



# Desenvolvendo com Angular CLI

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Instrutora @ Caelum  
Frontend Dev  
Agile Coach  
Voluntária @ MariaLab





meu primeiro contato



# Cursos online de tecnologia

Na Alura a sua carreira está pronta para decolar

MATRICULE-SE JÁ



## Cursos de Mobile

iOS, Android, Phonegap, e mais...



## Cursos de Programação

Java, C#, Ruby, PHP, Python, e mais...



## Cursos de Front-end

HTML, CSS, Angular, e mais...



## Cursos de Infraestrutura

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## Cursos de Design & UX

Photoshop, Illustrator, Usabilidade, e mais...



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Agilidade, Startup, Marketing, SEO, e mais...



## Curso Angular 2: webapps ainda mais poderosas parte 1

Nota

**9.2**

Nível

**Avançado**

Última atualização

**11/09/2017**

Carga horária

**18h**

Acessar Curso



Pausar



Certificado



Favoritar

### Aulas

Atividades Concluídas

**Pré-requisitos:**

```
{ } package.json x { } index.html x { } systemjs.config.js x { } tsconfig.json x { } typings.json x

1 {
2   "name":
3   "version
4   "descrip
5   "main":
6   "scripts
7     "test"
8     "tsc:w
9     "start
10    "typin
11  },
12  "author"
13  "license
14  "depende
15    "@angu
16    "@angu
17    "@angu
18    "@angu
19    "@angu
20    "@angu
21    "@angu
22    "@angu
23    "@angu
24    "core-
25    "refle
26    "rxjs"
27    "syste
28    "zone.

1 <!doctype
2 <html>
3 <head>
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23 </head>
24 <body>
25
26
27
28 </body>
</html>

1 /**
2  * System confi
3  * Adjust as ne
4  */
5 (function (global) {
6   System.config
7   paths: {
8     // paths
9     'npm:': '
10  },
11  // map tell
12  map: {
13    // our ap
14    app: 'app
15    // angula
16    '@angular
17    '@angular
18    '@angular
19    '@angular
20    '@angular
21    '@angular
22    '@angular
23    '@angular
24    // other
25    'rxjs':
26    'angular2
27  },
28  // packages

1 {
2   "compiler
3   "target
4   "module
5   "module
6   "source
7   "emitDe
8   "experi
9   "remove
10  "noImpl
11 }

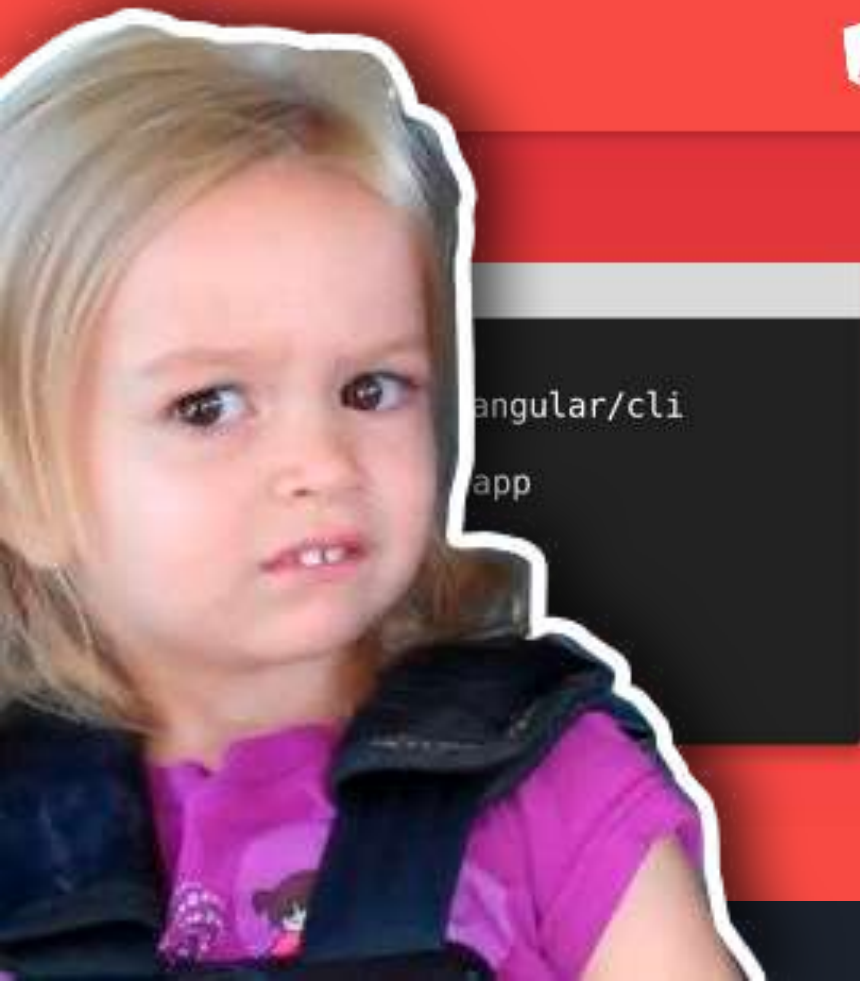
1 {
2   "name": "client",
3   "version": false,
4   "dependencies": {},
5   "globalDependencies": {
6     "core-js": "registry:dt/core-js#0.0.0+201
7     "jasmine": "registry:dt/jasmine#2.2.0+201
8     "node": "registry:dt/node#6.0.0+201609091
9   }
10 }
11 }
```












