**Angular js**

Angular js is a java script framework to build an application that run on web browser using html

Two basic requirement to add angular to web page is

1 -Script tag pointing to angular.js, angular has no dependency on other libraries.

2-add ng –app some where in your application , it’s a special directive that angular looks for in html

And if it is find angular will bootstrap itself , so it initializes it self and jumps into action for managing the page .

There should ne only one ng-app directive per page

**JavaScript patterns**

Examples are in Angular application , script.js file

1-function as abstraction

Call function from another function basically,

Basically some routine add logic or some routine to add value before executing the main function.

2- function as build object

Some times we need object that as data and message attach to it . in Java script we define a model by creating a java script function. it may has some private implementation details from which other are not aware of implementation they can access by creating the object.

3- function to avoid a global variable,

Global variable is evil in JavaScript. java script is a dynamic type language , global variable can be override by some one else as they are accessible to any where in files

**Controller**

Controller is a central peace of angular framework , controller is an encharge of many area of application, controller is responsible for building a model , a model contains data that we need to work with controller to what ever needed to grap that data ,

For basics facts of controller

The job of controller is to control the information that want to put on page or in editing scenario to save information that user is typing on page

1-controller directive in html

Ng-controller is an attribute that we place on page , ng- controller is directive same as ng-app

When we use ng-controller in particular div it’s a incharge of that div or tag ,

2-bqscically controllers are function that angular invoke

3-controller takes $scope parameter.

$ sing prefix is a sign to indicate that component you r working with is component provide by angular

Scope is bascically going to be a model

4- Attach model to scope .

**Controller capabilities**

1-multiple controller

2-complex object

3-Nest Controllers

**Two Way Binding**

Keeps the model and view in sync at all time, that is change in model updates the view and change in view updates the model.

Binding expression updates the view when model changes

Ng-model directive updates the model when view changes

**Filters**

**Filter can do three different thing**

**Format , Sort and filters data**

**Filters can be used with regular expression or a directive**

**To apply filters use(|) characters**

**{{expression | filtersname:parameter}}**

**Bulid in filters**

**Lower, upper,**

**number(format the number as text , include comma as thousand separator and numbe of decimal place can be specified.),**

**currency(format the number as currency ,$ is default)**

**date (formate date to a stringbased on request format)**

**limitTofilters :can be used o limit the number of rows or character in string.**

**{{expression|limitTO : limit : begin }}**

**Sorting Data In Angular**

**To sort data in angular we use**

**orderby filter**

**{{ordeby\_expression |orderby :expression:reverse}}**

**Example:ng-repeat”employee in employees | order:salary: false”**

**Custom Filters**

**Is a function that returns a function**

**Use to filter function to create a custom filter.**

**Ng-init**

**The ng-init directive allows you to evaluate an expression in the current scope.**

**In the real world application you should use a controller instead of ng-init to initialize value on a scope.**

**Ng- init should only be used for aliasing special properties of ng-repeat directive.**

Basically we need to fetch data from web server and were server communicate with sql database or any data source To send data we need

So above can be achieve by $http service , basically it’s a object , object with method that we can use make http

1-encapsulate HTTP communication methods like get, post put, delete

2-can ask for $http inside a controller

Just add as another parameter to controller function

$scope.user =$http.get(“/user/1234”)

Will nt assign a data to scope immediately bcz communication is synchronous what it returns object immediately is promise . promise promise you to return some result in future may be even error messag

So we use promise.then , then will call function when data is ready

$http.get(“https/github.com/users/robconery”).then(onusercomplete)

The method in .then method only onvoked when .get is successful response.

If the server is down or error we will call another call back function to show error .

$http.get(“https/github.com/users/robconery”).then(onusercomplete,onerror)

GitHubApi

Available from javascrtpt in a browser.

Return Json(easy to convert into objects)

No authentication and key required.