Zero: my goal is to find out if the graph can be made into a better-looking type.

First, locate code associated with the graph objects on the Process tab of the CD Dashboard-Client website using Chrome Dev Tool [with 'scroll into view' or 'inspect element']. Result: identified 'nv-linesWrap' among others as a relevant class associated with the graph.

Secondly, Find /Find in Files inside Sublime to search for files containing code snippet 'nv-linesWrap'. Among the found files is nv.d3.js.

Thirdly, go to the nvde.org website to study up. Read up on the Mike Bostok's Towards Reusable Charts [<http://bost.ocks.org/mike/chart/>].

The root directory of the project is C:\Users\sz3160\Desktop\cd-dashboard-client, look into the file nv.d3.js at the path C:\Users\sz3160\Desktop\cd-dashboard-client\bower\_components\angularjs-nvd3-directives\examples\js.

TODO: Trying to figure out how graphing works, in order to explore ways to enrich user experience.

From Elise Eiden (ee550x@att.com): <http://stackoverflow.com/questions/11932767/zoomable-google-finance-style-time-series-graph-in-d3-or-rickshaw>

8. EE suggests that 'just kind of poking around the site and making sure that the way data is displayed makes sense to you would be a great starting point for enhancements.'

9. http://www.w3schools.com/XML/xml\_whatis.asp

10. SVG: https://developer.mozilla.org/en-US/docs/Web/SVG

11. SVG primer: http://www.w3.org/Graphics/SVG/IG/resources/svgprimer.html

7/30/2015: Zach Fisher commit on cd-dash-board-client CodeCloud : 8a0b2a99e4, on 7/29/2015: "Switch from angular-nvd3-directives to angular-nvd3 so the app can use the latest version of NVD3", changed 'nvd3-line-chart' to 'nvd3'. Find Files in Sublime for 'nvd3-line-chart', results include:

C:\Users\sz3160\Desktop\cd-dashboard-client\bower\_components\angularjs-nvd3-directives\examples,multiple files;

C:\Users\sz3160\Desktop\cd-dashboard-client\app\process, multiple files;

C:\Users\sz3160\Desktop\cd-dashboard-client\app\engineering, multiple files;

and build files.

Zach shared that history api does not support start-/end dates, yet so a zoom functionality is not possible. . and there were no docs for api.

C:\Users\sz3160\Desktop\cd-dashboard-client\bower\_components\angularjs-nvd3-directives\examples\lineChart.with.ngRepeat.html:

15

16 app.directive('nvd3RepeatChart', function ($compile) {

17: var template = '<nvd3-line-chart data="chartData" id="exampleId" width="800" height="400" showXAxis="true" showYAxis="true" tooltips="true" interactive="true" margin="{left:50,top:50,bottom:50,right:50}" > <svg></svg> </nvd3-line-chart>';

18 return {

19 restrict: "E",

..

24 compile: function (element, attrs) {

25 scope.chartData = data;

26: var x = angular.element('<nvd3-line-chart data="chartData" id="exampleId" width="800" height="400" showXAxis="true" showYAxis="true" tooltips="true" interactive="true" margin="{left:50,top:50,bottom:50,right:50}" > <svg></svg> </nvd3-line-chart>');

27 element.append(x);

28 $compile(x);

Engineering/Agile Technical Training, file at App/engineering/xp-training/xp-training.tpl.jade:

metric-details

.row

.columns.small-5

p {{xpTraining.meta}}

info-display(text='loading details' ng-show='xpTraining.loadingPeople')

.metric-details\_\_progress-bar(

ng-show='!xpTraining.loadingPeople'

ng-repeat='person in xpTraining.people'

ng-click='xpTraining.toggleShowGraph(person)'

ng-style='{cursor: person.xpCompletions && xpTraining.graph.cur < xpTraining.graph.max ? "pointer" : "not-allowed"}'

ng-class='{"metric-details\_\_disabled": !person.xpCompletions}'

)

div.pull-left

div.pull-left.no-wrap.omnes-medium-font

span {{ person.fName.substring(0, 1) }} {{ person.lName | properize }}

span(ng-if='person.xpCompletions !== undefined') &nbsp;- {{ xpTraining.getProgressBarPercent(person).toFixed(0) }}%&nbsp;&nbsp;

span(ng-if='person.xpCompletions === undefined') &nbsp;- N/A

div.pull-left.no-wrap ( {{ person.xpCompletions }} of {{ person.numEmployees }} employees )

progress-bar.pull-left(

percent='xpTraining.getProgressBarPercent(person)'

options='xpTraining.progressBarOptions'

)

a.metric-details\_\_graph-toggle(ng-if='person.xpCompletions' ng-style='{color: person.history.color}' ng-class='{"light-gray": !person.history.showGraph}')

i.fa.fa-line-chart

.columns.small-7

info-display(text='loading graph' ng-show='xpTraining.loadingGraph')

nvd3-line-chart(

ng-style="{visibility: !xpTraining.loadingGraph ? 'visible' : 'hidden'}"

data="xpTraining.graph.data",

xAxisTickFormat="xpTraining.xAxisTickFormat()",

yAxisTickFormat="xpTraining.yAxisTickFormat()",

x='xpTraining.xFunction()',

y='xpTraining.yFunction()',

height="300",

showXAxis="true",

showYAxis="true",

interactive="true",

tooltips="true"

)

Svg

At the CD-dashboard-Engineering/Agile Technical Training tab, (<http://txcdtl133bs998h.itservices.sbc.com:3000/#/engineering/xp-training>):

1. There are a few tags, [cd-tree=”cd-tree” road-map=”engineering.roadMap”]: are these custom html attributes?

2. What is the difference between ng-scope and ng-isolate-scope?

7/31/2015:

At your project directory, in ConEmu:

1. run npm install -g bower sails
2. Run npm install
3. Run bower install
4. Sails lift, there will be a msg guiding to http://localhost:1337; need to add /index.html to it, see next step.
5. Open in a browser: http://localhost:1337/index.html .