angular/cli

app

# Angular CLI

A command line interface for Angular

GET STARTED



## Requisitos Node e npm

```
v:~ Vanessa$ |
```

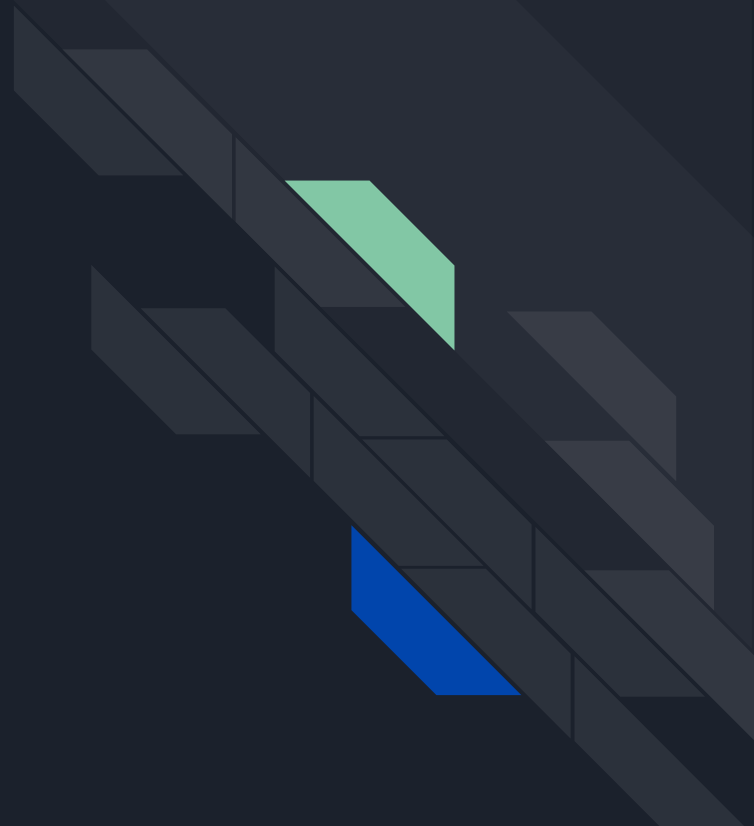


npm install -g @angular/cli

```
v:~ Vanessa$ npm install -g @angular/cli
```

# ng

*“o comando”*




Angular cli

@angular/cli: 1.4.3

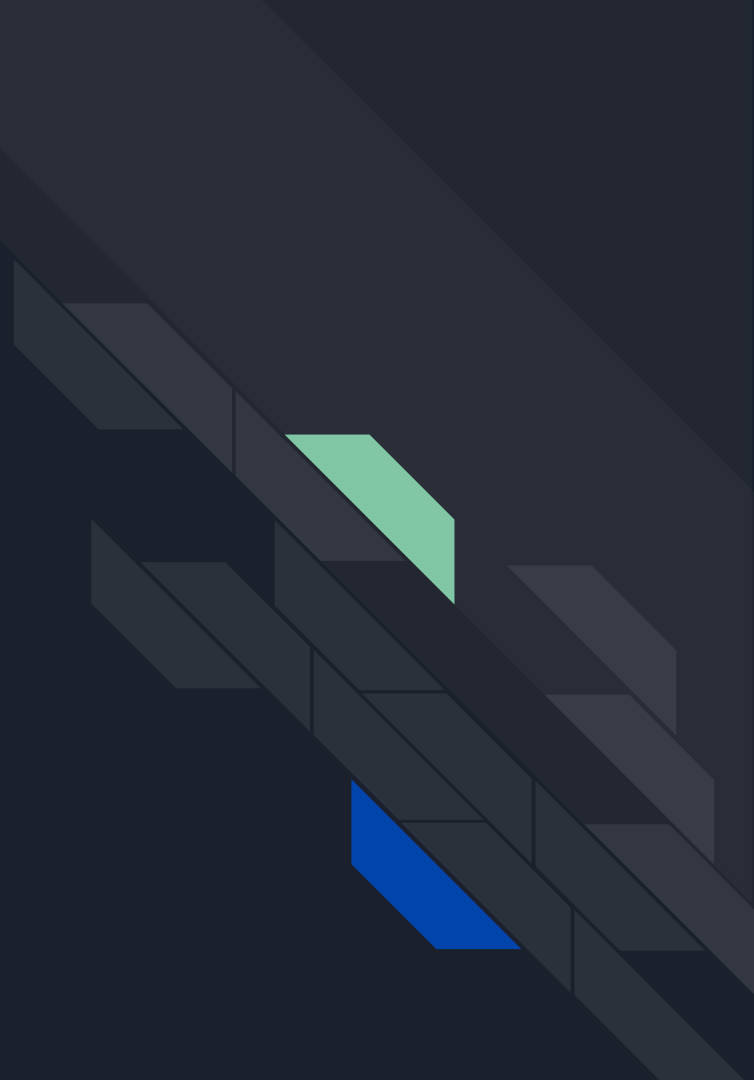
node: 8.4.0

os: darwin x64



ng -v

Criando um novo projeto



SEARCH DOCS...

DOCS HOME

CORE DOCUMENTATION

QUICKSTART

CLI QUICKSTART

GUIDE

1. Overview

2. Setup

3. Learning Angular

4. Architecture

5. The Root Module

6. Displaying Data

7. User Input

8. Forms

9. Dependency Injection

## Setup a local development environment

The [QuickStart live-coding](#) example is an Angular *playground*. It's not where you'd develop a real application. You [should develop locally](#) on your own machine ... and that's also how we think you should learn Angular.

Setting up a new project on your machine is quick and easy with the **QuickStart seed**, maintained [on github](#).

The [QuickStart seed live-example](#) is QuickStart *plus* the `app.module.ts` and `main.ts` application files ([described below](#)) that facilitate richer application examples.

Make sure you have [node](#) and [npm](#) installed. Then ...

1. Create a project folder (you can call it `quickstart` and rename it later).
2. [Clone](#) or [download](#) the **QuickStart seed** into your project folder.
3. Install [npm](#) packages.
4. Run `npm start` to launch the sample application.



SEARCH DOCS...

DOCS HOME

CORE DOCUMENTATION

QUICKSTART

GUIDE

API REFERENCE

ADDITIONAL DOCUMENTATION

TUTORIAL

ADVANCED

COOKBOOK

Angular for TypeScript

- **typings.json** provides additional definition files for libraries that the TypeScript compiler doesn't natively recognize.
- **systemjs.config.js** provides information to a module loader about where to find application modules, and registers all the necessary packages. It also contains other packages that will be needed by later documentation examples.

Create each of these files in your project directory. Populate them by pasting in text from the tabs in the example box below.

package.json

tsconfig.json

typings.json

systemjs.config.js

COPY CODE

```
1. {
2.   "name": "angular-quickstart",
3.   "version": "1.0.0",
4.   "scripts": {
5.     "start": "tsc && concurrently \"tsc -w\" \"lite-server\" ",
6.     "lite": "lite-server",
7.     "postinstall": "typings install",
8.     "tsc": "tsc",
9.     "tsc:w": "tsc -w",
10.    "typings": "typings"
11.  },
12.  "license": "ISC",
13.  "dependencies": {
14.    "@angular/common": "~2.0.1",
```

ng new *nomedoprojeto*



sa\$

## └─ linesabout

▸ e2e

▸ node\_modules

▸ src

{ } .angular-cli.json

⚙ .editorconfig

📁 .gitignore

📄 karma.conf.js

{ } package-lock.json

{ } package.json

JS protractor.conf.js

📖 README.md

{ } tsconfig.json

{ } tslint.json

ng new, opções:

