

# Workshop 7 – AngularJS HR Application

## Topics:

1. Create an application that manages employees

## Demo:

1. Create a new WebStorm project 'hrapplication'. Create it inside your GIT local repository under the folder 'exercices';
2. Copy the 'bower.json', 'package.json' and 'Gruntfile.js' files inside your project. Install Bower and Node dependencies.
3. Create 'index.html' file:

```
<!DOCTYPE html>
<html ng-app="hrApp">
<head>
  <meta charset="UTF-8">
  <title>HR APP</title>
  <link rel="stylesheet" type="text/css"
href="bower_components/bootstrap/dist/css/bootstrap.css"/>
  <link rel="stylesheet" type="text/css"
href="bower_components/bootstrap/dist/css/bootstrap-theme.css"/>
</head>
<body>
<div ng-include="'templates/menu.html'"></div>
<div class="container" ng-view></div>
<script type="text/javascript"
src="bower_components/jquery/jquery.js"></script>
<script type="text/javascript"
src="bower_components/bootstrap/dist/js/bootstrap.js"></script>
<script type="text/javascript"
src="bower_components/angular/angular.js"></script>
<script type="text/javascript" src="bower_components/angular-
resource/angular-resource.js"></script>
<script type="text/javascript" src="bower_components/angular-
route/angular-route.js"></script>
```

```

<script type="text/javascript" src="scripts/app.js"></script>
<script type="text/javascript"
src="scripts/controllers/MenuController.js"></script>
<script type="text/javascript"
src="scripts/controllers/MainController.js"></script>
<script type="text/javascript"
src="scripts/services/MenuServices.js"></script>
<script type="text/javascript"
src="scripts/controllers/EmployeeListController.js"></script>
<script type="text/javascript"
src="scripts/controllers/EmployeeAddController.js"></script>
<script type="text/javascript"
src="scripts/controllers/EmployeeViewController.js"></script>
<script type="text/javascript"
src="scripts/controllers/EmployeeEditController.js"></script>
<script type="text/javascript"
src="scripts/controllers/EmployeeDeleteController.js"></script>
</body>
</html>

```

4. Create the folders 'scripts' and 'templates';
5. Inside folder 'scripts' create the folders 'controllers' and 'services';
6. Create file 'app.js' inside folder 'scripts'. Create inside this file your AngularJS module:

```
var hrApp = angular.module('hrApp', ['ngRoute', 'ngResource']);
```

7. Add the following routes:

```

.when('/employeeslist', {
    templateUrl: 'templates/employeeslist.html',
    controller: 'EmployeeListController'
})
.when('/employeeadd', {
    templateUrl: 'templates/employeeadd.html',
    controller: 'EmployeeAddController'
})
.when('/employeeview/:employeeid', {
    templateUrl: 'templates/employeeview.html',
    controller: 'EmployeeViewController'
})
.when('/employeeedit/:employeeid', {
    templateUrl: 'templates/employeeedit.html',
    controller: 'EmployeeEditController'
})

```

```

    })
    .when('/employee/delete/:employeeid', {
        templateUrl: 'templates/employee/delete.html',
        controller: 'EmployeeDeleteController'
    })
    .otherwise({
        templateUrl: 'templates/main.html',
        controller: 'MainController'
    });
});

```

8. Create file 'MainController.js' inside 'scripts/controllers':

```

hrApp.controller('MainController', ['$scope', function($scope) {
    $scope.title = 'HR Application';
    $scope.description = "Application for managing employees";
}]);

```

9. Create file 'MenuController.js' inside 'scripts/controllers':

```

hrApp.controller('MenuController', ['$scope', 'employeeActionsService',
function($scope, employeeActionsService){
    $scope.employeeActionList = employeeActionsService;
}]);

```

10. Create file 'EmployeeListController' inside 'scripts/controllers':

```

hrApp.controller('EmployeeListController', ['$scope', '$http',
'$location', function($scope, $http, $location) {
    $scope.employees = [];
    $http({url:
'http://demo.teamnet.ro:8282/datamodel/employees/findAll', method:
'GET'}).
    success(function(data, status, headers, config) {
        $scope.employees = data;
    });
    $scope.viewEmployee = function(employeeId) {
        $location.url('/employee/view/'+employeeId);
    };
    $scope.editEmployee = function(employeeId) {
        $location.url('/employee/edit/'+employeeId);
    };
    $scope.deleteEmployee = function(employeeId) {
        $location.url('/employee/delete/'+employeeId);
    };
}]);

