ThoughtWorks®

AngularJS Sessions

INTRODUÇÃO



OBJETIVOS DE HOJE





O que é AngularJS? Visão geral



Por que e quando devo usar AngularJS?



http://angularjs.org

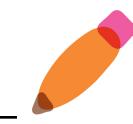




AngularJS é um framework estrutural para desenvolvimento de aplicativos web interativos

VISÃO GERAL







VISÃO GERAL





```
DIRECTIVE
   <html ng-app>
     <head>
       <title></title>
     </head>
                                             DIRECTIVE
     <body>
       <div name="container">
         Name: <input type="text" ng-model="name" />
         Hello, {{name}}
       </div>
10
11
     <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.2.13/angular.min.js"></script>
     </body>
   </html>
14
```

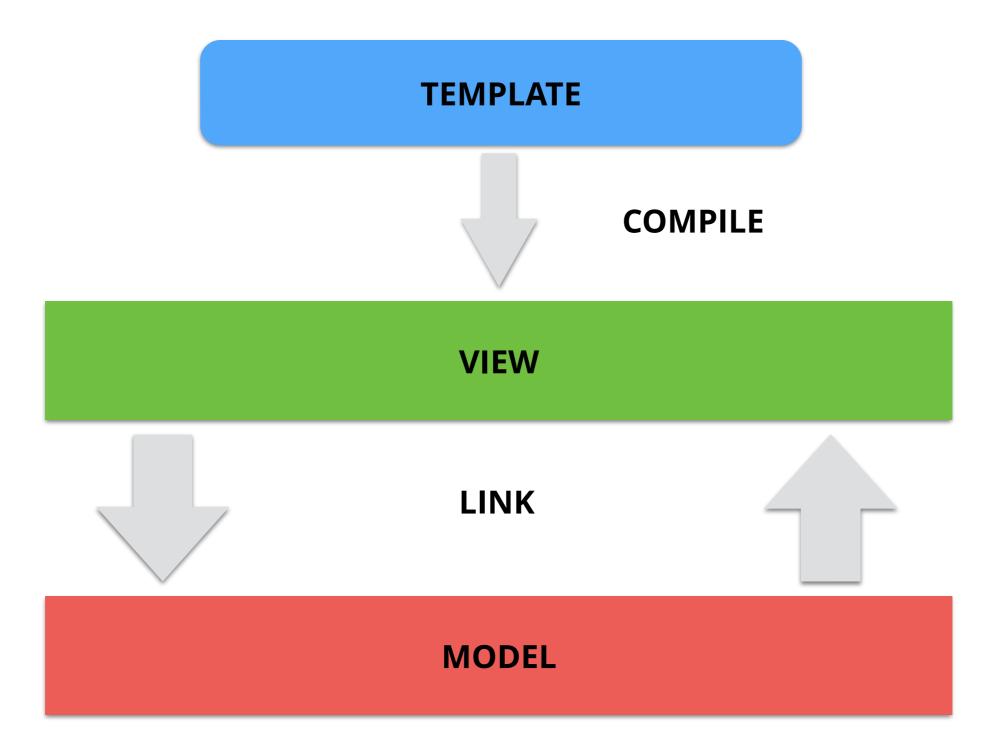
"{{ name }}" é uma binding expression!







TWO WAY DATA BINDING







Assim como qualquer abstração, ela afeta a flexibilidade

AngularJS nem sempre é uma boa opção





MVC implementado corretamente!





Uma interface declarativa, como deve ser





SCOPES Entidades de domínio são meros objetos JavaScript

VISÃO GERAL



Comportamento através de diretivas! (directives)

Manipulação de DOM em uma camada segregada

http://www.thoughtworks.com/radar/#/techniques/698

This involves aggressively restricting all DOM access (which usually translates to all jQuery usage) to a thin 'segregation layer'. One pleasant side-effect of this approach is that everything outside of that segregated DOM layer can be tested rapidly in isolation from the browser using a lean JavaScript engine such as node.js.





Flexibilidade nos templates através de filtros (filters)





Comunicação dependente de contexto

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Você vai escrever menos código!