ng new *nomedoprojeto* --minimal

v: angular

#### └─ linesabout

└─ node\_modules

└─ src

{ } .angular-cli.json

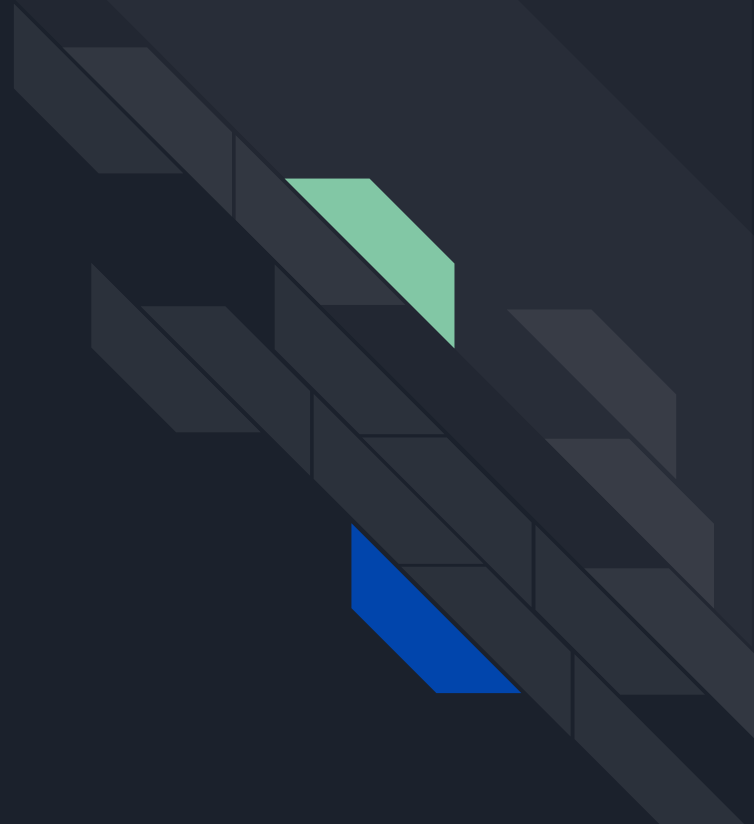
◆ .gitignore

{ } package-lock.json

{ } package.json

{ } tsconfig.json

package.json



() package.json x

```
1  {
2    "name": "linesabout",
3    "version": "0.0.0",
4    "license": "MIT",
5    "scripts": {
6      "ng": "ng",
7      "start": "ng serve",
8      "build": "ng build",
9      "test": "ng test",
10     "lint": "ng lint",
11     "e2e": "ng e2e"
12   },
13   "private": true,
14   "dependencies": {
15     "@angular/animations": "^4.2.4",
16     "@angular/common": "^4.2.4",
17     "@angular/compiler": "^4.2.4",
18     "@angular/core": "^4.2.4",
19     "@angular/forms": "^4.2.4",
20     "@angular/http": "^4.2.4",
21     "@angular/platform-browser": "^4.2.4",
22     "@angular/platform-browser-dynamic": "^4.2.4",
23     "@angular/router": "^4.2.4",
24     "core-js": "^2.4.1",
25     "rxjs": "^5.4.2",
26     "zone.js": "^0.8.14"
27   },
28   "devDependencies": {
29     "@angular/cli": "1.4.3",
30     "@angular/compiler-cli": "^4.2.4",
31     "@angular/language-service": "^4.2.4",
32     "typescript": "~2.3.3"
33   }
34 }
```



() package.json x

```
1 {
2   "name": "linesabout",
3   "version": "0.0.0",
4   "license": "MIT",
5   "scripts": {
6     "ng": "ng",
7     "start": "ng serve",
8     "build": "ng build",
9     "test": "ng test",
10    "lint": "ng lint",
11    "e2e": "ng e2e"
12  },
13  "private": true,
14  "dependencies": {
15    "@angular/animations": "^4.2.4",
16    "@angular/common": "^4.2.4",
17    "@angular/compiler": "^4.2.4",
18    "@angular/core": "^4.2.4",
19    "@angular/forms": "^4.2.4",
20    "@angular/http": "^4.2.4",
21    "@angular/platform-browser": "^4.2.4",
22    "@angular/platform-browser-dynamic": "^4.2.4",
23    "@angular/router": "^4.2.4",
24    "core-js": "^2.4.1",
25    "rxjs": "^5.4.2",
26    "zone.js": "^0.8.14"
27  },
28  "devDependencies": {
29    "@angular/cli": "1.4.3",
30    "@angular/compiler-cli": "^4.2.4",
31    "@angular/language-service": "^4.2.4",
32    "typescript": "~2.3.3"
33  }
34 }
```

# Dependências com



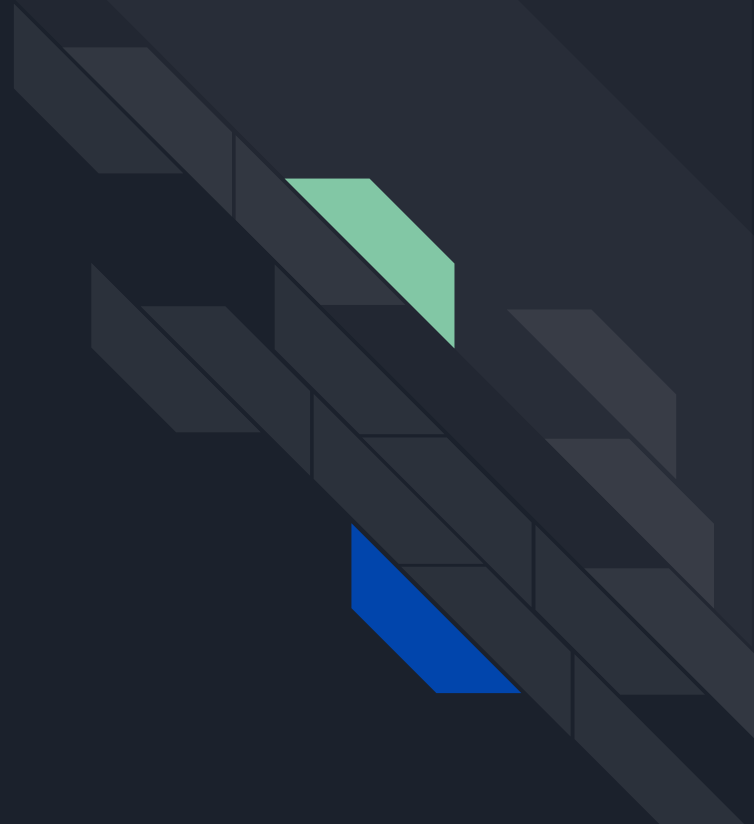
npm update

sempre vai deixar elas atualizadas

() package.json x

```
1 {
2   "name": "linesabout",
3   "version": "0.0.0",
4   "license": "MIT",
5   "scripts": {
6     "ng": "ng",
7     "start": "ng serve",
8     "build": "ng build",
9     "test": "ng test",
10    "lint": "ng lint",
11    "e2e": "ng e2e"
12  },
13  "private": true,
14  "dependencies": {
15    "@angular/animations": "^4.2.4",
16    "@angular/common": "^4.2.4",
17    "@angular/compiler": "^4.2.4",
18    "@angular/core": "^4.2.4",
19    "@angular/forms": "^4.2.4",
20    "@angular/http": "^4.2.4",
21    "@angular/platform-browser": "^4.2.4",
22    "@angular/platform-browser-dynamic": "^4.2.4",
23    "@angular/router": "^4.2.4",
24    "core-js": "^2.4.1",
25    "rxjs": "^5.4.2",
26    "zone.js": "^0.8.14"
27  },
28  "devDependencies": {
29    "@angular/cli": "1.4.3",
30    "@angular/compiler-cli": "^4.2.4",
31    "@angular/language-service": "^4.2.4",
32    "typescript": "~2.3.3"
33  }
34 }
```

