-show / ng-hide

HTML

ng-show shows element, when condition is true

```
<body ng-controller="MainController">
  ...
  Known associates:
  <div ng-show="name === 'Henning'">
    Lukas, Benjamin
  </div>

  <span ng-hide="name === 'Daniel'">Mostly</span> harmless
</body>
```

ng-hide hides element, when condition is true

ng-repeat

ng-repeat, for-each over clients with "client" as loop variable

HTML

```
...  
<ul>  
  <li ng-repeat="client in clients">  
    {{ client.name }}, {{ client.firstName }}  
  </li>  
</ul>
```

JavaScript

```
...  
  $scope.clients = [  
    { name: 'Beeblebrox', firstName: 'Zaphod' },  
    { name: 'Dent', firstName: 'Arthur' }  
  ];  
...
```

ng-submit / ng-click

ng-submit: function will be called when form submits

HTML

```
...
<form ng-submit="addUser()">
  <input type="text" placeholder="Name" ng-model="user.name">
  <input type="text" placeholder="Firstname" ng-model="user.firstName">
  <button ng-click="addUser()">Add User</button>
</form>
```

ng-click executes function when element is clicked

JavaScript

```
...
$scope.addUser = function() {
  $scope.users.push({
    name: $scope.user.name,
    firstName: $scope.user.firstName
  });
  $scope.user = {};
};
...
```

Filters

applies the filter after the pipe to the clients variable

HTML

```
...  
<input type="text" ng-model="query" placeholder="Search ...">  
<div ng-repeat="client in clients | filter:query">  
  ...  
</div>  
...
```

filter for objects containing the content of the "query" variable

services

JavaScript

.service creates a new service, bind methods at `this`

```
app.service('UserService', function() {
  var users = [...];
  this.getAllUsers = function() {
    return users;
  };
  this.addUser = function(user) {
    users.push(user);
  };
});

app.controller('MainController', function(UserService) {

  $scope.users = UserService.getAllUsers();

});
```

inject UserService and call its methods

\$http service

inject \$http service for HTTP requests

JavaScript

```
app.controller('MainController', function($http) {  
    $http.get('http://api.openweathermap.org/data/2.5/find?q=Karlsruhe,DE')  
        .then(function(response) {  
            var data = response.data; // actual body of response  
            $scope.temp = data.main.temp;  
            $scope.desc = data.weather.description;  
        });  
});
```

\$http methods return a Promise, which has a method .then(), which you can pass a function that will be called, as soon as the result is ready

ngRoute - Configuration

JavaScript

Dependency to ngRoute module

```
angular.module('demo', ['ngRoute'])
.config(function($routeProvider) {
  $routeProvider
    .when('/clients', {
      templateUrl: 'views/clientList.html',
      controller: 'ClientListController'
    })
    .when('/client/:id', {
      templateUrl: 'views/client.html',
      controller: 'ClientDetailController'
    })
    .otherwise({
      redirectTo: '/clients'
    });
});
```

configure different routes,
with a template to load,
and a controller to use

module.config() method will be called to set up all services, etc.
some services expect configuration here

ngRoute - Controller

HTML

The place where the templateUrl will be loaded to

```
<div ng-view></div>
```

JavaScript

\$routeParams service give access to placeholders as defined in "/client/:id" route

```
app.controller('ClientDetailController',  
    function($scope, $routeParams, ClientService) {  
        $scope.client = ClientService.getClientById($routeParams.id);  
    });
```



Firebase

www.firebase.com

Angular Firebase

JavaScript

Require the 'firebase' module as dependency

```
angular.module('myApp', ['firebase'])
.controller(function($scope, $firebaseArray) {

    var ref = new Firebase('https://<yourapp>.firebaseio.com/clients');

    $scope.clients = $firebaseArray(ref);

    $scope.addClient = function(client) {
        $scope.clients.$add(client);
    };

});
```

Your project URL (and database path)

Angular Firebase - Auth

\$firebaseAuth service provides authentication methods

JavaScript

```
angular.module('myApp', ['firebase'])
.controller(function($scope, $firebaseAuth) {

    var ref = new Firebase('https://<yourapp>.firebaseio.com/clients');

    var auth = $firebaseAuth(ref);

    auth.$authWithOAuthPopup('twitter').then(function(response) {
        // response contains information about user
    }, function() {
        // wrong login data
    });

});
```

Links:

- www.angularjs.org
- www.angular.io (Preview Angular 2)
- github.com/timroes/angular-starter-template
- firebase.com
- codeschool.com/courses/shaping-up-with-angular-js
- www.youtube.com/user/ngconfvideos