```

```
    }  
  }]);
```

11. Create file 'EmployeeAddController.js':

```
hrApp.controller('EmployeeAddController', ['$scope', '$http',  
  '$location', function ($scope, $http, $location) {  
    $scope.employee = {};  
  
    $http({url: 'http://  
demo.teamnet.ro:8282/datamodel/departments/findAll', method: 'GET'}).  
      success(function (data) {  
        $scope.departments = data;  
      });  
    $http({url: 'http://  
demo.teamnet.ro:8282/datamodel/employees/findAll', method: 'GET'}).  
      success(function (data) {  
        $scope.managers = data;  
      });  
  
    $http({url: 'http:// demo.teamnet.ro:8282/datamodel/jobs/findAll',  
method: 'GET'}).  
      success(function (data) {  
        $scope.jobs = data;  
      });  
  
    /**  
     * Reset form  
     */  
    $scope.reset = function () {  
      this.employee = {};  
    };  
  
    /**  
     * Persist an employee  
     * @param addEmployee - employee to be persisted  
     */  
    $scope.create = function (addEmployee) {
```

```

        $http({url: 'http://
demo.teamnet.ro:8282/datamodel/employees/create', method:
'PUT', data: addEmployee}).
        success(function (data) {
            $scope.employee = data;

$location.url('/employeeview/'+$scope.employee.employeeId);
        });
    }
}]);

```

## 12. Create EmployeeViewController:

```

hrApp.controller('EmployeeViewController', ['$scope', '$http',
$routeParams', function($scope, $http, $routeParams) {
    $http({url: 'http://
demo.teamnet.ro:8282/datamodel/departments/findAll', method: 'GET'}).
    success(function (data) {
        $scope.departments = data;
    });

    $http({url:
'http://demo.teamnet.ro:8282/datamodel/employees/findAll', method:
'GET'}).
    success(function (data) {
        $scope.managers = data;
    });

    $http({url: 'http://demo.teamnet.ro:8282/datamodel/jobs/findAll',
method: 'GET'}).
    success(function (data) {
        $scope.jobs = data;
    });

    $http({url:
'http://demo.teamnet.ro:8282/datamodel/employees/findOne/'+$routeParams.
employeeid, method: 'GET'}).
    success(function (data) {
        $scope.employee = data;
    });
}]);

```

### 13. Create EmployeeEditController:

```
hrApp.controller('EmployeeEditController', ['$scope', '$http',
'$routeParams', '$location', function ($scope, $http, $routeParams,
$location) {

    $http({url:
'http://demo.teamnet.ro:8282/datamodel/departments/findAll', method:
'GET'}).

        success(function (data) {
            $scope.departments = data;
        });

    $http({url: 'http://
demo.teamnet.ro:8282/datamodel/employees/findAll', method: 'GET'}).
        success(function (data) {
            $scope.managers = data;
        });

    $http({url: 'http:// demo.teamnet.ro:8282/datamodel/jobs/findAll',
method: 'GET'}).
        success(function (data) {
            $scope.jobs = data;
        });

    $http({url: 'http://
demo.teamnet.ro:8282/datamodel/employees/findOne/'+$routeParams.employee
id, method: 'GET'}).
        success(function (data) {
            $scope.employee = data;
        });

    /**
     * Reset form
     */
    $scope.reset = function () {
        $scope.employee = {};
    };
});
```

```

/**
 * Persist an employee
 * @param addEmployee - employee to be persisted
 */
$scope.create = function (addEmployee) {
    console.log(addEmployee);
    $http({url: 'http://
demo.teamnet.ro:8282/datamodel/employees/edit', method:
'POST',data:addEmployee}).
        success(function (data) {
            $scope.employee = data;

$location.url('/employeeview/'+$scope.employee.employeeId);
        });
    }
}]);