.angular-cli.json



```
1 = {
2   "$schema": "../node_modules/@angular/cli/lib/config/schema.json",
3   "project": {
4     "name": "linesabout"
5   },
6   "apps": [
7     {
8       "root": "src",
9       "outDir": "dist",
10      "assets": [
11        "assets",
12        "favicon.ico"
13      ],
14      "index": "index.html",
15      "main": "main.ts",
16      "polyfills": "polyfills.ts",
17      "test": "test.ts",
18      "tsconfig": "tsconfig.app.json",
19      "testTsconfig": "tsconfig.spec.json",
20      "prefix": "app",
21      "styles": [
22        "styles.css"
23      ],
24      "scripts": [],
25      "environmentSource": "environments/environment.ts",
26      "environments": {
27        "dev": "environments/environment.ts",
28        "prod": "environments/environment.prod.ts"
29      }
30    }
31  ],
32  "e2e": {
33    "protractor": {
34      "config": "./protractor.conf.js"
35    }
36  },
37  "lint": [
38    {
39      "files": "src/**/*.ts",
40      "options": "tsconfig.app.json"
41    }
42  ]
43 }
```

```
1 = {
2   "$schema": "../node_modules/@angular/cli/lib/config/schema.json",
3   "project": {
4     "name": "linesabout"
5   },
6   "apps": [
7     {
8       "root": "src",
9       "outDir": "dist",
10      "assets": [
11        "assets",
12        "favicon.ico"
13      ],
14      "index": "index.html",
15      "main": "main.ts",
16      "polyfills": "polyfills.ts",
17      "test": "test.ts",
18      "tsconfig": "tsconfig.app.json",
19      "testTsconfig": "tsconfig.spec.json",
20      "prefix": "app",
21      "styles": [
22        "styles.css"
23      ],
24      "scripts": [],
25      "environmentSource": "environments/environment.ts",
26      "environments": {
27        "dev": "environments/environment.ts",
28        "prod": "environments/environment.prod.ts"
29      }
30    }
31  ],
32  "e2e": {
33    "protractor": {
34      "config": "./protractor.conf.js"
35    }
36  },
37  "lint": [
38    {
39      "files": "src/**/*.ts",
40      "options": {
41        "tsconfig": "tsconfig.app.json"
42      }
43    }
44  ]
45}
```

```
1 = {
2   "$schema": "../node_modules/@angular/cli/lib/config/schema.json",
3   "project": {
4     "name": "linesabout"
5   },
6   "apps": [
7     {
8       "root": "src",
9       "outDir": "dist",
10      "assets": [
11        "assets",
12        "favicon.ico"
13      ],
14      "index": "index.html",
15      "main": "main.ts",
16      "polyfills": "polyfills.ts",
17      "test": "test.ts",
18      "tsconfig": "tsconfig.app.json",
19      "testTsconfig": "tsconfig.spec.json",
20      "prefix": "app",
21      "styles": [
22        "styles.css"
23      ],
24      "scripts": [],
25      "environmentSource": "environments/environment.ts",
26      "environments": {
27        "dev": "environments/environment.ts",
28        "prod": "environments/environment.prod.ts"
29      }
30    }
31  ],
32  "e2e": {
33    "protractor": {
34      "config": "./protractor.conf.js"
35    }
36  },
37  "lint": [
38    {
39      "file": "tsconfig.app.json"
40    }
41  ]
42}
```

() .angular-cli.json x

```
1 = {
2   "$schema": "./node_modules/@angular/cli/lib/config/schema.json",
3   "project": {
4     "name": "linesabout"
5   },
6   "apps": [
7     {
8       "root": "src",
9       "outDir": "dist",
10      "assets": [
11        "assets",
12        "favicon.ico"
13      ],
14      "index": "index.html",
15      "main": "main.ts",
16      "polyfills": "polyfills.ts",
17      "test": "test.ts",
18      "tsconfig": "tsconfig.app.json",
19      "testTsconfig": "tsconfig.spec.json",
20      "prefix": "app",
21      "styles": [
22        "styles.css"
23      ],
24      "scripts": [],
25      "environmentSource": "environments/environment.ts",
26      "environments": {
27        "dev": "environments/environment.ts",
28        "prod": "environments/environment.prod.ts"
29      }
30    }
31  ],
32  "e2e": {
33    "protractor": {
34      "config": "./protractor.conf.js"
35    }
36  },
37  "lint": [
38    {
39      "files": "src/**/*.ts",
40      "files": "src/**/*.html"
```



() .angular-cli.json x

```
1 = {
2   "$schema": "./node_modules/@angular/cli/lib/config/schema.json",
3   "project": {
4     "name": "linesabout"
5   },
6   "apps": [
7     {
8       "root": "src",
9       "outDir": "dist",
10      "assets": [
11        "assets",
12        "favicon.ico"
13      ],
14      "index": "index.html",
15      "main": "main.ts",
16      "polyfills": "polyfills.ts",
17      "test": "test.ts",
18      "tsconfig": "tsconfig.app.json",
19      "testTsconfig": "tsconfig.spec.json",
20      "prefix": "app",
21      "styles": [
22        "styles.css"
23      ],
24      "scripts": [],
25      "environmentSource": "environments/environment.ts",
26      "environments": {
27        "dev": "environments/environment.ts",
28        "prod": "environments/environment.prod.ts"
29      }
30    }
31  ],
32  "e2e": {
33    "protractor": {
34      "config": "./protractor.conf.js"
35    }
36  },
37  "lint": [
38    {
39      "files": "src/**/*.ts",
40      "formatter": "html",
41      "quiet": true
42    }
43  ]
44 }
```

