

AngularJS

Prototypes You Don't Need to Throw Away

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We've all been there...

Wireframe a new design (maybe some PhotoShop)

HTML mockup to see in browser

Then they “need” to see this page mocked in design

Suddenly, you have 20 pages of static content, forms, clickthroughs, fake workflows

I wish this was an exaggeration...

Then it happens...

How long until you deploy this on production?

How long until you deploy this on PRODUCTION?

How long until you deploy this MOCKUP on PRODUCTION?!?!

There has to be better way
(that's still quick)

Design Tools That Do This

You can use them to make the design clickable

Not wasted coding time

but then you're still not having any code written

Why not write code you can interact with *and* keep?

Enter the Angular

Why AngularJS?

Let's you extend HTML into your application code

MVC, Client side application code

Modules for many features you can grab and go
(angularui, material-angular, angular-translate, restangular)

Can run local with just node (perfect for demoing without worry of connectivity)

Why AngularJS?

Write full application with services

Mock out services to use JSON values
and / or local storage

When ready, point services to REST with
same data model

then BOOM, you have a web application



Why AngularJS

Added bonus:

You have a full set of data to then use for your unit tests
(that we all know we all *always* write, right?)

Proof is in the Pudding

Set out to put together a new prototype in 3 evenings with AngularJS

Set up with JSON to get initial data

“POSTs” save to sessionStorage



Your Training

THE HUB

MY PLAN

AVAILABLE PLANS



Runner's World Hat Trick (in a month)

Week 13 of 19



[VIEW FULL PLAN](#)

Start a new plan?

[Sprint Triathlon \(20 weeks\)](#)

[Get Fit \(10 weeks\)](#)

Controller code

```
HubService.getAvailablePlans()
  .then(function(data, status) {
    $scope.model.availablePlans = data;
  }, function(data, status) {
    //handle error
  });
}
```

Services Code + JSON

```
getCurrentPlansSummary : function() {  
    return $http.get('/app/data/my-plans-summary.json');  
}
```

Services Code + JSON

Great for getting data

Just need to switch to new API.

Doesn't work well for saving data beyond a controller

Load to Local Storage

```
angular.module('pt', ['ngStorage'])
.run(['$localStorage', function($localStorage) {
    $localStorage.currentPlansSummary = {
        //preload data
    }
}]);
```

Services Code + storage

```
getCurrentPlansSummary : function() {  
    var deferred = $q.defer();  
    if($localStorage.currentPlansSummary) {  
        deferred.resolve($localStorage.currentPlansSummary);  
    } else {  
        deferred.reject({msg: 'not found', status: 404});  
    }  
    return deferred.promise;  
}
```

Services Code + storage

```
addPlan : function(newPlan) {  
    var deferred = $q.defer();  
    var currentPlans = $localStorage.currentPlans || [];  
    currentPlans.push(newPlan);  
    $localStorage.currentPlans = currentPlans;  
    deferred.resolve(currentPlans);  
    return deferred.promise;  
}
```

Services Code Hybrid

```
getCurrentPlansSummary : function() {
    var deferred = $q.defer();
    if(!$sessionStorage.currentPlansSummary) {
        $http.get('/app/data/my-plans-summary.json')
            .success(function(data) {
                $sessionStorage.currentPlansSummary = data;
                deferred.resolve($sessionStorage.currentPlansSummary);
            });
    } else {
        deferred.resolve($sessionStorage.currentPlansSummary);
    }
    return deferred.promise;
}
```

In Action

<http://localhost:8000/app/index-dev.html>

GitHub: <https://github.com/RHGeek/devfest-dc-15>

What's Next?

UI can be refined and developed further while a REST API is added to support current data model

Lessons learned from API data model

Go finish those unit tests on your JavaScript!

Flip the services to your backend and you have full stack

Github: <https://github.com/RHGeek/devfest-dc-15>

(I promise I'll finish editing the README.md

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