

Angular2 in Action

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Angular-cli



2009, front-end big bang...

Angular-cli



Angular-cli



When we develop Angular apps, we need...

Angular-cli



Angular-cli is more than a tool, it is a **PLATFORM!**

Angular-cli



```
>npm install -g angular-cli  
>ng help  
>ng new my-project1  
>ng serve
```


>ng generate

cl:class

c:component

d:directive

e:enum

m:module

p:pipe

s:service

Angular-cli



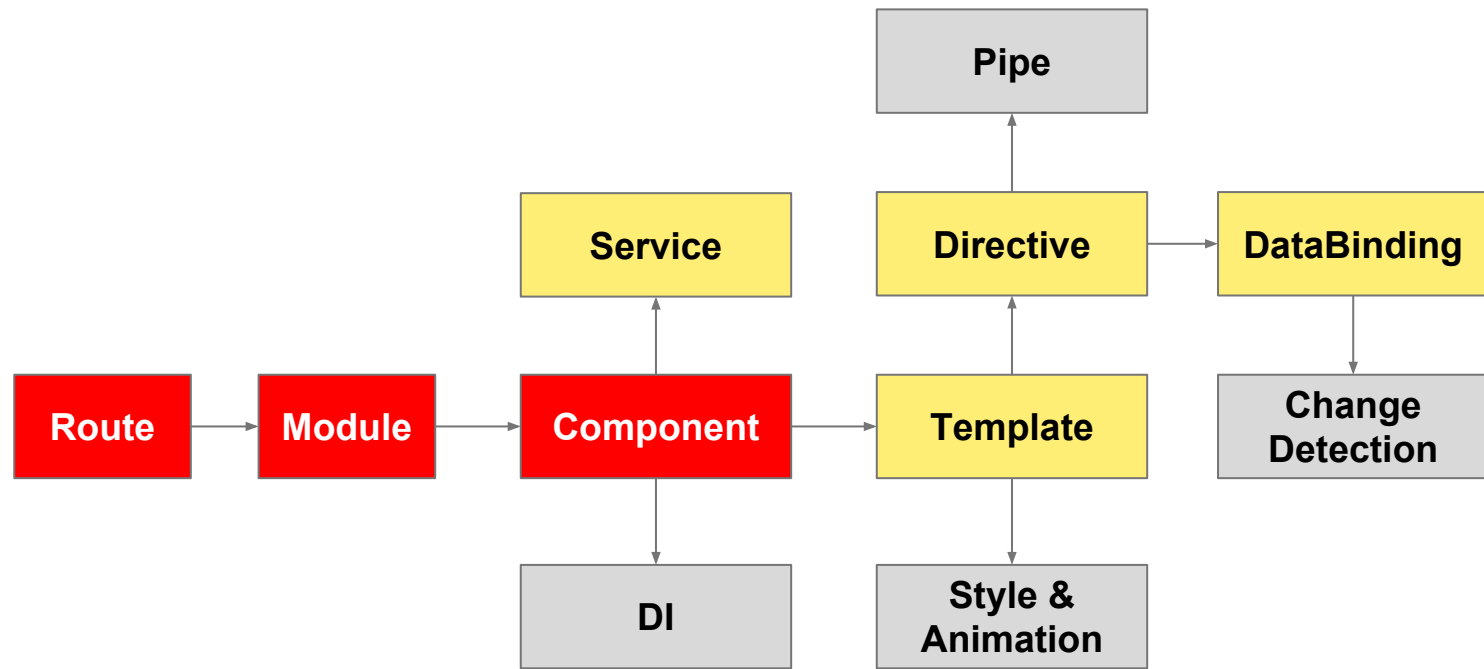
```
angular-cli
WARNING in ./@angular/core/src/linker/system.js ng module factory loader.js
45:15 Critical dependency: the request of a dependency is an expression
WARNING in ./@angular/core/src/linker/system.js ng module factory loader.js
57:15 Critical dependency: the request of a dependency is an expression
ERROR in [default] E:\github\ng2-bootstrap-demo\src\app\user\add-user.component.spec.ts:8:20
  Supplied parameters do not match any signature of call target.
13 10 2016 10:58:21.772:INFO [karma]: Karma v1.2.0 server started at http://localhost:9876/
13 10 2016 10:58:21.773:INFO [launcher]: Launching browser Chrome with unlimited concurrency
13 10 2016 10:58:21.897:INFO [launcher]: Starting browser Chrome
13 10 2016 10:58:24.805:INFO [Chrome 53.0.2785 (Windows 10 0.0.0)]: Connected on socket /#i6GL146TuIVZ1kPKAAAA with id 79091848
Chrome 53.0.2785 (Windows 10 0.0.0): App: Angular2BootstrapSass should create the app FAILED
  'router-outlet' is not a known element:
  1. If 'router-outlet' is an Angular component, then verify that it is part of this module.
  2. If 'router-outlet' is a Web Component then add "CUSTOM_ELEMENTS_SCHEMA" to the '@NgModule.schema' of this component to suppress this message.
  </div>
  <div class="main-container">
    [ERROR ->]<router-outlet></router-outlet>
  </div>
  ): AppComponent#42:4
Error: Template parse errors:
  at TemplateParser.parse (http://localhost:9876/_karma_webpack_/0.bundle.js:7333:19)
  at RuntimeCompiler.compileTemplate (http://localhost:9876/_karma_webpack_/0.bundle.js:15632:51)
  at http://localhost:9876/_karma_webpack_/0.bundle.js:15555:83
  at Set.forEach (native)
  at compile (http://localhost:9876/_karma_webpack_/0.bundle.js:15555:47)
  at RuntimeCompiler._compileComponents (http://localhost:9876/_karma_webpack_/0.bundle.js:15557:13)
  at RuntimeCompiler.compileModuleAndAllComponents (http://localhost:9876/_karma_webpack_/0.bundle.js:15474:37)
  at RuntimeCompiler.compileModuleAndAllComponentsSync (http://localhost:9876/_karma_webpack_/0.bundle.js:15462:21)
  at TestingCompilerImpl.compileModuleAndAllComponentsSync (http://localhost:9876/_karma_webpack_/0.bundle.js:20504:35)
  at TestBed._initIfNeeded (webpack:///E:/github/ng2-bootstrap-demo/_karma_webpack_/0.bundle.js:1059:0 <- src/test.ts:8814:40)
Chrome 53.0.2785 (Windows 10 0.0.0): Executed 1 of 10 FAILED (0 secs / 0.101 secs)
Chrome 53.0.2785 (Windows 10 0.0.0): App: Angular2BootstrapSass should create the app FAILED
  'router-outlet' is not a known element:
  1. If 'router-outlet' is an Angular component, then verify that it is part of this module.
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  </div>
  <div class="main-container">
    [ERROR ->]<router-outlet></router-outlet>
  </div>
  ): AppComponent#42:4
Error: Template parse errors:
  at TemplateParser.parse (http://localhost:9876/_karma_webpack_/0.bundle.js:7333:19)
```