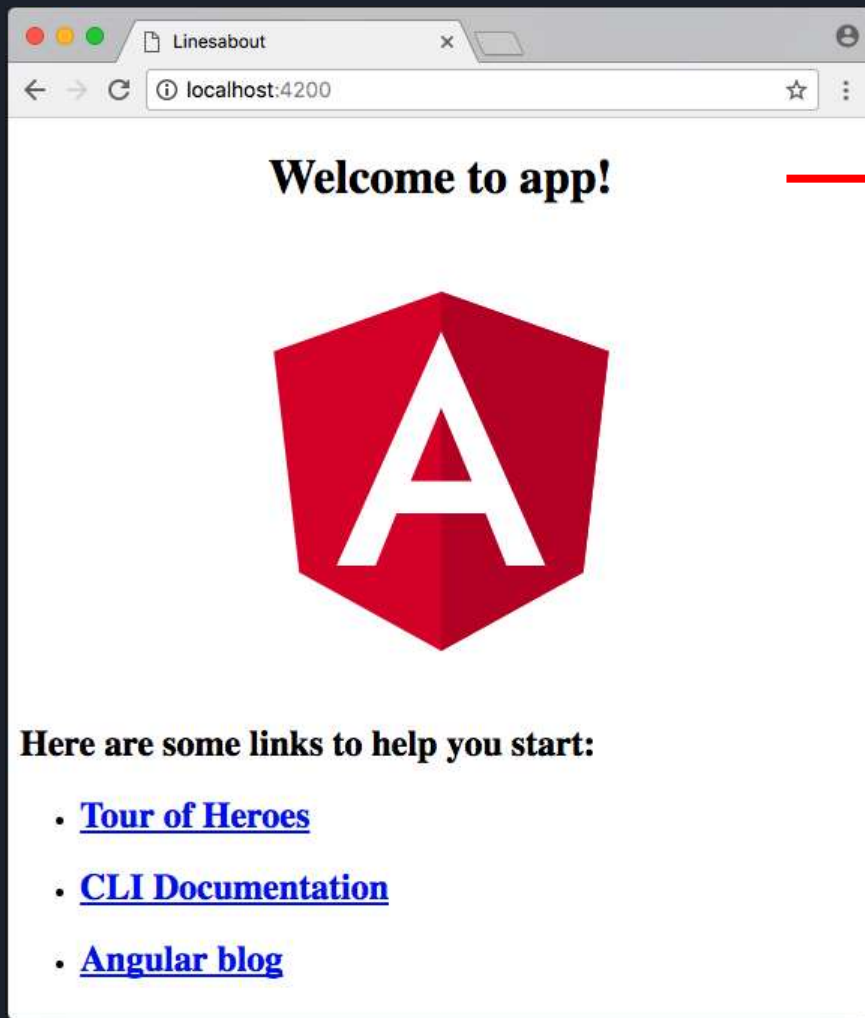
```
1 {
2   "$schema": "./node_modules/@angular/cli/lib/config/schema.json",
3   "project": {
4     "name": "linesabout"
5   },
6   "apps": [
7     {
8       "root": "src",
9       "outDir": "dist",
10      "assets": [
11        "assets",
12        "favicon.ico"
13      ],
14      "index": "index.html",
15      "main": "main.ts",
16      "polyfills": "polyfills.ts",
17      "test": "test.ts",
18      "tsconfig": "tsconfig.app.json",
19      "testTsconfig": "tsconfig.spec.json",
20      "prefix": "app",
21      "styles": [
22        "styles.css"
23      ],
24      "scripts": [],
25      "environmentSource": "environments/environment.ts",
26      "environments": {
27        "dev": "environments/environment.ts",
28        "prod": "environments/environment.prod.ts"
29      }
30    }
31  ],
32  "e2e": {
33    "protractor": {
34      "config": "./protractor.conf.js"
35    }
36  },
37  "lint": [
38    {
39      "files": "src/**/*.ts",
40      "files": "src/**/*.html",
41      "files": "src/**/*.css",
42      "files": "src/**/*.scss",
43      "files": "src/**/*.js",
44      "files": "src/**/*.jsx",
45      "files": "src/**/*.vue",
46      "files": "src/**/*.json",
47      "files": "src/**/*.yaml",
48      "files": "src/**/*.yml",
49      "files": "src/**/*.xml",
50      "files": "src/**/*.xhtml",
51      "files": "src/**/*.svg",
52      "files": "src/**/*.png",
53      "files": "src/**/*.gif",
54      "files": "src/**/*.ico",
55      "files": "src/**/*.woff",
56      "files": "src/**/*.woff2",
57      "files": "src/**/*.eot",
58      "files": "src/**/*.ttf",
59      "files": "src/**/*.otf",
60      "files": "src/**/*.pbf",
61      "files": "src/**/*.zip",
62      "files": "src/**/*.tar",
63      "files": "src/**/*.rar",
64      "files": "src/**/*.7z",
65      "files": "src/**/*.bz2",
66      "files": "src/**/*.gz",
67      "files": "src/**/*.xz",
68      "files": "src/**/*.zst",
69      "files": "src/**/*.lz4",
70      "files": "src/**/*.lz5",
71      "files": "src/**/*.lz6",
72      "files": "src/**/*.lz7",
73      "files": "src/**/*.lz8",
74      "files": "src/**/*.lz9",
75      "files": "src/**/*.lzh",
76      "files": "src/**/*.lzx",
77      "files": "src/**/*.lzo",
78      "files": "src/**/*.lzma",
79      "files": "src/**/*.lzip",
80      "files": "src/**/*.lbr",
81      "files": "src/**/*.lbrz",
82      "files": "src/**/*.lbrz2",
83      "files": "src/**/*.lbrz3",
84      "files": "src/**/*.lbrz4",
85      "files": "src/**/*.lbrz5",
86      "files": "src/**/*.lbrz6",
87      "files": "src/**/*.lbrz7",
88      "files": "src/**/*.lbrz8",
89      "files": "src/**/*.lbrz9",
90      "files": "src/**/*.lbrz10",
91      "files": "src/**/*.lbrz11",
92      "files": "src/**/*.lbrz12",
93      "files": "src/**/*.lbrz13",
94      "files": "src/**/*.lbrz14",
95      "files": "src/**/*.lbrz15",
96      "files": "src/**/*.lbrz16",
97      "files": "src/**/*.lbrz17",
98      "files": "src/**/*.lbrz18",
99      "files": "src/**/*.lbrz19",
100     "files": "src/**/*.lbrz20",
101     "files": "src/**/*.lbrz21",
102     "files": "src/**/*.lbrz22",
103     "files": "src/**/*.lbrz23",
104     "files": "src/**/*.lbrz24",
105     "files": "src/**/*.lbrz25",
106     "files": "src/**/*.lbrz26",
107     "files": "src/**/*.lbrz27",
108     "files": "src/**/*.lbrz28",
109     "files": "src/**/*.lbrz29",
110     "files": "src/**/*.lbrz30",
111     "files": "src/**/*.lbrz31",
112     "files": "src/**/*.lbrz32",
113     "files": "src/**/*.lbrz33",
114     "files": "src/**/*.lbrz34",
115     "files": "src/**/*.lbrz35",
116     "files": "src/**/*.lbrz36",
117     "files": "src/**/*.lbrz37",
118     "files": "src/**/*.lbrz38",
119     "files": "src/**/*.lbrz39",
120     "files": "src/**/*.lbrz40",
121     "files": "src/**/*.lbrz41",
122     "files": "src/**/*.lbrz42",
123     "files": "src/**/*.lbrz43",
124     "files": "src/**/*.lbrz44",
125     "files": "src/**/*.lbrz45",
126     "files": "src/**/*.lbrz46",
127     "files": "src/**/*.lbrz47",
128     "files": "src/**/*.lbrz48",
129     "files": "src/**/*.lbrz49",
130     "files": "src/**/*.lbrz50",
131     "files": "src/**/*.lbrz51",
132     "files": "src/**/*.lbrz52",
133     "files": "src/**/*.lbrz53",
134     "files": "src/**/*.lbrz54",
135     "files": "src/**/*.lbrz55",
136     "files": "src/**/*.lbrz56",
137     "files": "src/**/*.lbrz57",
138     "files": "src/**/*.lbrz58",
139     "files": "src/**/*.lbrz59",
140     "files": "src/**/*.lbrz60",
141     "files": "src/**/*.lbrz61",
142     "files": "src/**/*.lbrz62",
143     "files": "src/**/*.lbrz63",
144     "files": "src/**/*.lbrz64",
145     "files": "src/**/*.lbrz65",
146     "files": "src/**/*.lbrz66",
147     "files": "src/**/*.lbrz67",
148     "files": "src/**/*.lbrz68",
149     "files": "src/**/*.lbrz69",
150     "files": "src/**/*.lbrz70",
151     "files": "src/**/*.lbrz71",
152     "files": "src/**/*.lbrz72",
153     "files": "src/**/*.lbrz73",
154     "files": "src/**/*.lbrz74",
155     "files": "src/**/*.lbrz75",
156     "files": "src/**/*.lbrz76",