Produtividade

Registering callbacks

Manipulating HTML DOM programmatically

Marshaling data to and from the UI

Writing tons of initialization code just to get started





Designers tendem a adorar o AngularJS.





O HTML permanece declarativo!





Inversão de Controle através da Injeção de dependência



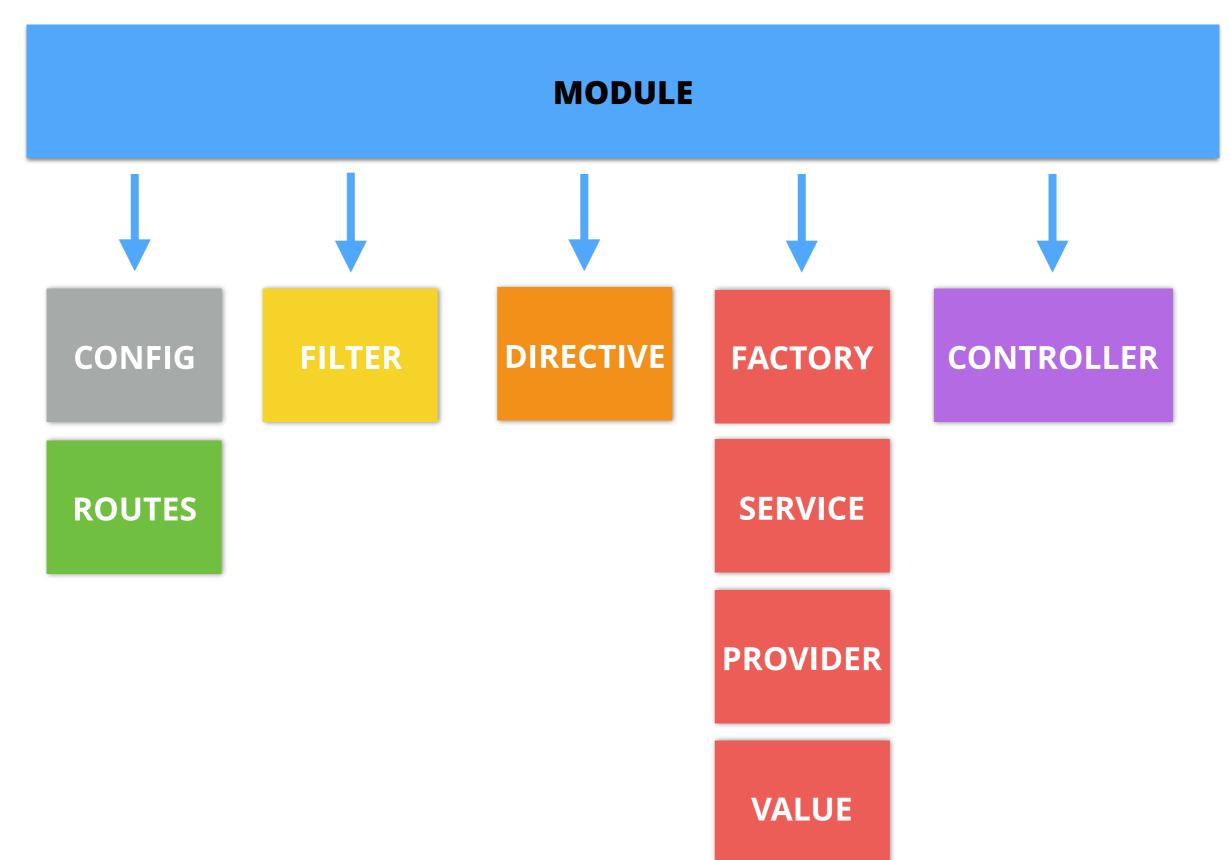
Associado à boas ferramentas de escrita de testes

= TESTABILIDADE!