>ng test

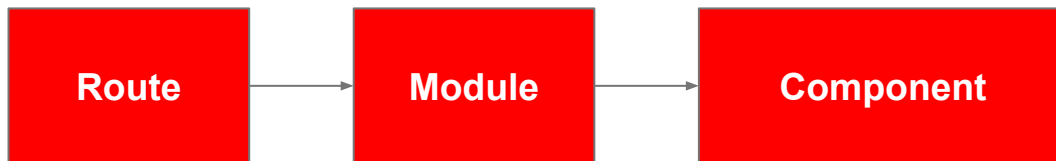


Angular2 core Concepts

Angular2 Core Concepts



Angular2 Core Concepts



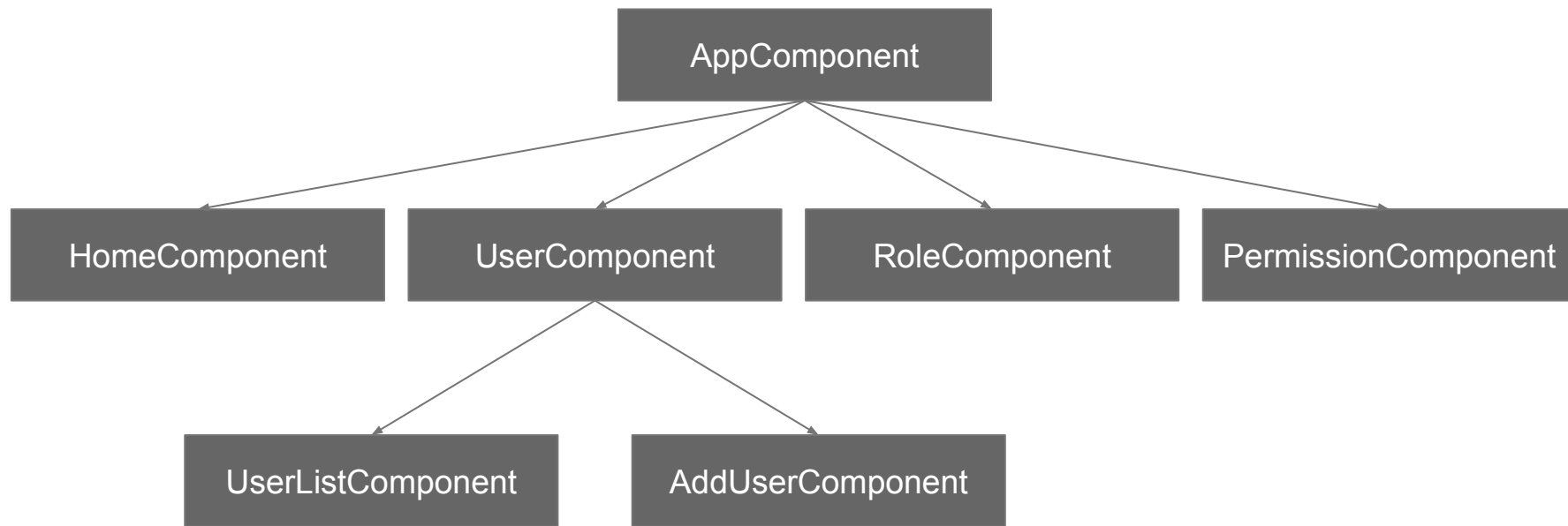
Angular2 Core Concepts