To use browser-sync,

1. npm install -g browser-sync //ignore the red msgs

2. browser-sync --version //to confirm installation

3. browser-sync start --server --files "\*.html, styles/\*.css" //to run from the assets folder

//

# cd-dashboard-client

## Usage

This application was built using the Yeoman generator [dustinspecker/generator-ng-poly](https://github.com/dustinspecker/generator-ng-poly). For component generation use the generator also.

## Setup

1. Run `npm install -g bower gulp yo generator-ng-poly`

1. Run `npm install`

1. Run `bower install`

## Gulp tasks

- Run `gulp build` to compile assets

- Run `gulp dev` to run the build task and setup the development environment

- Run `gulp unitTest` to run unit tests via Karma and to create code coverage reports

- Run `gulp webdriverUpdate` to download Selenium server standalone and Chrome driver for e2e testing

- Run `gulp e2eTest` to run e2e tests via Protractor

- Run `gulp analyze` to run lint and Plato static analysis

- Add a `--stage=['local','dev','prod']` arg to specify which preconfigured API URL to use

- Add a `--stage-url=http://hostname.domain:port` arg to specify which API URL to use, stage-url overrides stage

- Add a `--min` arg to your task command for minified output

## Info

Any feature that can be reused should be placed in the \*\*"common"\*\* folder with their own module folder unless it is just a service then should be placed in \*\*"common/services"\*\*Gulp build/dev

1) Create a new test branch. Name it [yourName]-test or something.

2) Modify the personnel-factory.js file in app/services:

If you do, in the personnel-factory.js file add

id = id === 'sg024v' ? 'mm694y' : id;

Right after:

deferred = personnelDefers[deferredKey] = $q.defer();

Replacing sg024v with your user id. then build the project.

That should let you see everything, it makes the frontend recognise you as Mike Mueller

Its down around line 94 of the personnel-factory file

3) Then run

gulp dev --stage-url=http://cd.dev.att.com:9001

//If dev environment is ever to go down, try using test environment with the below command

4) gulp dev --stage=test

8/3/2015: Qs:

1. In ~/bower\_components/angular-nvd3/dist/, **. bower.json and bower.json** both list ‘angular-nvd3’ as "An AngularJS directive for NVD3.js reusable charting library (based on D3.js)".

"dependencies": {

"angular": "^1.x",

"d3": "^3.3.13",

"nvd3": "^1.7.1"

};

.bower.json lists "\_source": <https://github.com/krispo/angular-nvd3.git>.

In ~/bower\_components/angularjs-nvd3-directives/src/directives", angularjs-nvd3-directives" are "description": "Angular.js directives for nvd3.js.", with

"dependencies": {

"angular": "~1.2.4",

"d3": "~3.4.1",

"nvd3": "~v1.1.15-beta"

},

Automatic refresh page: <meta http-equiv="refresh" content="5">

**For adding an event to click on the bars, use this on your chart function:**

d3.selectAll("rect.nv-bar").on("click", function (d) { // You can pass d to function to recover x ou y value of the bar

// Whatever you want to do on click

});

D. Schonfeld implement fixed time boxed views on detail page graphs to easily see my team’s history over fixed time length, 30D, 60D, 90D, 120D API field NumDays-Mike Mueller.)

Acceptance criteria:

~~To hover over a specific~~ (x,y) –already available with new nvD3

* User has ability to select in 30D increment, 30D, 60D, 90D, 120D, default is the entire history or 30D?
* graph would adjust to increments.(default range is the past 30D)
* On all detail pages listed.
* ?Team interested in 14 day view.

<http://tex.stackexchange.com/questions/103282/convert-latex-to-svg-online>

<http://krispo.github.io/angular-nvd3/#/quickstart to study angular nvd3> directive. Do the example bar chart, and page did not show either by ‘Open with’ or browser-sync. Muhammad Abdusamad walked me through the debugging, and figured out that I did not close my module ‘myApp’.

Muhammad thinks Sublime Package Control is useful.

Git clone is like git remote add origin and git pull., I think.

[Zoom Options](http://stackoverflow.com/questions/13196545/is-it-possible-to-have-zooming-option-in-nvd3-charts-as-like-in-highcharts): http://stackoverflow.com/questions/13196545/is-it-possible-to-have-zooming-option-in-nvd3-charts-as-like-in-highcharts

* [Answer1](http://nvd3.org/examples/lineWithFocus.html): nv.models.lineWithFocusChart().

[details: nv.addGraph(function(){

var chart = nv.models.lineWithFocusChart(); etc});]

* [Answer2](http://jsfiddle.net/cqNkB/): by altering the nvd3 source file function addZoom(options){}

8/5/2015: [global vs local installment](http://insider.web.att.com/s/s.dll?spage=hb/index.htm&site=empnet): the directories **not quite match**.

[Responsive SVG logo](http://insider.web.att.com/s/s.dll?spage=hb/index.htm&site=empnet): SVG to graphics is what XHTML to text. [InkSpace](http://insider.web.att.com/s/s.dll?spage=hb/index.htm&site=empnet) is a free tool.Install InkSpace 0.91. Made checkMateLogo.svg and .png images. [Insert as alt image](http://stackoverflow.com/questions/18474564/bootstrap-3-navbar-with-logo) for the CheckMate logo: push the insertion work to CodeCloud CheckMate.