```

#### 14. Create EmployeeDeleteController:

```

hrApp.controller('EmployeeDeleteController', ['$scope', '$http',
'$routeParams', '$location', function($scope, $http, $routeParams,
$location) {
    $http({url: 'http://
demo.teamnet.ro:8282/datamodel/departments/findAll', method: 'GET'}).
        success(function (data) {
            $scope.departments = data;
        });

    $http({url: 'http://
demo.teamnet.ro:8282/datamodel/employees/findAll', method: 'GET'}).
        success(function (data) {
            $scope.managers = data;
        });

    $http({url: 'http:// demo.teamnet.ro:8282/datamodel/jobs/findAll',
method: 'GET'}).
        success(function (data) {
            $scope.jobs = data;
        });
}]);

```

```

    $http({url: 'http://
demo.teamnet.ro:8282/datamodel/employees/findOne/'+$routeParams.employee
id, method: 'GET'}).

    success(function (data) {
        $scope.employee = data;
    });

    $scope.deleteEmployee = function() {
        $http({url: 'http://
demo.teamnet.ro:8282/datamodel/employees/delete/'+$routeParams.employeei
d, method: 'DELETE'}).

        success(function (data) {
            $location.url('/employeeslist');
        });
    }
}]]);

```

15. Create MenuService:

```

hrApp.value('employeeActionsService', [
    {
        label: "List employees",
        url: "#/employeeslist"
    },
    {
        label: "Add employee",
        url: "#/employeeadd"
    }
]
);

```

16. Employeeadd template:

```

<div class="panel panel-default">
    <div class="panel-heading">
        <h2 class="panel-title">Add new employee</h2>
    </div>
    <div class="panel-body">
        <div ng-form="employeeAddForm">
            <div class="row">
                <div class="col-lg-6">

```



```

        <div class="form-group">
            <label for="firstName">First Name:</label>
            <input type="text" id="firstName"
class="form-control" ng-model="employee.firstName"
                placeholder="First Name" required>
        </div>
    </div>
    <div class="col-lg-6">
        <div class="form-group">
            <label for="lastName">Last Name:</label>
            <input type="text" id="lastName"
class="form-control" ng-model="employee.lastName"
                placeholder="Last Name" required>
        </div>
    </div>
</div>
<div class="row">
    <div class="col-lg-6">
        <div class="form-group">
            <label
for="departmentId">Department:</label>
            <select id="departmentId" ng-
model="employee.departmentId" class="form-control" required
                ng-options="v as v.departmentName
for v in departments">
            </select>
        </div>
    </div>
    <div class="col-lg-6">
        <div class="form-group">
            <label for="manager">Manager:</label>
            <select id="manager" ng-
model="employee.managerId" class="form-control" required
                ng-options="v as v.firstName+' '+
v.lastName for v in managers">
            </select>
        </div>
    </div>
</div>

```

```

        <div class="row">
            <div class="col-lg-6">
                <div class="form-group">
                    <label for="job">Job:</label>
                    <select id="job" ng-model="employee.jobId"
class="form-control" required
                                ng-options="v as v.jobTitle+
salary:['+v.minSalary+':'+v.maxSalary+']' for v in jobs">
                        </select>
                    </div>
                </div>
            <div class="col-lg-6">
                <div class="form-group">
                    <label for="phoneNumber">Phone
Number:</label>
                    <input type="text" id="phoneNumber"
class="form-control" ng-model="employee.phoneNumber"
                                placeholder="Phone Number" required>
                    </div>
                </div>
            </div>
            <div class="row">
                <div class="col-md-5"></div>
                <div class="col-md-7">
                    <div class="container">
                        <button class="btn btn-default" ng-
click="reset()">RESET</button>
                        <button class="btn btn-default" ng-
disabled="employeeAddForm.$invalid" ng-
click="create(employee)">SAVE</button>
                    </div>
                </div>
            </div>
        </div>
    </div>
</div>