<https://github.com/damoqiongqiu/ng2-bootstrap-demo>

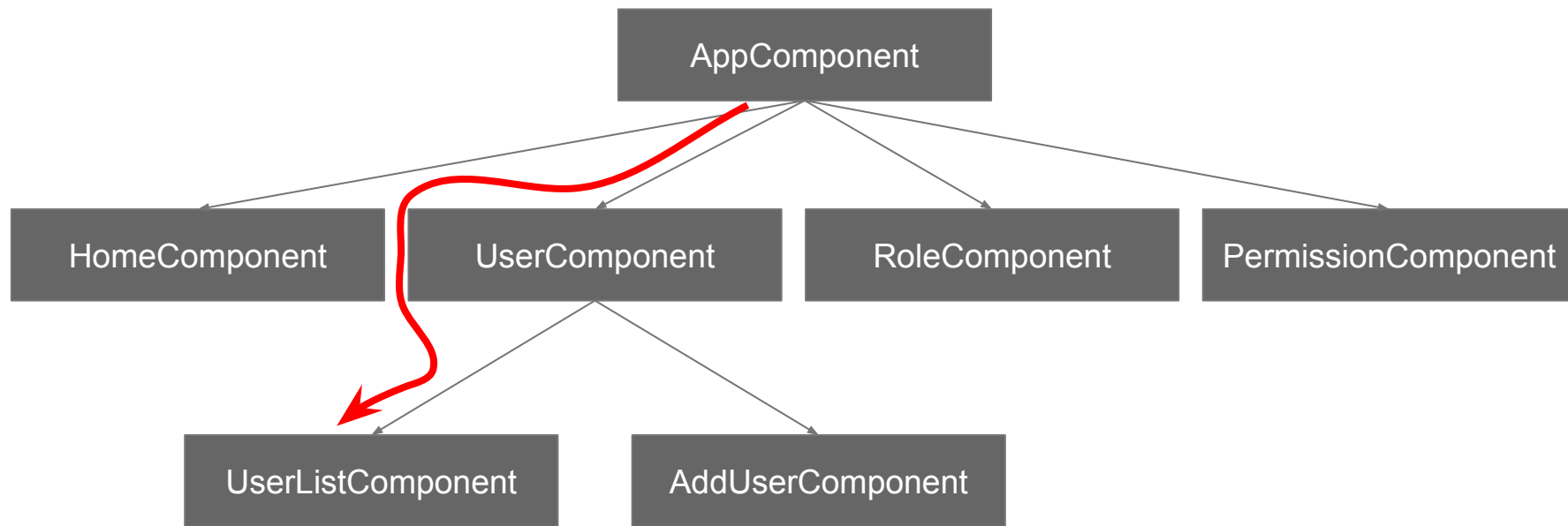


Core Concept:Component



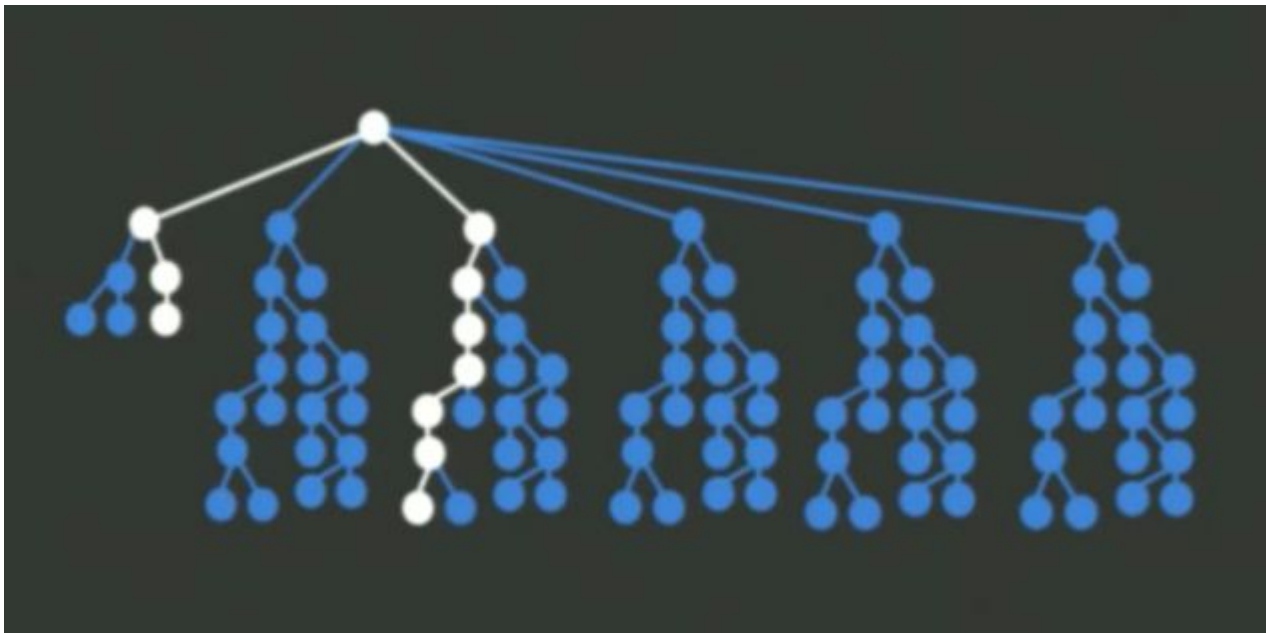
Tree

Core Concept:Component



Data Flow