Look for for "ng-repeat="person in xpTraining.people"" in all of cd-dashboard-client: find in C:\Users\sz3160\Desktop\cd-dashboard-client\build\engineering\xp-training\xp-training.tpl.html:

So look in for <!--ngRepeat:person in xpTraining.people -->

CookieWang

Using a jade conversion site George Li shared: http://jade-lang.com/demo/

Convert xp-training.tpl.jade to xp-training.tpl.html, which contains:

<nvd3 ng-style="{visibility: !xpTraining.loadingGraph ? 'visible' : 'hidden'}" data="xpTraining.graph.data" options="xpTraining.graph.options"> </nvd3>

Find [data="xpTraining.graph.data"] in all of cd-dashboard-client

Convert metric-details-directive.tpl.jade to .html: in this file , div class="metric-details\_\_header\_\_metric" displays {{ ((metricDetails.meta.percentage)\*100 || 0).toFixed(0) }} and <div class="metric-details\_\_description columns columns small-12"> displays {{ metricDetails.meta.description }}</div>

**Shuyu(9:53:00 AM):** Hi,Zack! I am Susie, one of the interns. David (Schonfeld) and I are looking for ways to enhance charts functions (e.g zoom) at CD Maturity Model app. I saw that you have committed at cd-dash-board-client CodeCloud : 8a0b2a99e4 on 7/29/2015 so that we can now use the new NVD3. Thank you so much. Would you keep David and I informed on any pertinent advancement that you make on this effort? I would appreciate very much if there is any suggestions that you have for me.

**Zach Fisher(9:55:16 AM):** ok. the history api doesn’t support start/end dates yet so a zoom functionality really isnt possible

**Shuyu(10:04:34 AM):** OK,thank you.Would you point me to the docs about that limitation please? Sorry for my rudimentary question.

**Zach Fisher(10:05:14 AM):** i wish there were docs for the api, but they dont exist yet either

**Shuyu(10:05:43 AM):** How do you know then?:)

**Zach Fisher(10:06:47 AM):** Mike Mueller and a few others created them, so they told me how they worked

**Shuyu(10:11:44 AM):** Thanks a bunch

8/6/2015: study [Nvd3 github documentation](https://github.com/novus/nvd3/wiki/Models)

<nvd3 options=’options’ data=’data’> </nvd3>

Options: chart type, height, margin, x label, y label, transition Duration, XAxis, yAxis.

Data: key: , value:[{label: , value}]

[Es6](http://www.frontendjournal.com/javascript-es6-learn-important-features-in-a-few-minutes/) var is function-scoped (hoisting) and let is block-scoped.

const

Look into Rally: US514433 of TMNT: Spike: Research Best Implementation of Graph Detail Points

As a user

I want to be able to see details crowded/cluster points

So that there is clarity in the metrics.

Acceptance Criteria:

* Mock up options

**Shuyu(10:58:21 AM):** Zoom Options:<http://stackoverflow.com/questions/13196545/is-it-possible-to-have-zooming-option-in-nvd3-charts-as-like-in-highcharts>  
(summary:• [Answer1](http://nvd3.org/examples/lineWithFocus.html): nv.models.lineWithFocusChart().  
[details: nv.addGraph(function(){  
var chart = nv.models.lineWithFocusChart(); etc});]  
  
• [Answer2](http://jsfiddle.net/cqNkB/): <http://jsfiddle.net/cqNkB/> by altering the nvd3 source file function addZoom(options){}

**Shuyu(11:00:38 AM):** Zach, Do you think the above two option may be valid for allowing zoom?

Set Chrome as the default browser, in hamburger bar/Setting

[Require, expose](http://openmymind.net/2012/2/3/Node-Require-and-Exports/): js

In engineering-controller.js: engineering Ctrl ($scope, OrgDrilldown, Overview)?

8/7/2015: try catch finally to handle exceptions (e).

Angular’s watch and [watchCollectio](http://www.bennadel.com/blog/2566-scope-watch-vs-watchcollection-in-angularjs.htm)n

Module(‘’).config(config); function config($stateProvider){$stateProvider.state([module name]’, { url: , templateUrl: , controller: });

App/services/details-utility-factory.js provides detailsUtility function

8/10/2015: [Bootstrap Modal](http://www.sitepoint.com/understanding-bootstrap-modals/)

[Pseudo](https://css-tricks.com/almanac/selectors/a/after-and-before/) element ::after and ::before

Angular.tutorial: https://docs.angularjs.org/tutorial/

-run npm test in the background all the time . How to do that?

[Restangula](http://arian-celina.com/implementing-rest-services-in-angularjs-using-restangular/)r :

8/12: add .metric-details\_\_progress-bar:nth-child(2) {

border: 2px solid @mediumGray;

font-weight: bolder;

} in metri-details.less; remove line 4 from xp-training.tpl.jade to unify architecture s across all stadiums to be able to use the nth child modification. Results of gulp unitTest:

-----

sz3160@TXCDTL133BS998H /c/Users/sz3160/desktop/cd-dashboard-client (szdev)

$ gulp unitTest

[14:40:39] Using gulpfile c:\Users\sz3160\desktop\cd-dashboard-client\Gulpfile.js

[14:40:39] Starting 'lint'...

[14:40:41] Starting 'karmaFiles'...

[14:40:43] Finished 'karmaFiles' after 2.33 s

[14:40:44] Finished 'lint' after 5.81 s

[14:40:44] Starting 'unitTest'...

INFO [karma]: Karma v0.12.37 server started at http://localhost:9876/

INFO [launcher]: Starting browser PhantomJS

INFO [PhantomJS 1.9.8 (Windows 7 0.0.0)]: Connected on socket p0RRWNOEbeW7jhZJbd6n with id 89976526

WARN [web-server]: 404: /images/cd-logo.png

[14:40:51] Finished 'unitTest' after 6.2 s

8/13/2015: [Sacha Barber’s take](http://www.codeproject.com/Articles/637430/Angular-js-example-application) on Angular js

8/14?201%: [ngClass](https://scotch.io/tutorials/the-many-ways-to-use-ngclass): <div ng-class=”text-type”> <div ng-class=”[styleOne, styleTwo]”>

Or <div ng-class=”{‘styleOne’:evaluation1, ‘styleTwo’:evaluation2}”> $even, $odd, first, &last,

<div ng-class=”$variableToEvaluate ? ‘class-if-true’: ‘class-if-false’”>

[And special](http://cssdeck.com/labs/simple-css3-heart-pulsing-animations) properties of ngRepeat

As a user

I want know know why a leader has no information in Agile Basics

So that I know the reasoning.

Iteration 8/17-8/28: : Acceptance Criteria:

* Have a button that denotes that the reason a direct report is greyed out/no information because they have less than 5 iterations in Rally and metrics require that minimum.

