ANGULARJS TUTORIAL

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INTRODUCTION TO JAVA SCRIPT FRAMEWORKS

Unlike most server side languages which are strongly typed language, JavaScript is loosely typed scripting language

JavaScript is a prototype based object oriented scripting language

JavaScript object definition can be changed at runtime. It is more dynamic in nature

Every JavaScript has a prototype object within it that is used to define object properties and functions

JavaScript alone can be run in web browsers it could be used inline or within a separate file

There are many popular frameworks in JavaScript. Like: JQuery, DOJO, Amber.js, Node.js, Knockout.js and especially AngularJS. All have their own design and principles.

AngularJS is mostly known as MVW. Which means Model-View-Whatever

Good to read: http://www.phpied.com/3-ways-to-define-a-javascript-class/

ANGULARJS VS OTHER JAVASCRIPT FRAMEWORKS

AngularJS is considered as HTML bootstrapping language

It is also called as assembly language for HTML DOM

AngularJS uses HTML elements as its templates and assigns controller to each of them

AngularJS model is a scope object which is assigned by default with each controller

Scopes can be nested, inherited or replicated based on directive and controller definition

AngularJS uses ng-app directive to indicate that it is angular. It uses ng-controller and ng-* for other functions

WHAT IS SCOPE IN ANGULARJS

Scope can be considered as a model object that gets assigned with each controller

Scope can have multiple objects and can also be inherited

Scope can be isolated and nested in cases where we need

From a scope object we can access $parent which is a link to its parent scope

We can also inject multiple objects inside scope that can be used on pages

CONTROLLERS AND DIRECTIVES

AngularJS binds a controller which is a method in JavaScript. Controller method runs and behaves like a constructor

It initiates variables and functions but all of them are limited to Scope of that controller

Each controller have a scope and can have access to its parent controllers through $parent scope object

Controllers are defined on the page through ng-controller directive. It can also be assigned through defining angular directive directly

One element in HTML can have only one controller

ANGULARJS SERVICE

AngularJS Service is a way in AngularJS through which controllers can share functions and objects

In order to have functionality shared among different controllers, we use services

Services are defined through factory and injecting into module

Services can have private and public methods depending on the API

Usually, we keep REST calls in services and use $q to perform deffered and promise

ROUTING

Angular has two types of Routing:

A. ngroute – basic routing service from AngularJS

B. ng-router – Advanced Routing services

Routing defines navigation inside an application

Routing can also have states and each state can have navigation

Ng-router also gives ability to define nested states and nested views. This is helpful if we need sidebar and header throughout applciation

BUILDING A SINGLE PAGE APPLICATION

Let us try

IDEAS & DISCUSSION

Q & A