Core Concept: Change Detection Google Developers

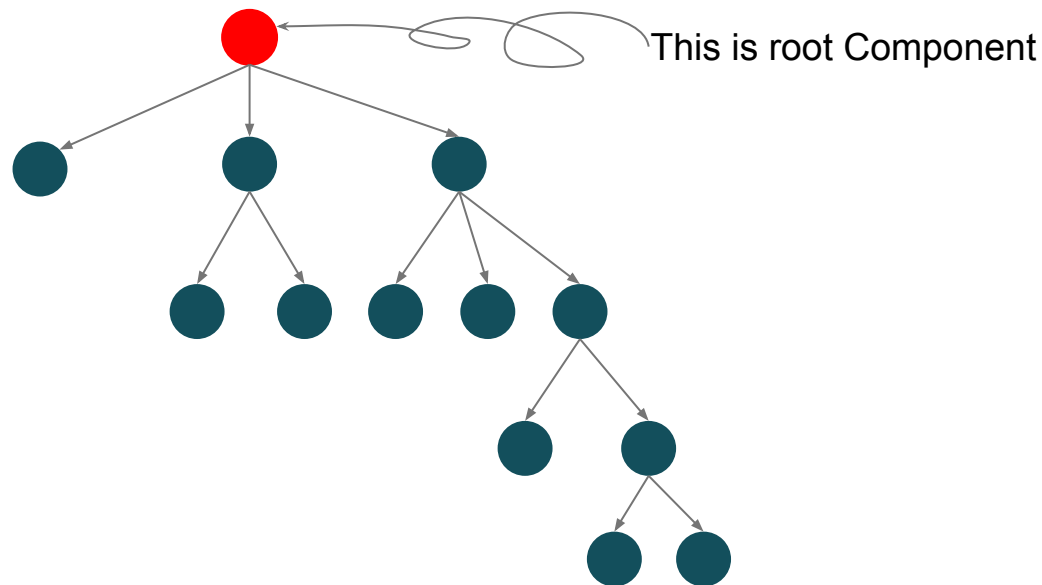


With immutable data

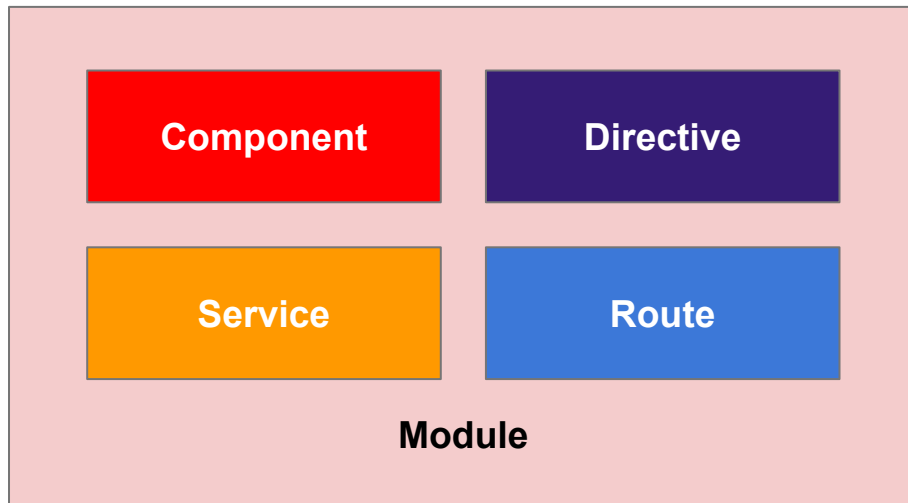
Core Concept:Module

Why we need NgModule?