157     "files": "src/**/*.lbrz77",
158     "files": "src/**/*.lbrz78",
159     "files": "src/**/*.lbrz79",
160     "files": "src/**/*.lbrz80",
161     "files": "src/**/*.lbrz81",
162     "files": "src/**/*.lbrz82",
163     "files": "src/**/*.lbrz83",
164     "files": "src/**/*.lbrz84",
165     "files": "src/**/*.lbrz85",
166     "files": "src/**/*.lbrz86",
167     "files": "src/**/*.lbrz87",
168     "files": "src/**/*.lbrz88",
169     "files": "src/**/*.lbrz89",
170     "files": "src/**/*.lbrz90",
171     "files": "src/**/*.lbrz91",
172     "files": "src/**/*.lbrz92",
173     "files": "src/**/*.lbrz93",
174     "files": "src/**/*.lbrz94",
175     "files": "src/**/*.lbrz95",
176     "files": "src/**/*.lbrz96",
177     "files": "src/**/*.lbrz97",
178     "files": "src/**/*.lbrz98",
179     "files": "src/**/*.lbrz99",
180     "files": "src/**/*.lbrz100",
181     "files": "src/**/*.lbrz101",
182     "files": "src/**/*.lbrz102",
183     "files": "src/**/*.lbrz103",
184     "files": "src/**/*.lbrz104",
185     "files": "src/**/*.lbrz105",
186     "files": "src/**/*.lbrz106",
187     "files": "src/**/*.lbrz107",
188     "files": "src/**/*.lbrz108",
189     "files": "src/**/*.lbrz109",
190     "files": "src/**/*.lbrz110",
191     "files": "src/**/*.lbrz111",
192     "files": "src/**/*.lbrz112",
193     "files": "src/**/*.lbrz113",
194     "files": "src/**/*.lbrz114",
195     "files": "src/**/*.lbrz115",
196     "files": "src/**/*.lbrz116",
197     "files": "src/**/*.lbrz117",
198     "files": "src/**/*.lbrz118",
199     "files": "src/**/*.lbrz119",
200     "files": "src/**/*.lbrz120",
201     "files": "src/**/*.lbrz121",
202     "files": "src/**/*.lbrz122",
203     "files": "src/**/*.lbrz123",
204     "files": "src/**/*.lbrz124",
205     "files": "src/**/*.lbrz125",
206     "files": "src/**/*.lbrz126",
207     "files": "src/**/*.lbrz127",
208     "files": "src/**/*.lbrz128",
209     "files": "src/**/*.lbrz129",
210     "files": "src/**/*.lbrz130",
211     "files": "src/**/*.lbrz131",
212     "files": "src/**/*.lbrz132",
213     "files": "src/**/*.lbrz133",
214     "files": "src/**/*.lbrz134",
215     "files": "src/**/*.lbrz135",
216     "files": "src/**/*.lbrz136",
217     "files": "src/**/*.lbrz137",
218     "files": "src/**/*.lbrz138",
219     "files": "src/**/*.lbrz139",
220     "files": "src/**/*.lbrz140",
221     "files": "src/**/*.lbrz141",
222     "files": "src/**/*.lbrz142",
223     "files": "src/**/*.lbrz143",
224     "files": "src/**/*.lbrz144",
225     "files": "src/**/*.lbrz145",
226     "files": "src/**/*.lbrz146",
227     "files": "src/**/*.lbrz147",
228     "files": "src/**/*.lbrz148",
229     "files": "src/**/*.lbrz149",
230     "files": "src/**/*.lbrz150",
231     "files": "src/**/*.lbrz151",
232     "files": "src/**/*.lbrz152",
233     "files": "src/**/*.lbrz153",
234     "files": "src/**/*.lbrz154",
235     "files": "src/**/*.lbrz155",
236     "files": "src/**/*.lbrz156",
237     "files": "src/**/*.lbrz157",
238     "files": "src/**/*.lbrz158",
239     "files": "src/**/*.lbrz159",
240     "files": "src/**/*.lbrz160",
241     "files": "src/**/*.lbrz161",
242     "files": "src/**/*.lbrz162",
243     "files": "src/**/*.lbrz163",
244     "files": "src/**/*.lbrz164",
245     "files": "src/**/*.lbrz165",
246     "files": "src/**/*.lbrz166",
247     "files": "src/**/*.lbrz167",
248     "files": "src/**/*.lbrz168",
249     "files": "src/**/*.lbrz169",
250     "files": "src/**/*.lbrz170",
251     "files": "src/**/*.lbrz171",
252     "files": "src/**/*.lbrz172",
253     "files": "src/**/*.lbrz173",
254     "files": "src/**/*.lbrz174",
255     "files": "src/**/*.lbrz175",
256     "files": "src/**/*.lbrz176",
257     "files": "src/**/*.lbrz177",
258     "files": "src/**/*.lbrz178",
259     "files": "src/**/*.lbrz179",
260     "files": "src/**/*.lbrz180",
261     "files": "src/**/*.lbrz181",
262     "files": "src/**/*.lbrz182",
263     "files": "src/**/*.lbrz183",
264     "files": "src/**/*.lbrz184",
265     "files": "src/**/*.lbrz185",
266     "files": "src/**/*.lbrz186",
267     "files": "src/**/*.lbrz187",
2
```

```
1 = {
2   "$schema": "../node_modules/@angular/cli/lib/config/schema.json",
3   "project": {
4     "name": "linesabout"
5   },
6   "apps": [
7     {
8       "root": "src",
9       "outDir": "dist",
10      "assets": [
11        "assets",
12        "favicon.ico"
13      ],
14      "index": "index.html",
15      "main": "main.ts",
16      "polyfills": "polyfills.ts",
17      "test": "test.ts",
18      "tsconfig": "tsconfig.app.json",
19      "testTsconfig": "tsconfig.spec.json",
20      "prefix": "app",
21      "styles": [
22        "styles.css"
23      ],
24      "scripts": [],
25      "environmentsSource": "environments/environment.ts",
26      "environments": {
27        "dev": "environments/environment.ts",
28        "prod": "environments/environment.prod.ts"
29      }
30    }
31  ],
32  "e2e": {
33    "protractor": {
34      "config": "./protractor.conf.js"
35    }
36  },
37  "lint": [
38    {
39      "runner": "eslint",
40      "options": "tsconfig.eslint.json"
41    }
42  ]
43 }
```