VISÃO GERAL

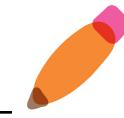






VISÃO GERAL - REVISÃO







Este exemplo possui uma prática não recomendada. Dica: Há certas manipulações que não deveríamos fazer na view /

```
<html ng-app>
 <head>
                                                         template
  <title></title>
 </head>
 <body>
   <div name="container"</pre>
      ng-init="contacts=[{name: 'Renan Martins'}, {name: 'Tania Gonzales'}, {name: 'Anabela de Malhadas'}]">
    <input type="text" ng-model="newContact" />
    <button ng-click="contacts.push({name:newContact})">ADD CONTACT</button>
    {{contact.name}}
    FILTER
    <hr>
    {{contact.name | uppercase }}
    </div>
 <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.2.13/angular.min.js"></script>
```

</body>

</html>

VISÃO GERAL - REVISÃO



Vamos fazer uma pequena app para revisar e aprender alguns conceitos novos?

Dessa vez adicionando um pouco de JavaScript





http://git-scm.com/download/win



http://nodejs.org/download/



https://github.com/renanmartins/thoughtworks-contacts-una



http://localhost:8000/app/snippets/second.html

Vamos adicionar um <input> para buscar / filtrar os nomes

THOUGHTWORKS CONTACTS







Who?