8/17:Docker[: not boot2Docker anymore](https://www.airpair.com/node.js/posts/getting-started-with-docker-for-the-nodejs-dev): **expose port 8080** of the **host** (VirtualBox) as the port 3000 of the container (VM):

AngularJS and scope.$apply [by Jim Hoskins](http://jimhoskins.com/2012/12/17/angularjs-and-apply.html): “If you write any code that uses Ajax without $http, or listens for events without using Angular’s ng-\* listeners, or sets a timeout without $timeout, you should wrap your code in $scope.$apply “

If your code isn’t wrapped in a function passed to $apply, and it throws an error, that error is thrown outside of AngularJS, which means any error handling being used in your application is going to miss it. $apply not only runs your code, but it runs it in a try/catch so your error is always caught, and the $digest call is in a finally clause, meaning it will run regardless of an error being thrown.

$watch How the $apply Runs a $digest: [here](http://angular-tips.com/blog/2013/08/watch-how-the-apply-runs-a-digest/)

[8/18: traversing array in angularjs with angular.forEach or some](http://community.sitepoint.com/t/foreach-object-array-problem-angularjs/37903)

[Another way](http://stackoverflow.com/questions/19544904/ng-repeat-access-key-and-value-for-each-object-in-array-of-objects):

[Five ways](http://stackoverflow.com/questions/13813254/how-do-i-conditionally-apply-css-styles-in-angularjs):ng class ng style ng show/hide; ng-if ng-switch; ng-disabled, ng-animate

Add elements on condition of current elements. 1: ng-class ,

.largeWidth {

width: 100%;

}

.smallWidth {

width: 0%;

}

// [...]

ng-class="{largeWidth: myVar == 'ok', smallWidth: myVar != 'ok'}"

Pseudocelement css (in css)

2: ng-show (in tpl);

There's more than one way to do this. I personally like the declarative which means keeping your view very descriptive and free of logic. So something like this.

<div ng-show="editingAllowed(item)">Edit</div>

or use ng-if

and then in your controller

$scope.editingAllowed = function(item){

//You can add aditional logic here

if(item.status==='New'){

return true

}

}

What's nice about this is your editingAllowed function could be re-used in other directives. I'm guessing other parts of your view will depend on whether editing/deletion is allowed. You can even put that function in a service to re-use across your entire app.

3. Transclude (in directive.js) 4, ngMessages

5 ng- [style](http://stackoverflow.com/questions/19375695/angular-ng-style-with-a-conditional-expression)

ng-style="{ width: getTheValue() }"

//or

ng-style="{ width: myObject.value == 'ok' ? '100%' : '0%' }"

1. Ng-if :

For example, the Delete button would only show for 'New' and 'Completed', but not for 'In Progress'.

**HTML:**

<button ng-if="showDelete(item.Status)">

...

</button>

**JS:**

$scope.showDelete = function(itemStatus){

var testStatus = ["New", "Completed"];

if(testStatus.indexOf(itemStatus) > -1){ //test the Status

return true;

}

return false;

}

function isBiggerThan10(element, index, array) {

return element > 10;

}

[2, 5, 8, 1, 4].some(isBiggerThan10); // false

[12, 5, 8, 1, 4].some(isBiggerThan10); // true

Details.facotry line 83for pie chart

Line Chart type 246

Extract history 209

Toggle 226?

8/19:

angular.module('ngToggle', [])

.controller('AppCtrl',['$scope', function($scope){

$scope.custom = true;

$scope.toggleCustom = function() {

$scope.custom = $scope.custom === false ? true: false;

};

}]);

Absolutely positioned elements are removed entirely from the document flow.

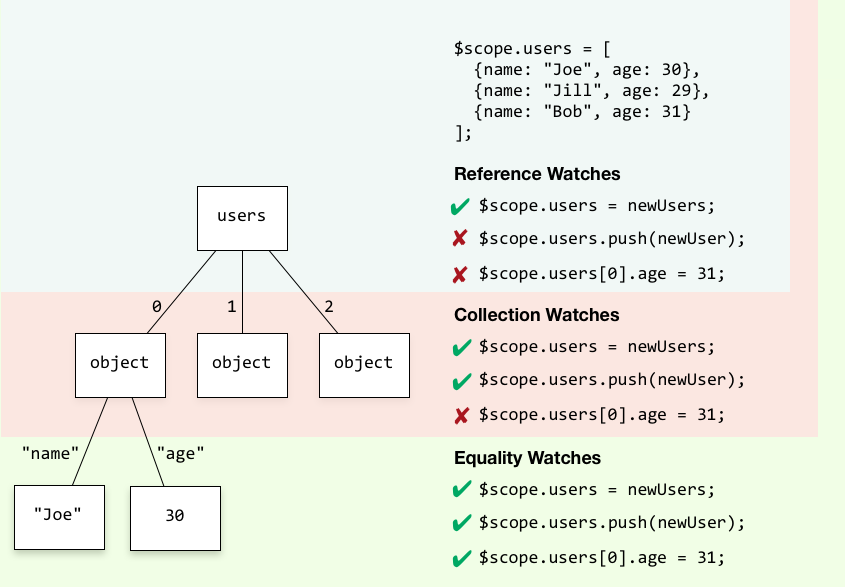
fixed positioning is a special form of absolute positioning: are fixed relative to the viewport/browser window rather than the containing element. Whereas the position and dimensions of an element with position:absolute are relative to its containing block, the position and dimensions of an element with position:fixed are always relative to the initial containing block. This is normally the viewport: the browser window or the paper’s page box.

<http://jsonviewer.stack.hu/>

<http://marianoguerra.github.io/json.human.js/>

To create shortkey, in /h drive, in the .bash\_profile file, make aliases=” “.