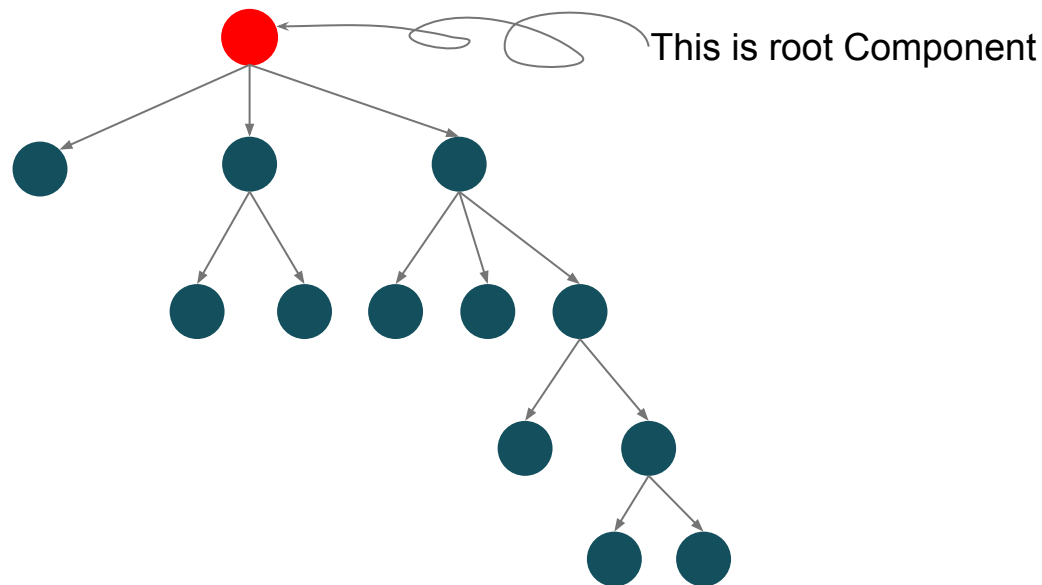
Core Concept:Module



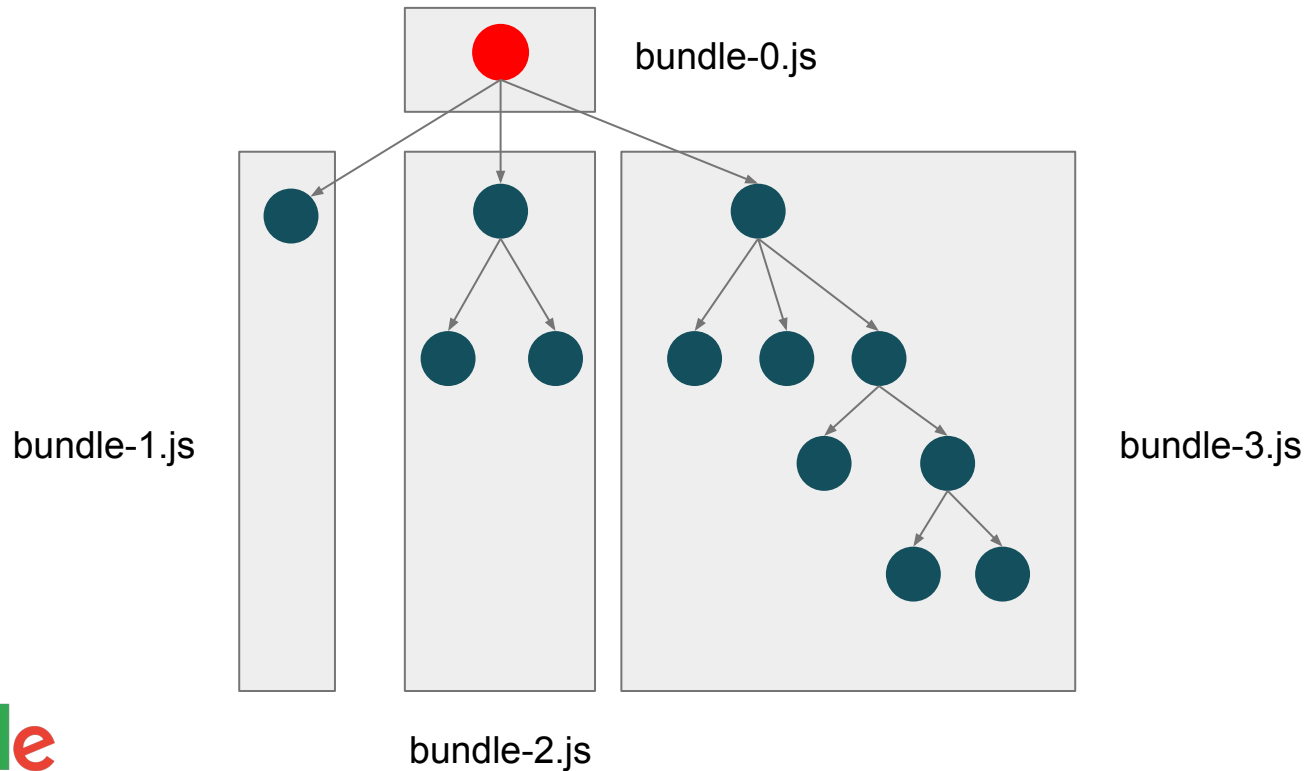
Core Concept:Module



Core Concept:Module



Core Concept: Module



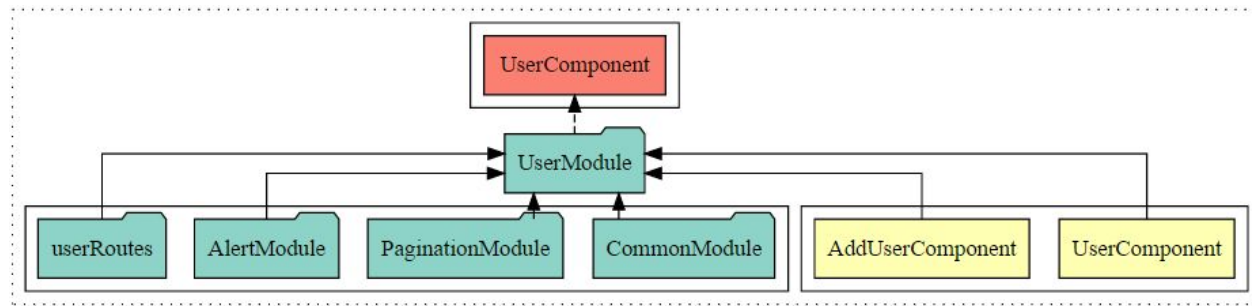
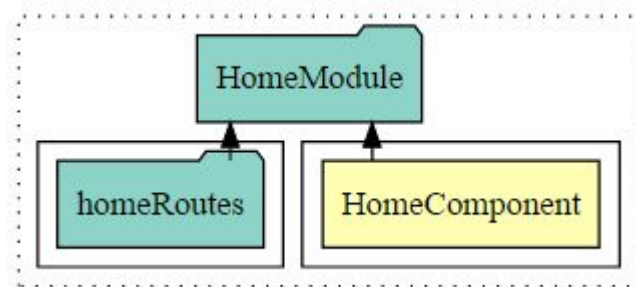
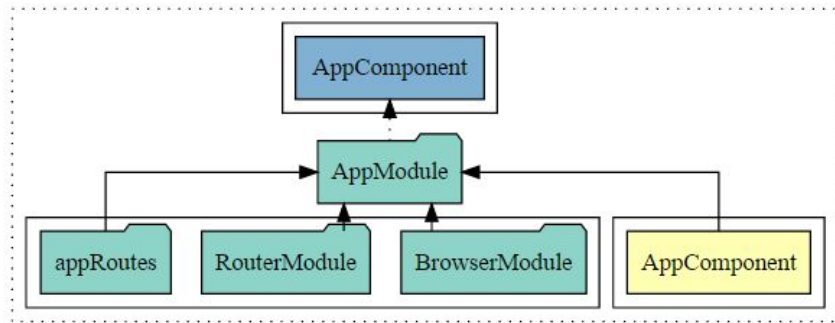
Core Concept:Module

```
app.routes.ts
1 import { RouterModule } from '@angular/router';
2
3 const appRoutes=[
4   {
5     path: '',
6     loadChildren: 'app/home/home.module'
7   }, {
8     path: 'home',
9     loadChildren: 'app/home/home.module'
10  }, {
11    path: 'user',