Anabela

Paulo Brito

Pedro Legal

Renan Martins

Tania Gonzales

Anabela







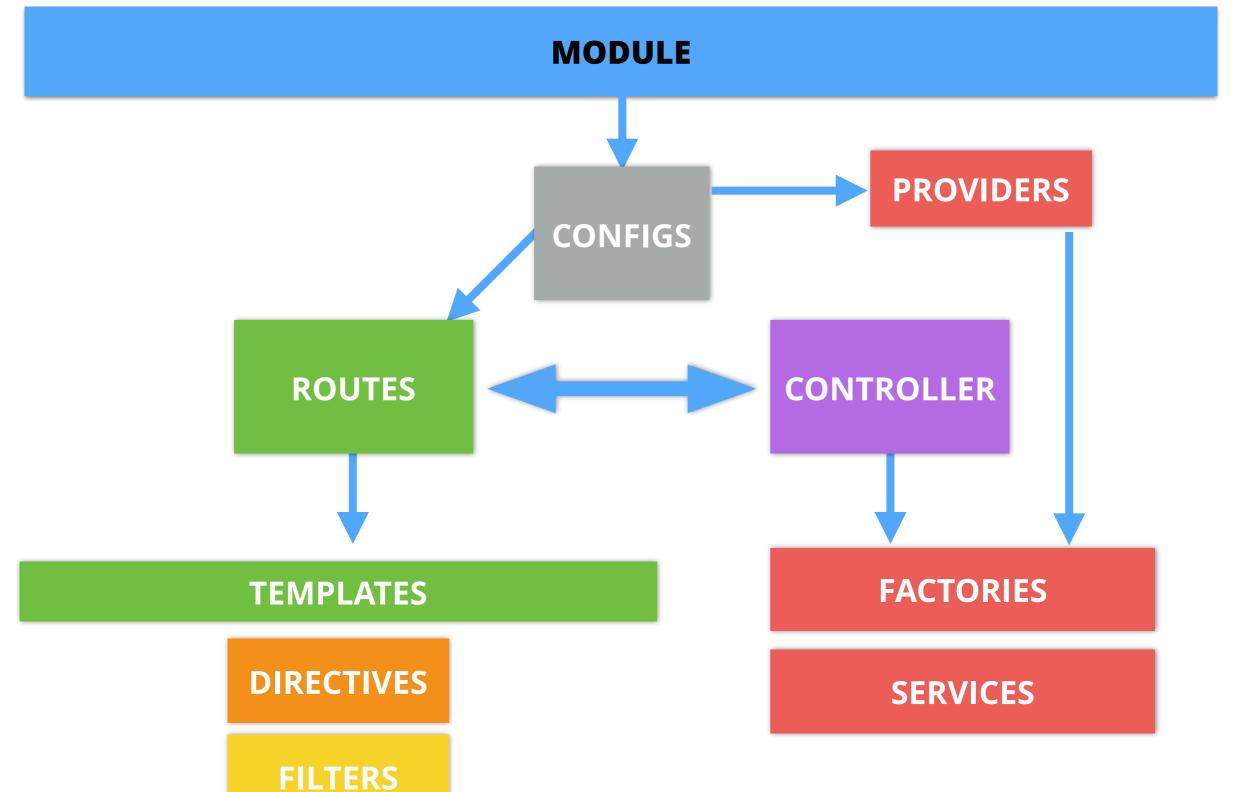




ANATOMIA DA APLICAÇÃO

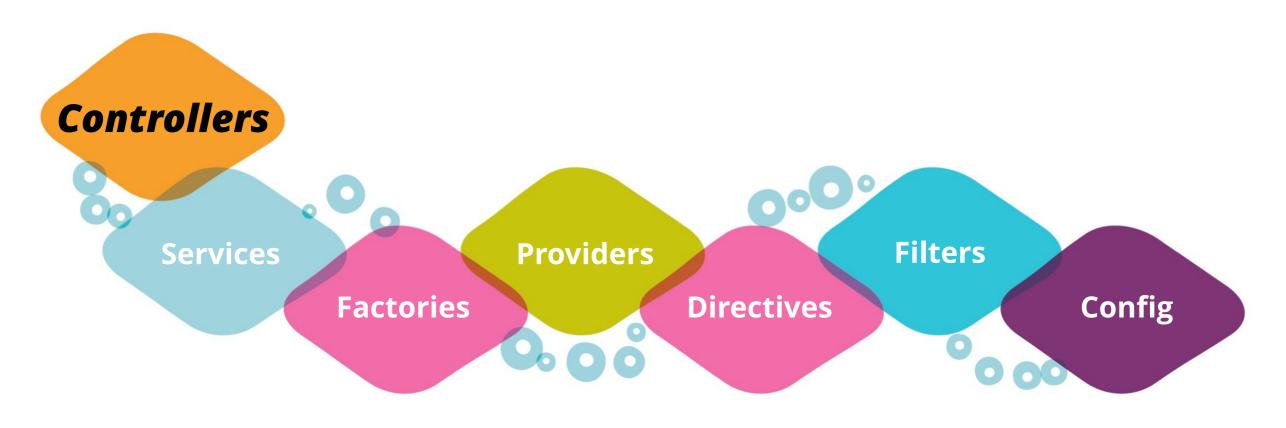






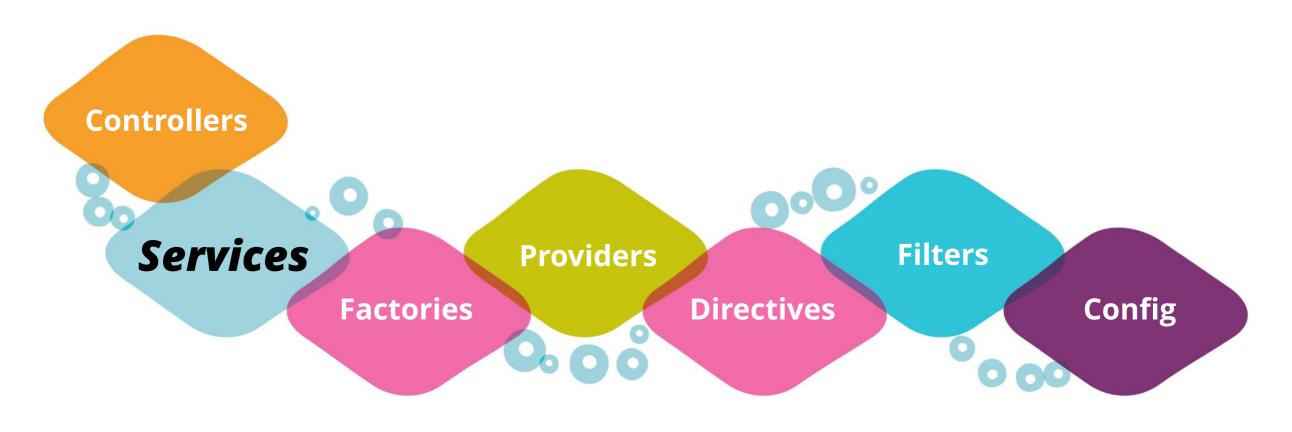