```

17. Employeedelete template:

```

<div class="panel panel-default">

```

```

<div class="panel-heading">
    <h2 class="panel-title">Add new employee</h2>
</div>
<div class="panel-body">
    <div ng-form="employeeAddForm">
        <div class="row">
            <div class="col-lg-6">
                <div class="form-group">
                    <label for="firstName">First Name:</label>
                    <p id="firstName" class="form-control-
static">{{employee.firstName}}</p>
                </div>
            </div>
            <div class="col-lg-6">
                <div class="form-group">
                    <label for="lastName">Last Name:</label>
                    <p id="lastName" class="form-control-
static">{{employee.lastName}}</p>
                </div>
            </div>
        </div>
        <div class="row">
            <div class="col-lg-6">
                <div class="form-group">
                    <label for="departmentId">Department:</label>
                    <p id="departmentId" class="form-control-
static">{{employee.departmentId.departmentName}}</p>
                </div>
            </div>
            <div class="col-lg-6">
                <div class="form-group">
                    <label for="manager">Manager:</label>
                    <p id="manager" class="form-control-
static">{{employee.managerId.firstName+ ' '+
employee.managerId.lastName}}</p>
                </div>
            </div>
        </div>
    </div>
</div>

```

```

        <div class="row">
            <div class="col-lg-6">
                <div class="form-group">
                    <label for="job">Job:</label>
                    <p id="job" class="form-control-
static">{{employee.jobId.jobTitle+'
salary:['+employee.jobId.minSalary+':'+employee.jobId.maxSalary+']}'}}</p
>

                </div>
            </div>
            <div class="col-lg-6">
                <div class="form-group">
                    <label for="phoneNumber">Phone Number:</label>
                    <p id="phoneNumber" class="form-control-
static">{{employee.phoneNumber}}</p>
                </div>
            </div>
        </div>
    </div>
    <div class="row">
        <div class="col-md-5"></div>
        <div class="col-md-7">
            <div class="container">
                <button class="btn btn-default" ng-
click="deleteEmployee()">DELETE</button>
            </div>
        </div>
    </div>
</div>
</div>
</div>

```

18. Employeeedit template:

```

<div class="panel panel-default">
    <div class="panel-heading">
        <h2 class="panel-title">Edit employee <b>{{employee.firstName}}
{{employee.lastName}}</b></h2>
    </div>
    <div class="panel-body">

```

```

<div ng-form="employeeAddForm">
  <div class="row">
    <div class="col-lg-6">
      <div class="form-group">
        <label for="firstName">First Name:</label>
        <input type="text" id="firstName" class="form-
control" ng-model="employee.firstName"
placeholder="First Name" ng-required>
      </div>
    </div>
    <div class="col-lg-6">
      <div class="form-group">
        <label for="lastName">Last Name:</label>
        <input type="text" id="lastName" class="form-
control" ng-model="employee.lastName"
placeholder="Last Name" required>
      </div>
    </div>
  </div>
  <div class="row">
    <div class="col-lg-6">
      <div class="form-group">
        <label for="departmentId">Department:</label>
        <select id="departmentId" ng-
model="employee.departmentId.departmentId" class="form-control" ng-
required
ng-options="v.departmentId as
v.departmentName for v in departments">
        </select>
      </div>
    </div>
    <div class="col-lg-6">
      <div class="form-group">
        <label for="manager">Manager:</label>
        <select id="manager" ng-
model="employee.managerId.employeeId" class="form-control"
ng-options="v.employeeId as
v.firstName+' '+ v.lastName for v in managers">
        </select>
      </div>
    </div>
  </div>

```

```

        </div>
    </div>
</div>

<div class="row">
    <div class="col-lg-6">
        <div class="form-group">
            <label for="job">Job:</label>
            <select id="job" ng-model="employee.jobId.jobId"
class="form-control" ng-required
                                ng-options="v.jobId as v.jobTitle+'
salary:['+v.minSalary+':'+v.maxSalary+']' for v in jobs">
                </select>
            </div>
        </div>
    <div class="col-lg-6">
        <div class="form-group">
            <label for="phoneNumber">Phone Number:</label>
            <input type="text" id="phoneNumber" class="form-
control" ng-model="employee.phoneNumber"
                                placeholder="Phone Number" >
            </div>
        </div>
    </div>
</div>
<div class="row">
    <div class="col-md-5"></div>
    <div class="col-md-7">
        <div class="container">
            <button class="btn btn-default" ng-
click="reset()">RESET</button>
            <button class="btn btn-default" ng-
disabled="employeeAddForm.$invalid" ng-
click="create(employee)">SAVE</button>
        </div>
    </div>
</div>
</div>
</div>