8/20: [3 levels of watch](http://teropa.info/blog/2014/01/26/the-three-watch-depths-of-angularjs.html):



Level 1: reference watch

|  |
| --- |
| $scope.$watch(…, …, false); |
| Or $scope.$watch(…, …); |

Level 2: $scope.$watchCollection(…, …);

Level 3: $scope.$watch(…, …, true);

 used

elm.children('.class-name-or-whatever')

to get children of the current element

[function expression and function declaration](https://javascriptweblog.wordpress.com/2010/07/06/function-declarations-vs-function-expressions/)

8/24/2015: console message: “Uncaught TypeError: Cannot read property 'update' of null: angular-nvd3.js:149. Find this : <https://github.com/krispo/angular-nvd3/issues/109>

Line 149 after modification: scope.chart.resizeHandler = nv.utils.windowResize(function() { scope.chart && scope.chart.update(); });

Change background color of the info button;

* created style=color:red as a property of button: works;
* created .warning class in process.less: does not make a difference, the color orange persists even without the class. Ctrl Shift Find for button.warning, and found button.warning definition in bower components/foundation/css/foundation.css. These are apparently automatically loaded to the codebase during build.

Foundation alert method:

[Semantics vs syntax](http://programmers.stackexchange.com/questions/113800/whats-the-difference-between-syntax-and-semantics):

8/25: [watch apply and digest](http://tutorials.jenkov.com/angularjs/watch-digest-apply.html):by Jakob Jenkov

$scope.$watch(function(scope) { return scope.data.myVar },

function() {}

);

The value function should return the value which is being watched

The listener function should do whatever it needs to do if the value has changed.

$scope.$watch(function(scope) { return scope.data.myVar },

function(newValue, oldValue) {

document.getElementById("").innerHTML =

"**" + newValue + "**";

}

);

Of course you could have done this using the code **{{ data.myVar }**, but this is just an example of what you can do inside the listener function.

The $digest() function is called whenever AngularJS thinks it is necessary. For instance, after a button click handler has been executed, or after an AJAX call returns (after the done() / fail() callback function has been executed).

You may encounter some corner cases where AngularJS does not call the $digest() function for you. You will usually detect that by noticing that the data bindings do not upate the displayed values. In that case, call$scope.$digest() and it should work. Or, you can perhaps use $scope.$apply() instead which I will explain in the next section.

Angular Ajax

/Learning [Spring’s RESTful Web Service](https://spring.io/guides/gs/rest-service/)

Extract Gradle 2.6 to C:\Program Files

Frank Wang recommends [http://www.tutorialspoint.com//restful/index.htm](http://www.tutorialspoint.com/restful/index.htm)

To set the path for Java, in ControlPanel/System/advanced system setting, in environmental viraiable, set for both personal and systemic :

JAVA\_HOME: C:\Java\jdk1.8.0\_51;

PATH as C:\Java\jdk1.8.0\_51\bin (bin is where the action comes from and has to be the last of path) While setting PATH I deleted PATH for node C:\Program Files\nodejs, causing gulp to not run. Added back

To create new class, selecting a project for its home; select a main method; save-this compiles it; right click button to access the run as command.

/The **Object.keys()** method returns an array of a given object's own enumerable properties

8/26/2015: [scope vs $scope](http://www.bennadel.com/blog/2716-when-to-use-scope-vs-scope-in-angularjs.htm) :

"$" in "$scope" indicates that the scope value is being injected into the current context. But, not all references to scope are based on dependency injection. For example, in $watch, link, and cloning functions (not an exhaustive list), scope is always passed as a positional argument, regardless of its name. As such, it shouldn't be prefixed with "$".

/Vanilla js .[map vs](http://tiffanybbrown.com/2012/10/15/array-prototype-map-versus-array-prototype-foreach/) .foreach & underscoreJS’ useful \_.pluck

: **.map returns, for each does not**. Common:

In both cases, the callback function for both methods has three arguments available to it.

1. The first argument is the value of the element.

1. The second argument is the index of the element.
2. The third argument is the object being traversed.

vanillaJS’ array.filter(function(){}).map(function(){}) can be converted to underscore’s \_.pluck(\_.filter(array,function(){}),””);

I am exploring the option of switching from the current chart type of line chart (nv.models.lineChart , as in Line 6059 in nv.d3.js) to that with a view finder ( [lineWithFocusChart](http://cmaurer.github.io/angularjs-nvd3-directives/line.with.focus.chart.html) ,line 7063 nv.models) . We are using angular.nvd3 (one example can be found here: <http://nvd3.org/examples/lineWithFocus.html>)

8/27: Zach,I found that currently the CD Maturity App runs with a console message about update with null about angular.nvd3. I googled and found a source that suggests removing update so that angular.nvd3's line 149 now is "scope.chart && scope.chart.update();" That seems to get rid of the message. Is it worth updating the app with the change?

ng-attr-class="{{someBoolean && 'class-when-true' || 'class-when-false' }}"

applies to [other attributes as well](http://stackoverflow.com/questions/15696416/what-is-the-best-way-to-conditionally-apply-attributes-in-angular)

app/common/display progress bar directory

8/28:

ng-class has map-only one case applied (ng-class="{strike: deleted, bold: important, 'has-error': error

) and array syntax ng-class="[style1, style2, style3]"

[\_.memoize](http://stackoverflow.com/questions/24902019/using-memoize-function-with-underscore-js) to generate cache.

Scott Gavin makes graph with d3.

8/31: spyOn

/ [Deferred and promises of Angular](http://www.webdeveasy.com/javascript-promises-and-angularjs-q-service/): $q is the built-in promise service of AngularJS, and soon, in ES6 JS. “An asynchronic operation doesn’t have to know how it continues, it only has to signal when it is ready.” While deferred has methods for changing the state of an operation, a promise exposes only methods needed to handle and figure out the state, but not methods that can change the state.