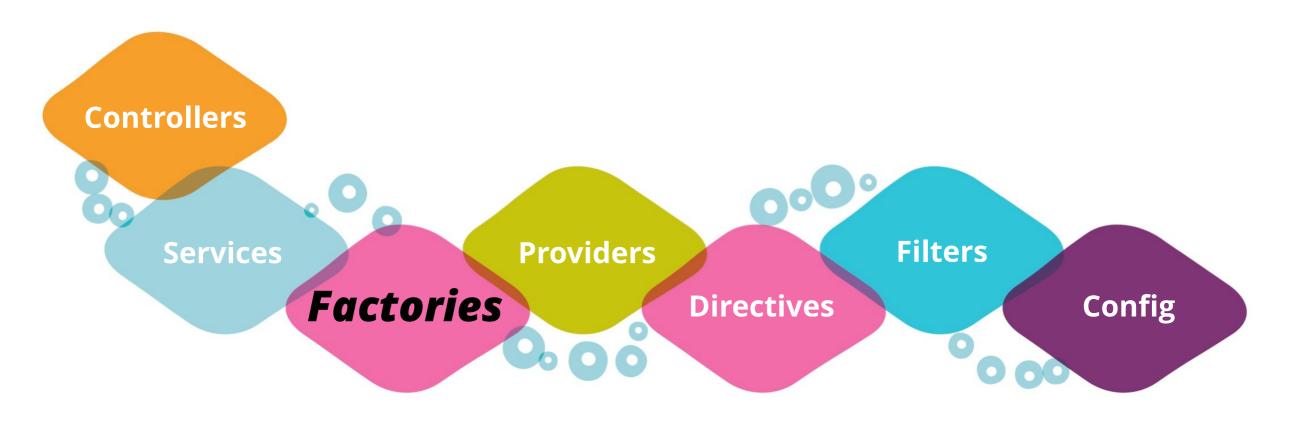










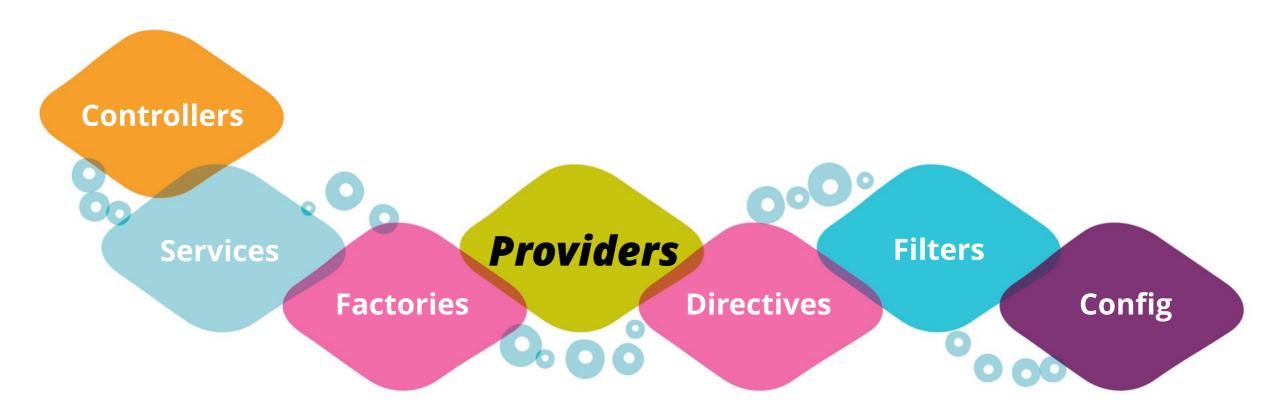




If you want your function to be called like a normal function, use factory. If you want your function to be instantiated with the **new** operator, use service.