12    loadChildren: 'app/user/user.module'
13  }, {
14    path: 'role',
15    loadChildren: 'app/role/role.module'
16  }, {
17    path: '**', //fallback router must in the last
18    loadChildren: 'app/home/home.module'
19  }
20 ];
21 export default RouterModule.forRoot(appRoutes);
```

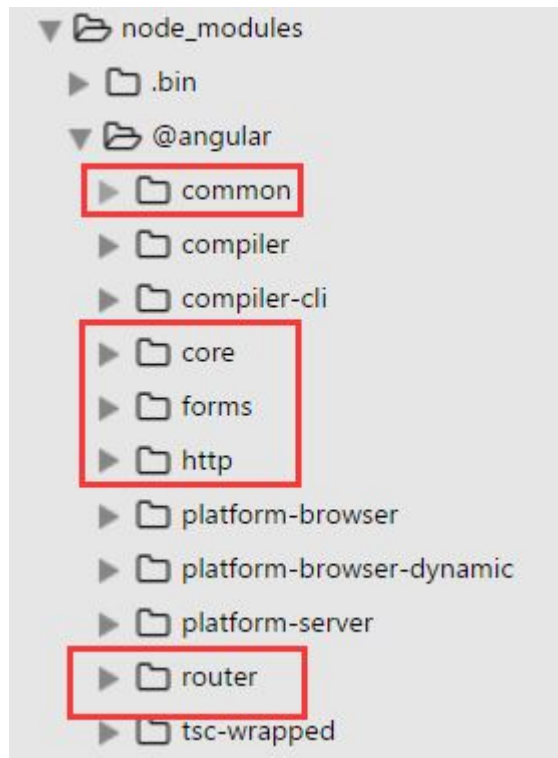
Core Concept:Module

```
home.routes.ts
1 import {RouterModule} from "@angular/router";
2 import {HomeComponent} from "../home.component";
3
4 const homeRoutes= [
5   {path: '', component: HomeComponent}
6 ];
7
8 export default RouterModule.forChild(homeRoutes);
```