9/1/2015: [d3](http://backstopmedia.booktype.pro/developing-a-d3js-edge/2-chart/)

Passing only success callback to promise.then() will assign only success callback and using promise.catch()will assign only failure callback. catch() is actually a shorthand for promise.then(null, errorCallback).   
In case we want to perform the same operation both on fulfillment or rejection of a promise, we can use promise.finally(): var callback = function() {

console.log('Assign a function that will be invoked both upon success and failure');

};

promise.then(callback, callback);

async1()

.then(async2)

.then(async3)

.catch(handleReject)

.finally(freeResources);

In this example we invoked async1(), async2() and async3() one after another, synchronously. In case of any rejection in any one of those methods, the success invocation will stop and handleReject() will occur. At the end, freeResources() will occur no matter of success and failure. For instance, if async2() will return a rejected promise, async3() will not occur and handleReject() will be invoked with the rejection reason of async2(). And at the end freeResources() will occur.

Sometimes we need to return a rejected promise. Instead of creating a new promise and rejecting it, we can use [$q.reject(reason)](https://docs.angularjs.org/api/ng/service/$q#reject).

Similar to $q.reject(reason), sometimes we need to return a resolved promise with a value. Instead of creating a new promise and resolving it, we can use [$q.when(value)](https://docs.angularjs.org/api/ng/service/$q#when)

A cool thing with $q.when(value) is that if value is a 3rd party thenable promise (like jQuery’s Deferred), this method can wrap it and convert it into a $q promise. This way we can easily use other promises implementations with AngularJS:

var jQueryPromise = $.ajax({

...

...

...

});

var angularPromise = $q.when(jQueryPromise);

9/3: [restangular](http://www.ng-newsletter.com/posts/restangular.html): how to set up restangular in our Angular objects.

9/8: [d3 tutorial](http://square.github.io/intro-to-d3/examples/)

Can make lineGraphWithFocus with d3 or nv.d3.

File exampleLineWithFocus (With d3): call data with d3.csv("sp500.csv", type, function(error, data) {})

File exampleLineWithFocus-nvd3(With nv.d3): call data with nv.addGraph (function(){});do that in agileBasics.jade with code in bcTraining: did not get graph;even so, some angular nvd3 features-such as tooltip-not in nv.d3 rendition.

Nvd3 lineWithFocusChart starting at line 7063

Angular nvd3.lineWithFocusChart, starting at 124, not defined.

Chart options in detailsUtil.starting line 245.

9/9: in bug-nvd3 branch:

1. verify change in angular-nvd3.js:149.
2. Change in details-utilities-factories.js: line 247 to : type: 'lineWithFocusChart',
3. Result: shows focus chart.Problem? Context chart axis labels are not dates or %.

* x2Axis.tickFormat(\_);(line 7570 of nv.d3.js)
* Add tick format for x2Axis: x2Axis: {

tickFormat: DetailsUtilityBase.tickFormatDateFunction

},

* Add tick format for y2Axis: y2Axis: {

tickFormat: DetailsUtilityBase.tickFormatPercentFunction

}

Feedback: 30Day, 60Day; play with numDates of API, currently set at 6.(for George’s flag: assuming there is a disabled field for each data API);

Can we superimpose the context chart to the bottom of the focus chart?

1. Chart impression: history chart last point is equal or 1% less than the progress bar percentage;
2. History chart tool tip leader order stay fixed as the order upon refresh, and does not correspond to sort function.

9/10/2015: **[Wed 08/19] Shuyu(3:17:30 PM):** sz3160

**[Wed 08/19] Michael(3:17:33 PM):** sure

**[Wed 09/09] Shuyu(4:42:32 PM):** Mike, What was the number of dates variable you mentioned earlier? I

**[Wed 09/09] Michael(4:51:46 PM):** numDates

**[Wed 09/09] Shuyu(4:56:56 PM):** That is what I thought, but I can't find it. Where does it live?

**[Wed 09/09] Michael(5:59:23 PM):** it's passed in the url... for instance:

**[Wed 09/09] Michael(5:59:26 PM):** <http://cd.dev.att.com:9002/training/program/history/xp/wh6454?numDates=30>

**[Wed 09/09] Michael(5:59:46 PM):** <http://cd.dev.att.com:9002/training/program/history/xp/wh6454?numDates=60>

Search for training/program/history in cd-dashboard-client codebase, and results point to app/services/training-factory, restangularPromises line 63.

From the actual page Process/agile boot-camp training: Bc-training dates set at 10; [vm.name = 'bcTraining';

19 vm.program = 'BC';]-Agile boot-camp training

Process/Scrum ALM set at 6;

Engineering/

* agile technical training: 10;[xp-training]
* Engineering.sonar: 6;
* unitTestCoverage:7;
* Rule and Compliance:7;
* Density of Duplicated lines: 6.

Two trainingHistoryDeferred:lines 51-52 of training-factory.

In DevTool Chrome, Network/XHR found the above url.numDates reflect what I set in lines 69 ~~and 59~~.-remove from line 59 no difference; remove from 69 produce just 6 points.

Set at numDates=240: May31-Sept10,2015;

Set at numDates=120: same graph: in Preview/value: 0-102 objects.

Set at numDates=90:same graph, 6/26-9/10 everyday; May31-6/26: every other day.

Set at numDates=60:same graph, 5/31-8/25: every other day; 8/25-9/10: every day.

Set at numDates=30: same graph, 7/30-9/10: every three days, 5/31-7/30: every 4 days.

/Feedback from Whiteboarding session: A simple graph on overview page; Default to 15 from 6;

Toggle between line Chart and line With Focus Chart (which will be on a 3rd tab with the controls of 30, 60, 90 days),Eventually need date pickers.

Need to toggle in xp-training.controller, not in details-utilities-factory…

Work in chart-selections branch .

9/11:All Process and Engineering stadiums have similar nvd3 charts, can be pulled to a custom directory under app/common and called from each stadium tpl.jade;

/[scope](https://docs.angularjs.org/guide/scope): Scope is the glue between application controller and the view…Both controllers and directives have reference to the scope, but not to each other. This arrangement isolates the controller from the directive as well as from the DOM.

*Angular response On error to any exception except 403 and 200*

cd-footer is in overview.tpl.jade and metric-details-directive.tpl.jade

9/14: $provide ?

Study codebase: meta?