# Abrindo a aplicação local

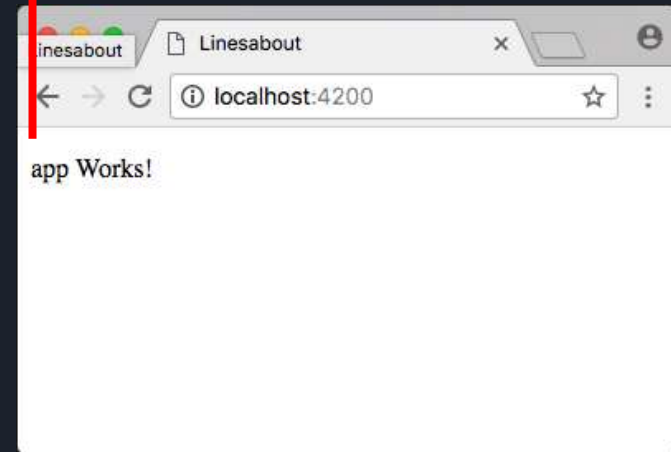
**ng serve --open**

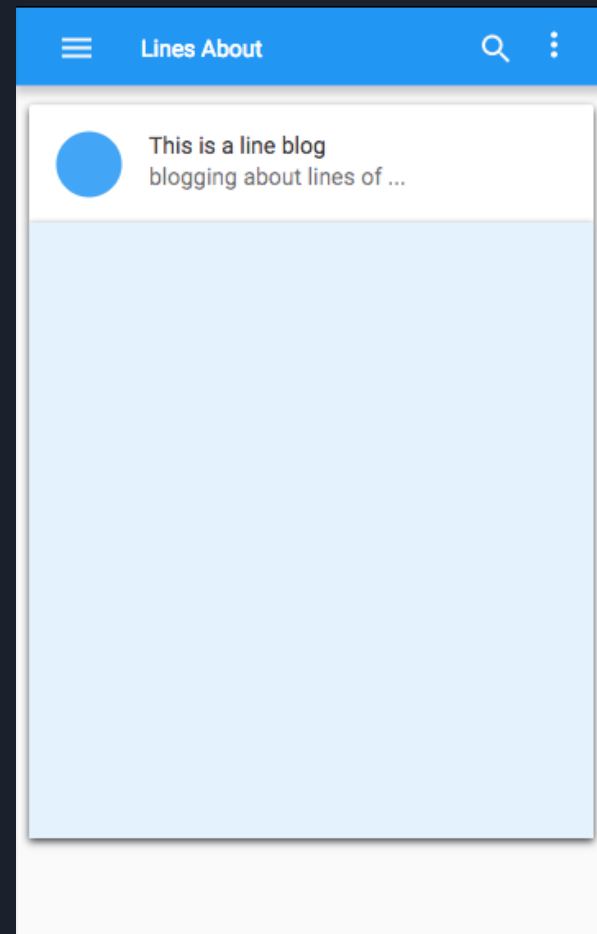
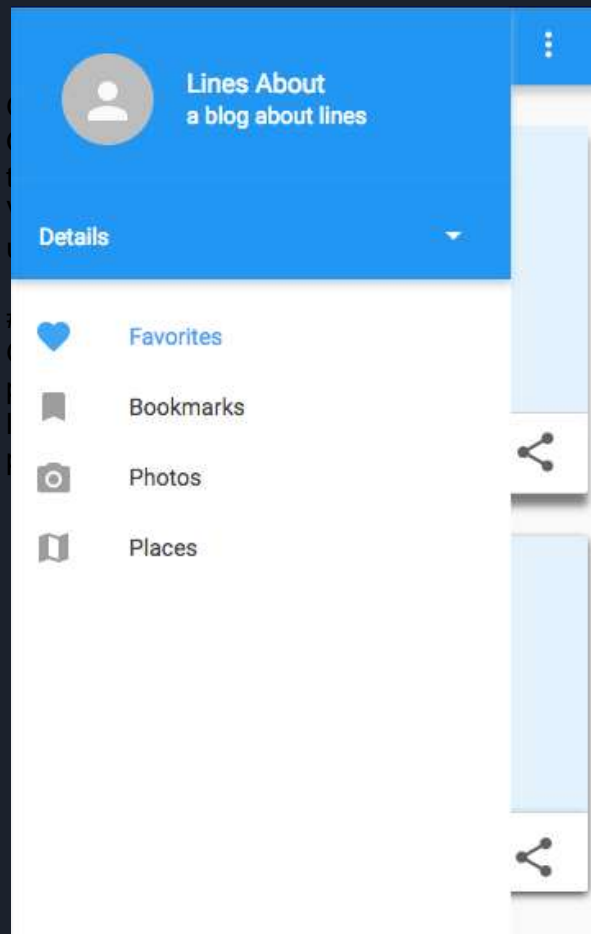
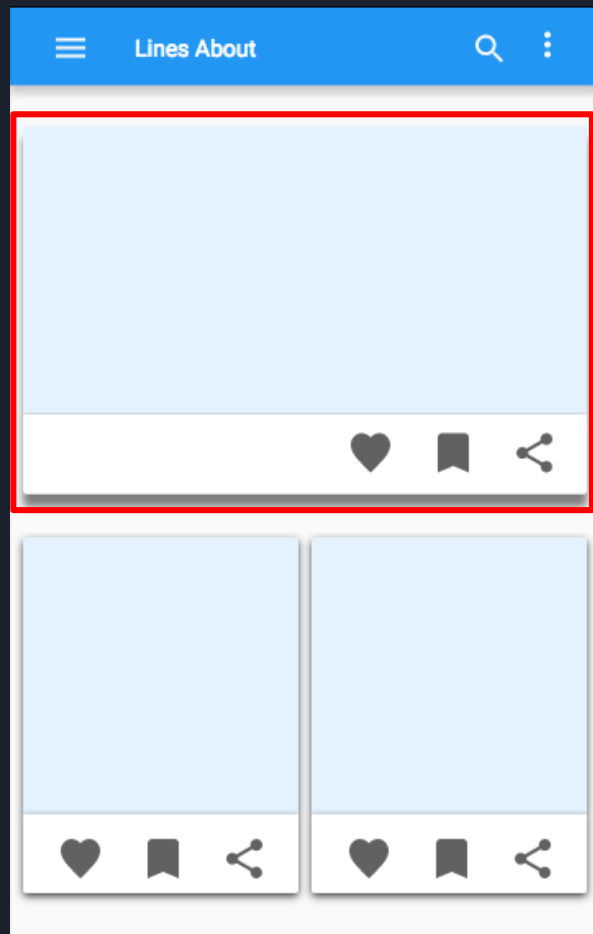
```
v:angular Vanessa$ cd linesabout/  
v:linesabout Vanessa$
```