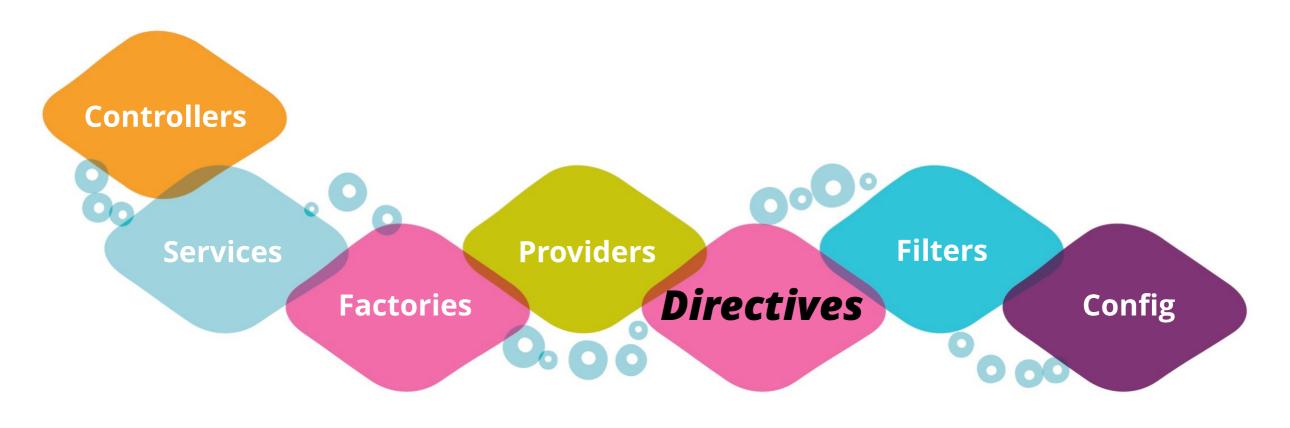




Features	Factory	Service	Value	Constant	Provider
Can have dependencies	yes	yes	no	no	yes
Object available in config phase	no	no	no	yes	yes
Can create functions / primitives	yes	no	yes	yes	yes