/Toggle sample size:

Set in training-factory.js:

numDates = 15;

numDatesOptions = [30,60,90,365];

pass in xp-training-controller.js:

in xp-training.tpl.jade:

use xpTraining.sampleSize instead of XpTrainingCtrl

in details-utility-factory.js: DetailsUtilityBase.init = function (scope, ctrl, getPeopleDetailsFn, peopleHistoryFilterFn) {

vs.

in xp-training-controller.js:

DetailsUtility.init($scope, vm, vm.getPeopleDetails);

In training-factory.js: the following did not work:

function Training($q, Restangular, xpTraining) {

var TrainingBase = {},

training = {},

trainingDefers = {},

numDates = xpTraining.sampleSize;

//XpTraining did not work,either

//ctrl did not work

//Ctrl did not work

//XpTrainingCtrl did not work

//xpTrainingCtrl did not work

[Dependency injection](https://github.com/angular/angular.js/wiki/Understanding-Dependency-Injection): can not inject ctrl into other things. What to do?

[Using ng-change instead of $watch in Angular](http://www.codelord.net/2015/06/11/using-ng-change-instead-of-$watch-in-angular/)

9/15: instead of updating numDates in Training using ctrl.sampleSize, update Training.numDates in XpTrainingCtrl. That worked; however,query did not fire, missingPerson upon querry is at 0, meaning caching is preventing any update. Cache is not catching the right signal. It needs to listen for change in numDates as well.

[Ng-change vs. watch](http://stackoverflow.com/questions/28313865/when-to-use-watch-or-ng-change-in-angularjs): ng-change works with ng-model on input elements, thus only responding to changes by user input; watch responds to whatever value function it sets out to watch:

$scope.$watch(function(scope) { return scope.data.myVar },

function(newValue, oldValue) {

}

);

By running the listener function.

9/16: toggle chart type using similar strategy:

Step 1: updating chartType in XpTrainingCtrl using /DetailUtility.chartType.

-worked, i.e. chartType updates; But no change in chart; no msg

Step2:pass in chartType in detailUtil.init:

In xp-training controller , DetailsUtility.init($scope, vm, vm.getPeopleDetails,chartType);

In detailUtility:

DetailsUtilityBase.init = function (scope, ctrl, getPeopleDetailsFn, peopleHistoryFilterFn,chartType)

Result:load alright; on clicking lineWithFocusChart: chartType updates, but chart spins, msg: lineWithFocusChart not a function.

Step2.1: call DetailsUtility.init($scope, vm, vm.getPeopleDetails,'lineWithFocusChart');same results as step 2.

Step3: add in selectChartType in xpTraining: DetailsUtility.chart.update();

Result: load all right, on click chartType update, chart no change: msg: TypeError: Cannot read property 'update' of undefined at XpTrainingCtrl.vm.selectChartType (xp-training-controller.js:51)

Step4: in xp-training, at selectChartType, call DetailsUtility.init($scope, vm, vm.getPeopleDetails,vm.my.chart); result similar to step 2.

Step 5: .vm.chart.update(); results same as Step3;

Step6: chart.update(); results similar-msg: chart is not defined

/Modify the sample size selection by using a slider?

/Look into live search for leaders in the app. US530675 Leader Search Function

**As a**user

**I want**the ability to search the org chart for another leader

**So that**I am not forced to know another leader's chain of command to select them.

**Acceptance Criteria**

* Leaders can be searched by ATTUID
* matched by full string

chart update:

<https://github.com/krispo/angular-nvd3/pull/175/files>

Currently in CD Maturity Model: AngularJS-nvD3, v1.0.0-rc; MIT License; 29/06/2015 15:12; <http://krispo.github.io/angular-nvd3>

But the Angular-nvD3 has updated to v1.0.0-rc.2(nvd3: v1.8.1) line 328

[Real time data visualization](http://www.pubnub.com/blog/creating-realtime-updating-data-visualizations-with-nvd3/)

Chart update angular-nvd3, line 43 & 48:

/fetch async-detail-display ,

From async-detail-display, Checkout chart-selection-asyn,

merge in async-detail-display, (no need)

merge in chart-selection.

9/17: Dave Nguyen first checked to see if chartType is passed inside init: Nope!

Then he checked the bracket for detail.Util: OK;

He noticed there are 6 arguments in init in detailUtil, but I am calling it in xp-training-controller with just 5 arguments. the reason the chartType is not p

/control M to locate the other half of bracket in sublime

[restangular](https://github.com/mgonto/restangular#element-methods)

pizza slider <input id="sizeSlider" type="range" min="1" max="3" value="2" step="1" onchange="resizePizzas(this.value)">

/App Maturity: Jenkins: build time is important; build frequency; metrics show MOTs ID

9/18: use min-width for the history chart section to prevent overlapping of history and detailed progress charts. Flex-wrap, display:flex did not do .

Implemented slider with input range tag of HTML5.

/look into angular testing, to test xp-training-controller.js

9/21: Standup feedback: slider not precise enough, go with drop-down.

Want the numDates to persist across entire session of a user; i.e., to have memory. Call the numDates in DetailsUtility from the template: how? DetailsUtility.numDates. How to cache?

Tomorrow: write unitTest.

timeout allows the $apply method to be ran at the end of the session. This ensures that $scope is fully digested and doesn't have any acid reflux or constipation.

the link function is the place to perform DOM manipulation.

to avoid manipulate DOM elements in this controller

one of uses of the controller is to connect the directives together to get or set data from perhaps a service or by a simple augmentation of the scope (ie: scope.message = "Hello World")

r presentation logic or what the user sees, that is the role of the directives, remember SOC(separation of concerns) each part of the MVC/MV\* pattern has its own roll to play.

Think of it in a simple way like this user sees button on presentation layer, user clicks button a function for the click of the button occurs on the business layer (controller) that takes the results and stores in the data/model layer.

The Directive Controller is defined within the context of one directive; but, it can be injected into other directives as a means to facilitate inter-directive communication.

The separation of concerns is awesome; and, I think it leads to a much more maintainable application. Figuring out what goes where, however, can be a little confusing at times.

