Do not declare angular.module(modulename) multiple times in an app, otherwise angular js will throw error Error: [ng:areq] ….

Directive

Directive name is different from tag name, each capital letter in directive name is converted to ‘-‘ or ‘:’ in tag name, do not use fancy characters like ‘:’ in directive name

If directive property ‘replace’ is set to true, then a single top element is required for template

Directive scope:

‘=’: dual direction binding of parent scope, directive will reflect parent scope value change

‘@’: single direction binding, further change of value in parent scope will not affect directive

‘&’: evaluate the directive’s expression in original scope (useful for passing callback functions to the directive’s scope)

To pass a controller scope object to directive, use ‘=’. Correct: <mydirective param=”data”/> look for “data” attribute in the scope. Wrong: <mydirective param=”{{data}}”/> error: {{data}} (parse syntax error) use ‘@’ <mydirective param=”{{data}}”/> a string is passed as param

templateUrl can be a function that creates dynamic url base on attribute value. However this works only if the attribute is a simple string, use “link” function, if the parameter is a complex json object. Eg.

If templateUrl is used in directive, a local server is needed and it cannot be loaded from file system directly (Access to restricted url denied). It is good to precompile and cache the template, and it bypass the file system restriction.

link: function(scope, element, attrs) {

var templateUrl = scope.definition.type + ‘.html’;

var template = $templateCache.get(tid);

element.html(template);

$compile(element.contents())(scope);

}

Ng-transclude works like a placeholder to embed content in a parent directive.

If directive’s “transclude” attribute is set to true, it changes variable lookup scope from parent directive to outside

Multiple “ng-transclude” can be used by setting property “ng-transclude-slot” to differentiat included content. In this case, “transclude” attribute has to be a json object that contains mapping for each slot, otherwise you get an error “No parent directive that requires a transclusion with slot name xxx”

Controller: used if external service is to be used, or manipulate directive’s dom element (reusable)

“Compile” and “link” are mutually exclusive, function returned by “compile” will replace “link”

Both can be used to manipulate dom, compile is safe to “add”, “remove” dom element before it is added to dom tree. “link” is used to register event and add watch.

Do not use $scope directly in service, declare “get”, “set” for variables and use it in controller, or let controller watch service variable changes and set it to scope