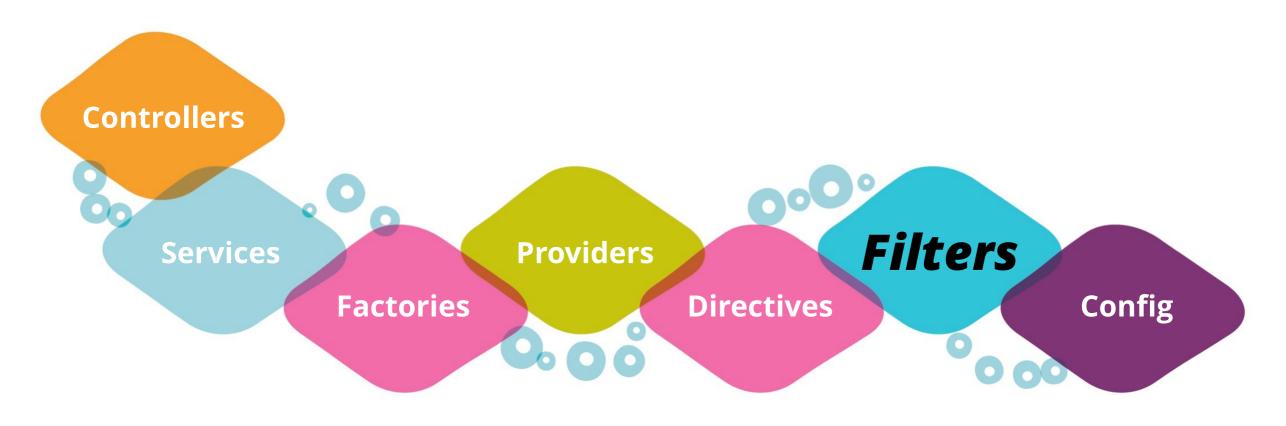






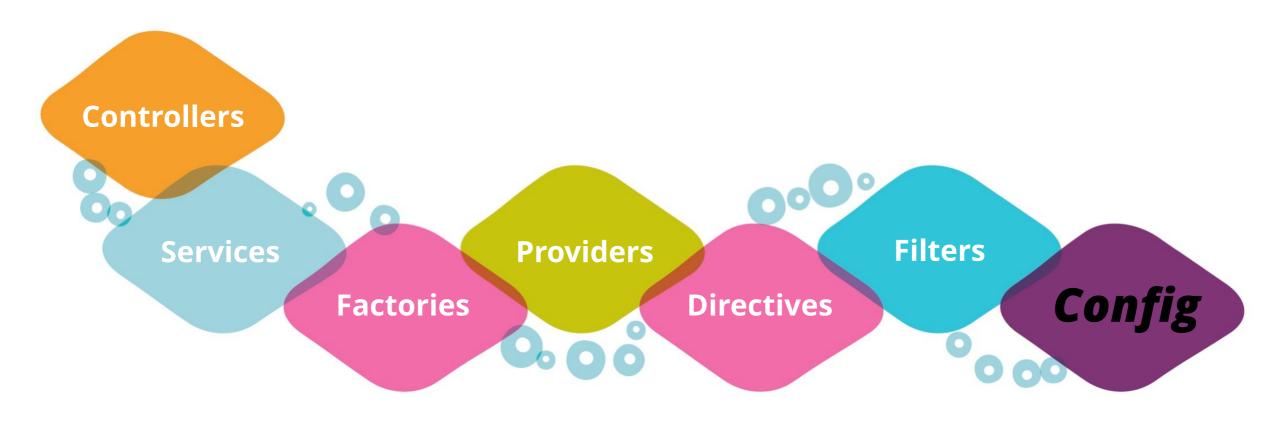












TESTES PONTA A PONTA





\$ NPM RUN PROTRACTOR



GOOD PRACTICES





Controllers e Services não devem referenciar o DOM



Services devem conter lógica reutilizável, independente da view



Scope não deve ser diretamente alterado nos templates



Seja cauteloso ao seguir exemplos simples da documentação ou de blog posts

Your architectures should reflect the system, not the frameworks you used in your system

Uncle Bob - Screaming Architecture

ECOSSISTEMA



REFERÊNCIAS



- http://docs.angularjs.org/guide: Angular official documentation, it used to be very poor with very simples examples but is getting better in content although still using the same basics examples.
- https://github.com/angular/angular.js/wiki : Very good "articles" to understand better what angular is doing under the hood, like managing scopes and directives.
- http://www.thinkster.io/pick/GtaQ0oMGII: "A Better Way to Learn AngularJS": Very nice website that puts together a lot of good resources to learn AngularJs from scratch.
- http://www.youtube.com/angularjs: AngularJs official youtube channel where they share and live-stream their presentations.

REFERÊNCIAS



- https://egghead.io/: Videos with very simple explanation of the angular world such as directives, scope, controllers, very simple to start to understand what angular can do for you but no how it does it.
- http://joelhooks.com/: Blog where you can find some very interesting articles about AngularJs such as "Modeling Data and State in Your AngularJs Application"
- AngularJs (O'Reilly, Brad Green & Shyam Seshadri): Nice book to go deeper into the AngularJs concepts and what it has to offer.
- ☐ Javascript: the good parts (O'Reilly, Douglas Crockford)
- https://my.thoughtworks.com/message/86389 (learnings from TWers around the world)

MUITO OBRIGADO

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Venha participar do nosso processo seletivo

JUNTE-SE A NÓS - BH

BELO HORIZONTE, MG

Sexta, 29 de agosto de 2014

14h às 18h

http://info.thoughtworks.com/junte-se-a-nos-bh.html

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SLIDES EXTRAS

VISÃO GERAL





\$COMPILE

Once all directives for a given DOM element have been identified they are sorted by priority and their the directive compile() functions are executed

LIVE BINDING BETWEEN SCOPE AND DOM!





LINK(DOM,\$SCOPE)

Register any listeners on the elements and set up any watches with the scope. Live binding between the scope and the DOM

VISÃO GERAL