```

```
</div>
```

19. Employee list template:

```
<table class="table table-bordered">
  <tr>
    <th>ID</th>
    <th>First Name</th>
    <th>Last Name</th>
    <th>Department Name</th>
    <th>Actions</th>
  </tr>
  <tr ng-repeat="employee in employees | orderBy:'employeeId'">
    <td>
      {{employee.employeeId}}
    </td>
    <td>
      {{employee.firstName}}
    </td>
    <td>
      {{employee.lastName}}
    </td>
    <td>
      {{employee.departmentId.departmentName}}
    </td>
    <td>
      <button type="button" class="btn btn-default" ng-
click="viewEmployee(employee.employeeId)">View</button>
      <button type="button" class="btn btn-default" ng-
click="editEmployee(employee.employeeId)">Edit</button>
      <button type="button" class="btn btn-default" ng-
click="deleteEmployee(employee.employeeId)">Delete</button>
    </td>
  </tr>
</table>
```

20. Employeeview template:

```
<div class="panel panel-default">
  <div class="panel-heading">
    <h2 class="panel-title">Add new employee</h2>
  </div>
  <div class="panel-body">
    <div ng-form="employeeAddForm">
      <div class="row">
        <div class="col-lg-6">
          <div class="form-group">
            <label for="firstName">First Name:</label>
            <p id="firstName" class="form-control-
static">{{employee.firstName}}</p>
          </div>
        </div>
        <div class="col-lg-6">
          <div class="form-group">
            <label for="lastName">Last Name:</label>
            <p id="lastName" class="form-control-
static">{{employee.lastName}}</p>
          </div>
        </div>
      </div>
      <div class="row">
        <div class="col-lg-6">
          <div class="form-group">
            <label for="departmentId">Department:</label>
            <p id="departmentId" class="form-control-
static">{{employee.departmentId.departmentName}}</p>
          </div>
        </div>
        <div class="col-lg-6">
```



```

        <div class="form-group">
            <label for="manager">Manager:</label>
            <p id="manager" class="form-control-
static">{{employee.managerId.firstName+ ' '+
employee.managerId.lastName}}</p>
        </div>
    </div>
</div>

<div class="row">
    <div class="col-lg-6">
        <div class="form-group">
            <label for="job">Job:</label>
            <p id="job" class="form-control-
static">{{employee.jobId.jobTitle+ '
salary:['+employee.jobId.minSalary+ ':' +employee.jobId.maxSalary+ '']}}</p>
        </div>
    </div>
    <div class="col-lg-6">
        <div class="form-group">
            <label for="phoneNumber">Phone Number:</label>
            <p id="phoneNumber" class="form-control-
static">{{employee.phoneNumber}}</p>
        </div>
    </div>
</div>
</div>
</div>
</div>

```

## 21. Main template:

```

<div class="container">
    <div class="jumbotron">
        <h1>{{title}}</h1>
        <p class="lead">
            {{description}}
        </p>
    </div>

```

```
</div>
```

## 22. Menu template:

```
<nav class="navbar navbar-default" role="navigation" ng-
controller="MenuController">
  <div class="container-fluid">
    <div class="navbar-header">
      <button type="button" class="navbar-toggle collapsed" data-
toggle="collapse"
        data-target="#bs-example-navbar-collapse-1">
        <span class="sr-only">Toggle navigation</span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
      </button>
      <a class="navbar-brand">Menu</a>
    </div>
    <div class="collapse navbar-collapse" id="bs-example-navbar-
collapse-1">
      <ul class="nav navbar-nav">
        <li><a href="#">Home</a></li>
        <li class="dropdown">
          <a href="" class="dropdown-toggle" data-
toggle="dropdown">Employees<span class="caret"></span></a>
          <ul class="dropdown-menu" role="menu">
            <li ng-repeat="action in employeeActionList"><a
href="{{action.url}}">{{action.label}}</a></li>
          </ul>
        </li>
      </ul>
      <ul class="nav navbar-nav navbar-right">
        <li><a>Date: {{currentDate | date:'dd-MM-
yyyy'}}</a></li>
      </ul>
    </div>
  </div>
</nav>
```

## 23. Start grunt server and check the application.