Core Concept:Module



Core Concept:Module



Core Concept:Route



Basic Route

Core Concept:Route

```
app.routes.ts
1 import { RouterModule } from '@angular/router';
2
3 const appRoutes=[
4   {
5     path:'',
6     loadChildren:'app/home/home.module'
7   },{
8     path:'home',
9     loadChildren:'app/home/home.module'
10  },{
11    path:'user',
12    loadChildren:'app/user/user.module'
13  },{
14    path:'role',
15    loadChildren:'app/role/role.module'
16  },{
17    path:'**',//fallback router must in the last
18    loadChildren:'app/home/home.module'
19  }
20 ];
21 export default RouterModule.forRoot(appRoutes);
```

Route and lazy loading.

Core Concept:Route

localhost:4200/user/team/2

Angular2-Bootstrap

Home User Role Permission Settings ECharts AboutMe

Department-1

- Team-1
- Team-2

Department-2

- Team-3
- Team-4

Search + Add User

Index	UserName	NickName	Operation
1	momo	大漠穷秋	× ?
2	momo	大漠穷秋	× ?
3	momo	大漠穷秋	× ?
4	momo	大漠穷秋	× ?
5	momo	大漠穷秋	× ?
6	momo	大漠穷秋	× ?
7	momo	大漠穷秋	× ?
8	momo	大漠穷秋	× ?
9	momo	大漠穷秋	× ?
10	momo	大漠穷秋	× ?

First Previous 1 2 3 4 5 ... Next Last

Nested Route

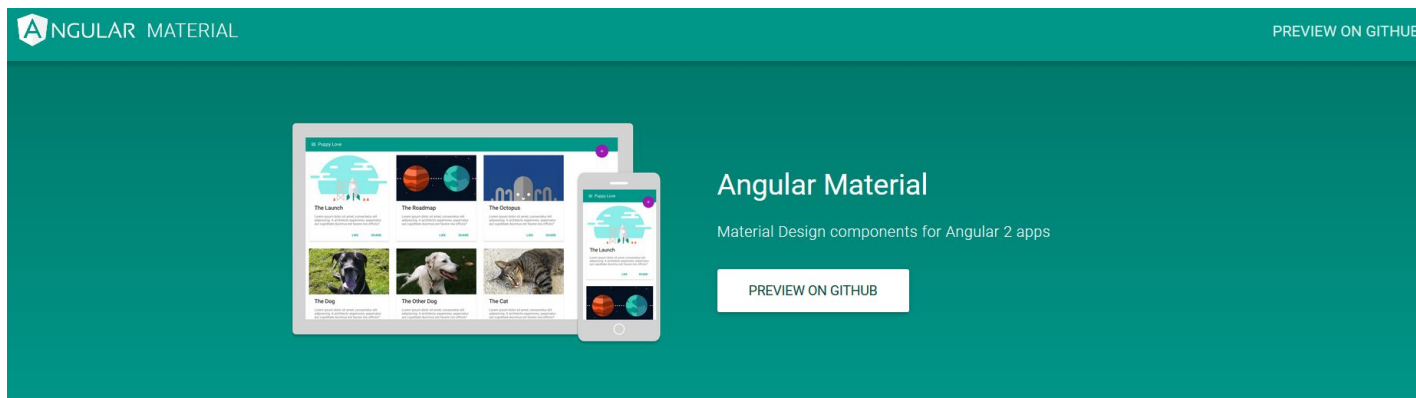
UI Libraries

UI Libraries

- [ng-bootstrap](#) is currently available.
- [PrimeNG](#) has largest number of components.
- [Angular-Material2](#) is in beta.
- [KendoUI](#) is creating components for ng2.

What if there is no ANSI C standard library?