9/22:/ [One](http://onehungrymind.com/notes-on-angularjs-scope-life-cycle/) of the main reasons you use $apply is when browser DOM events have triggered outside of AngularJS. jQuery I’m looking at you!

/$scope.$emit up, $scope.$broadcast down:

Lodash vs underscore.

Angular.foreach: map returns but foreach does not

\_.map({ 'one': 1, 'two': 2, 'three': 3 }, function(num) { return num \* 3; });

// => [3, 6, 9] (property order is not guaranteed across environments)//do for all elements

\_([1, 2, 3]).forEach(function(num) { console.log(num); }).join(',');

// => logs each number and returns '1,2,3'

\_.forEach({ 'one': 1, 'two': 2, 'three': 3 }, function(num) { console.log(num); });

// => logs each number and returns the object (property order is not guaranteed across environments)

var characters = [

{ 'name': 'barney', 'age': 36 },

{ 'name': 'fred', 'age': 40 }

];

\_.pluck(characters, 'name');

// => ['barney', 'fred']//1 property of all elements

//

var characters = [

{ 'name': 'barney', 'age': 36, 'blocked': false },

{ 'name': 'fred', 'age': 40, 'blocked': true },

{ 'name': 'pebbles', 'age': 1, 'blocked': false }

];

\_.find(characters, function(chr) {

return chr.age < 40;

});

// => { 'name': 'barney', 'age': 36, 'blocked': false }

// using "\_.where" callback shorthand

\_.find(characters, { 'age': 1 });

// => { 'name': 'pebbles', 'age': 1, 'blocked': false }

// using "\_.pluck" callback shorthand

\_.find(characters, 'blocked');

// => { 'name': 'fred', 'age': 40, 'blocked': true }

160terabytes consolidated from MOTS etc into RALLY SONAR,

PRISM

QC

ALTS

Can’t do lots of data on API. PostGre

Wiki.web.att.com/display/Dyson

Instead of calling DetailsUtility.init from ctrl of xp-training, define chart manipulation methods using only the update of chart type and chart data; then move them to detailsUtility factory. That way, the ctrl still is accessed from DetailUtility (vm in ctrls).

//allow users to set sample size for the history graphs on the Process and Engineering pages

ctrl.selectSampleSize = function(size) {

DetailsUtility.numDates = size;

DetailsApi.getUserHistory(\_.pluck(ctrl.people, 'id'), 'training/program/history/xp/',{numDates: ctrl.sampleSize})

.then(function (data) {

// console.log('just data',data);

ctrl.graph.data.forEach(function(person){

person.values = \_.find(data,function(userHistory){

return person.id===userHistory.key;

}).values;

});

console.log('graph data', ctrl.graph.data);

});

};

console.log(ctrl.sampleSize);

//allow users to set chart type for the history graphs on the Process and Engineering pages

ctrl.selectChartType = function(chart) {

ctrl.graph.options.chart.type = chart;

};

When $timeout delay is omitted, it defaults to 0. However, the block of code contained in it is executed after the DOM has been manipulated by Angular.

//reload nvd3 graph by triggering a window resize event when switching back to graph view otherwise the graph loads with a width close to 0

ctrl.triggerResize = function () {

$timeout(function () {

ctrl.graph.api.update();

});

};

Design-demo feedback: would like a toggle for graph type, a better-looking dropdown.

[anchors, inputs and buttons](http://davidwalsh.name/html5-buttons)

: Unlike inputs, a button's label is determined by its content.

[Foundation drop-down buttons](http://webdesign.tutsplus.com/articles/foundation-for-beginners-buttons-and-dropdowns--webdesign-12465):

ul.inline-list.history-graph-positioning

li

form Select Data Points

label(

for='sampleSizeSeletion'

)

select(

ng-model='metricObject.sampleSize'

ng-options='option for option in graphSettings.sampleSizeOptions'

ng-change='metricObject.selectSampleSize(metricObject.sampleSize)'

id='sampleSizeSelection'

style='width:100px'

)

option(value='') 15

li

span Focus Graph

.switch.round

input(

id='focusGraphSwitch'

ng-init='metricObject.showFocusGraph=false'

type='checkbox'

ng-model='metricObject.showFocusGraph'

ng-click='metricObject.toggleChart()'

)

label(for='focusGraphSwitch')

-------directive—

(function () {

'use strict';

/\*\*

\* @ngdoc directive

\* @name common.graphSettings.directive:graphSettings

\* @restrict E

\* @element

\*

\* @description

\*

\* @example

<example module="common.graphSettings">

<file name="index.html">

<graphSettings></graphSettings>

</file>

</example>

\*

\*/

angular

.module('common.graphSettings')

.directive('graphSettings', graphSettings);

function graphSettings() {

return {

restrict: 'E',

scope: {

metricObject: '=',

sampleSize: '=',

showFocusGraph: '='

},

templateUrl: 'common/graph-settings/graph-settings-directive.tpl.html',

replace: true,

controllerAs: 'graphSettings',

bindToController: true,

controller: function (DetailsUtility, DetailsApi, $scope) {

var vm = this;

vm.name = 'graph-settings';//what is this for?

//set the default sample size and chart type

// vm.sampleSize = 15;

vm.sampleSizeOptions = [30, 60, 90, 365];

// vm.showFocusGraph = false;

vm.selectSampleSize = function (size) {

DetailsUtility.numDates = size;

DetailsApi.getUserHistory(\_.pluck(ctrl.people, 'id'), 'training/program/history/xp/', {numDates:

ctrl.sampleSize})

.then(function (data) {

ctrl.graph.data.forEach(function (person) {

person.values = \_.find(data, function (userHistory) {

return person.id === userHistory.key;

}).values;

});

});

};

vm.toggleChart = function () {

if (ctrl.showFocusGraph === false) {

ctrl.graph.options.chart.type = 'lineChart';

} else {

ctrl.graph.options.chart.type = 'lineWithFocusChart';

}

};

},

link: function (scope, element, attrs) {

/\*jshint unused:false \*/

}

};

}

})();