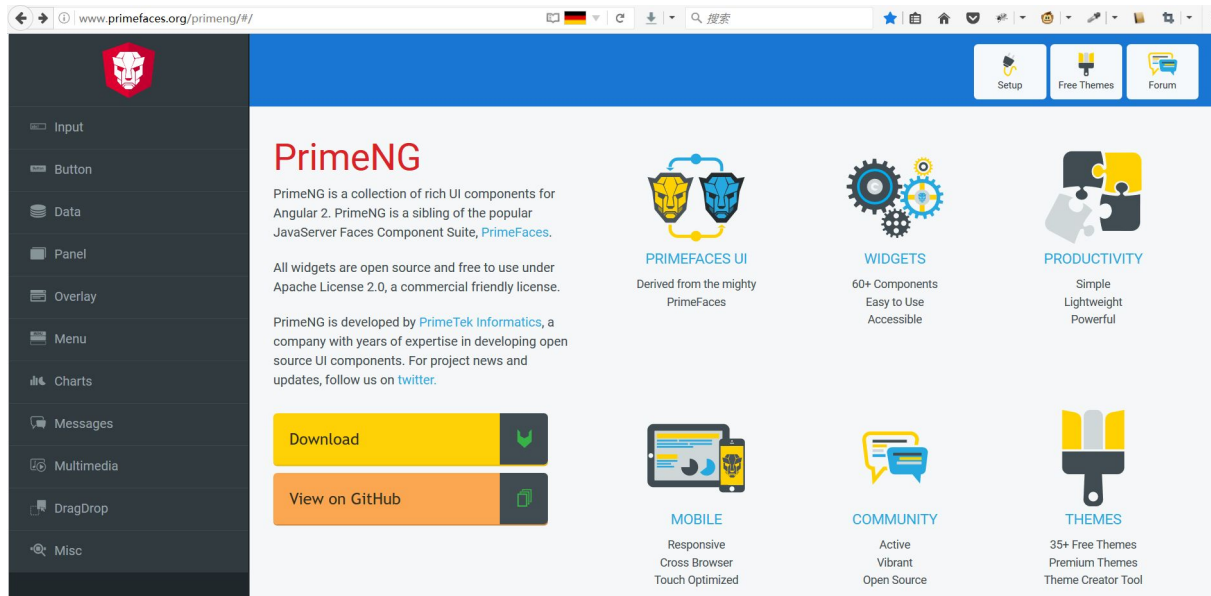
UI Libraries



Sprint from Zero to App

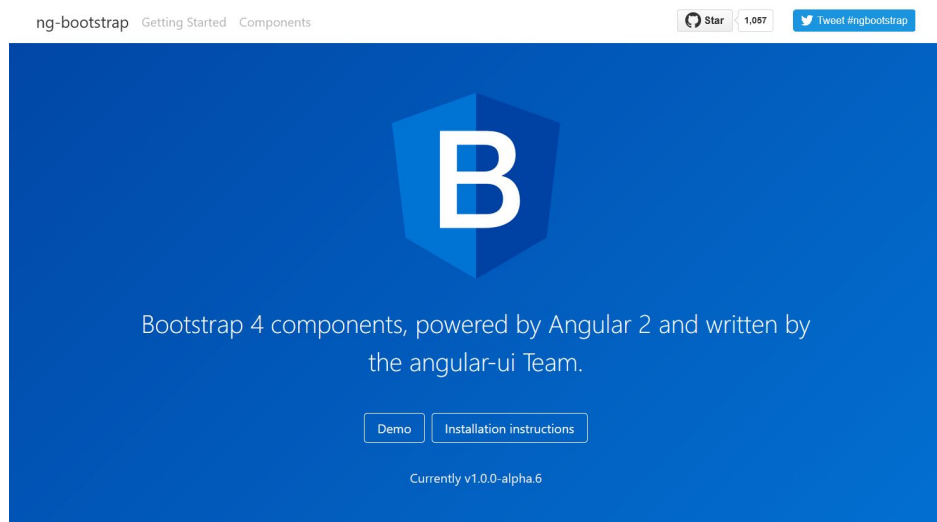
Hit the ground running with comprehensive, modern UI components that work across web, mobile and desktop.

UI Libraries



PrimeNG

UI Libraries



RECOMMENDED:ng-bootstrap

A Complex Demo of ng2-bootstrap

A Complex Demo Of ng2-bootstrap

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<https://github.com/damoqiongqiu/ng2-bootstrap-demo>



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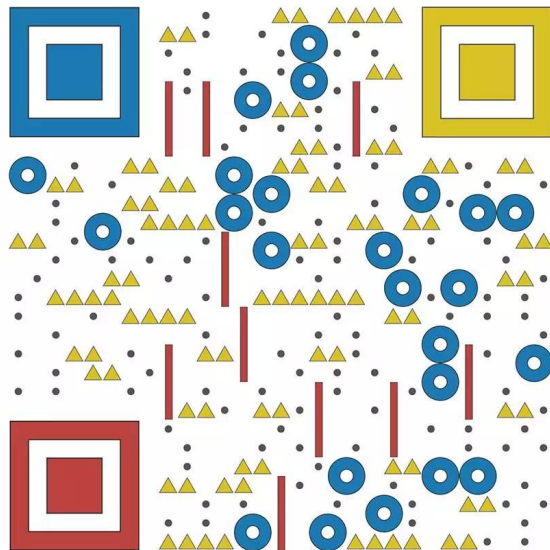
Contact



Google Developers

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谢谢