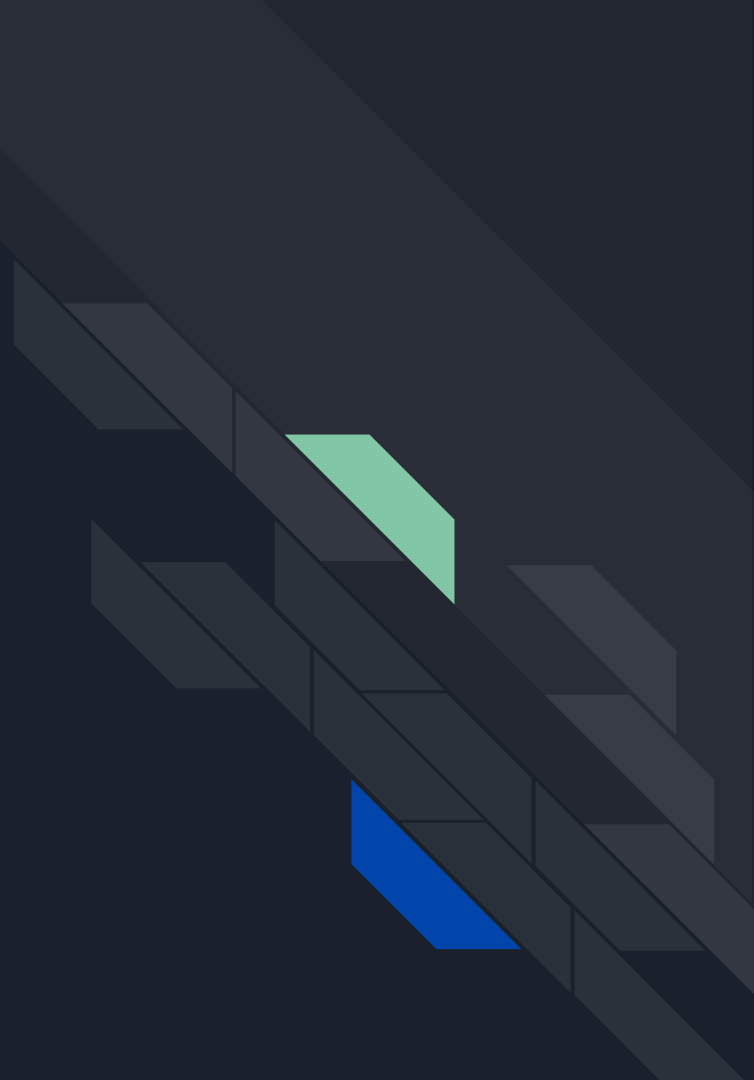
→ `ng new linesabout`

`ng new linesabout --minimal`

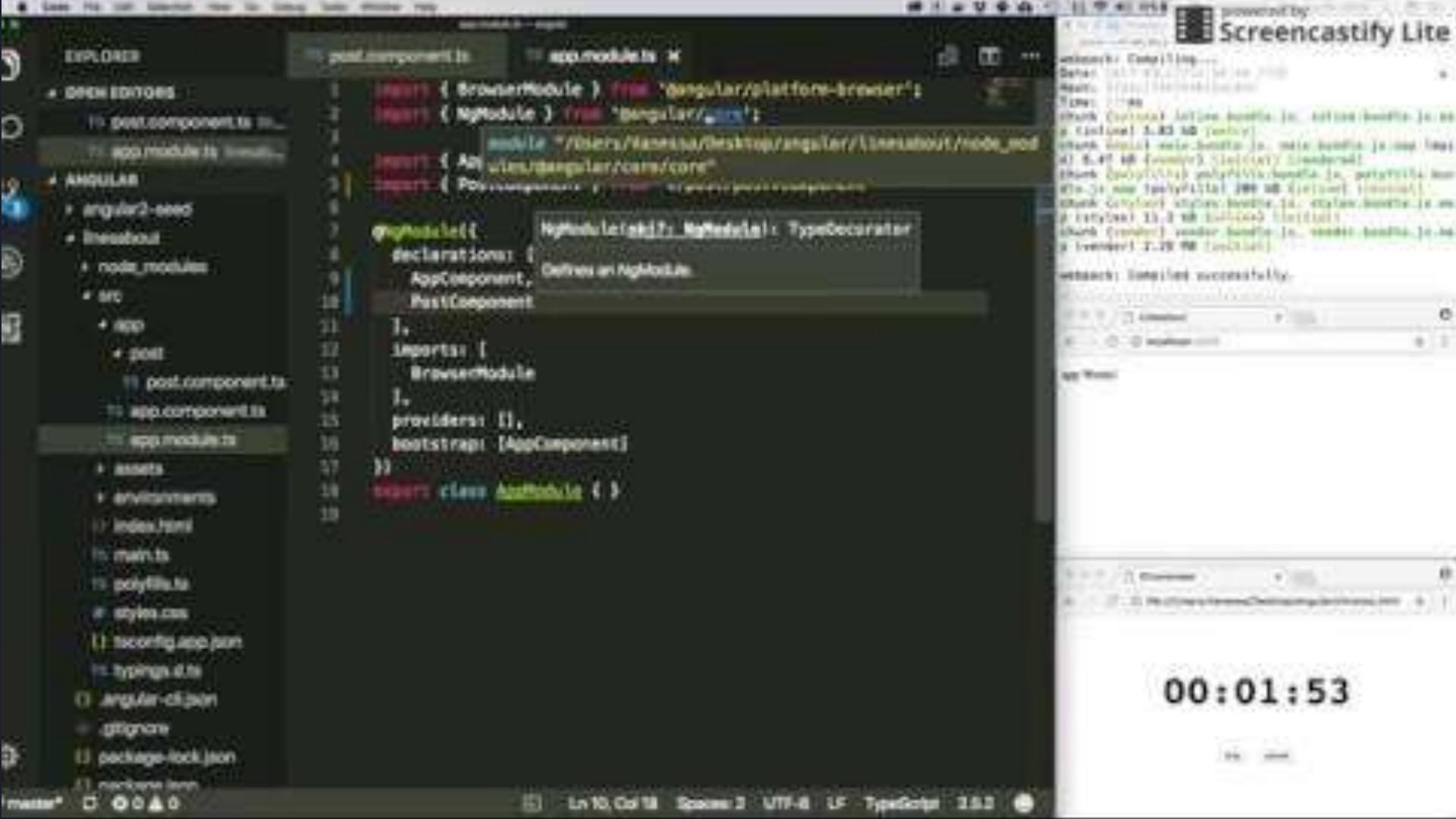




componentes







## EXPLORER

## OPEN EDITORS

post.component.ts

app.module.ts

## ANGULAR

angular2-seed

browserout

node\_modules

src

app

post

post.component.ts

app.component.ts

app.module.ts

assets

environments

index.html

main.ts

polyfills.ts

styles.css

tsconfig.app.json

typings.d.ts

angular-cli.json

gitignore

package-lock.json

webpack.config

post.component.ts

app.module.ts

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { AppRoutingModule } from './app-routing.module';

import { AppComponent } from './app.component';

import { PostComponent } from './post.component';

@NgModule({

declarations: [

AppComponent,

PostComponent

],

imports: [

BrowserModule

],

providers: [],

bootstrap: [AppComponent]

})

export class AppModule { }

NgModule&lt;T extends NgModule&gt;: TypeDecorator

Defines an NgModule.

Screencastify Lite

Websocket: Connecting...

Status: 200 OK (application/javascript)

Time: 1.19s

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

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chunk (runtime) entry bundle.js, entry bundle.js, 0

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chunk (runtime) entry bundle.js, entry bundle.js, 0

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chunk (runtime) entry bundle.js, entry bundle.js, 0

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chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

+ runtime 1.19 KB (runtime)

chunk (runtime) entry bundle.js, entry bundle.js, 0

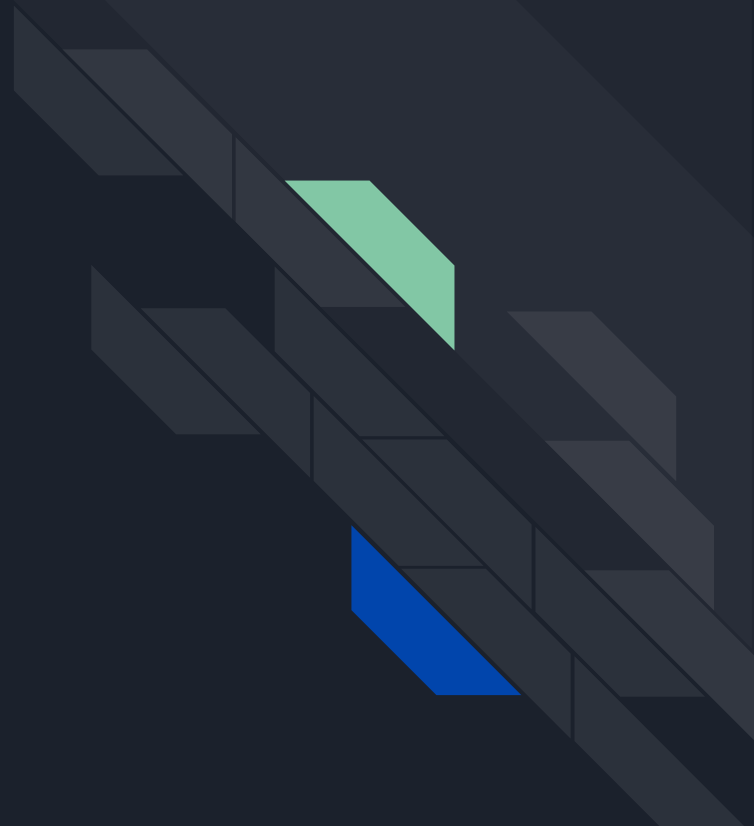
+ runtime 1.19 KB (runtime)

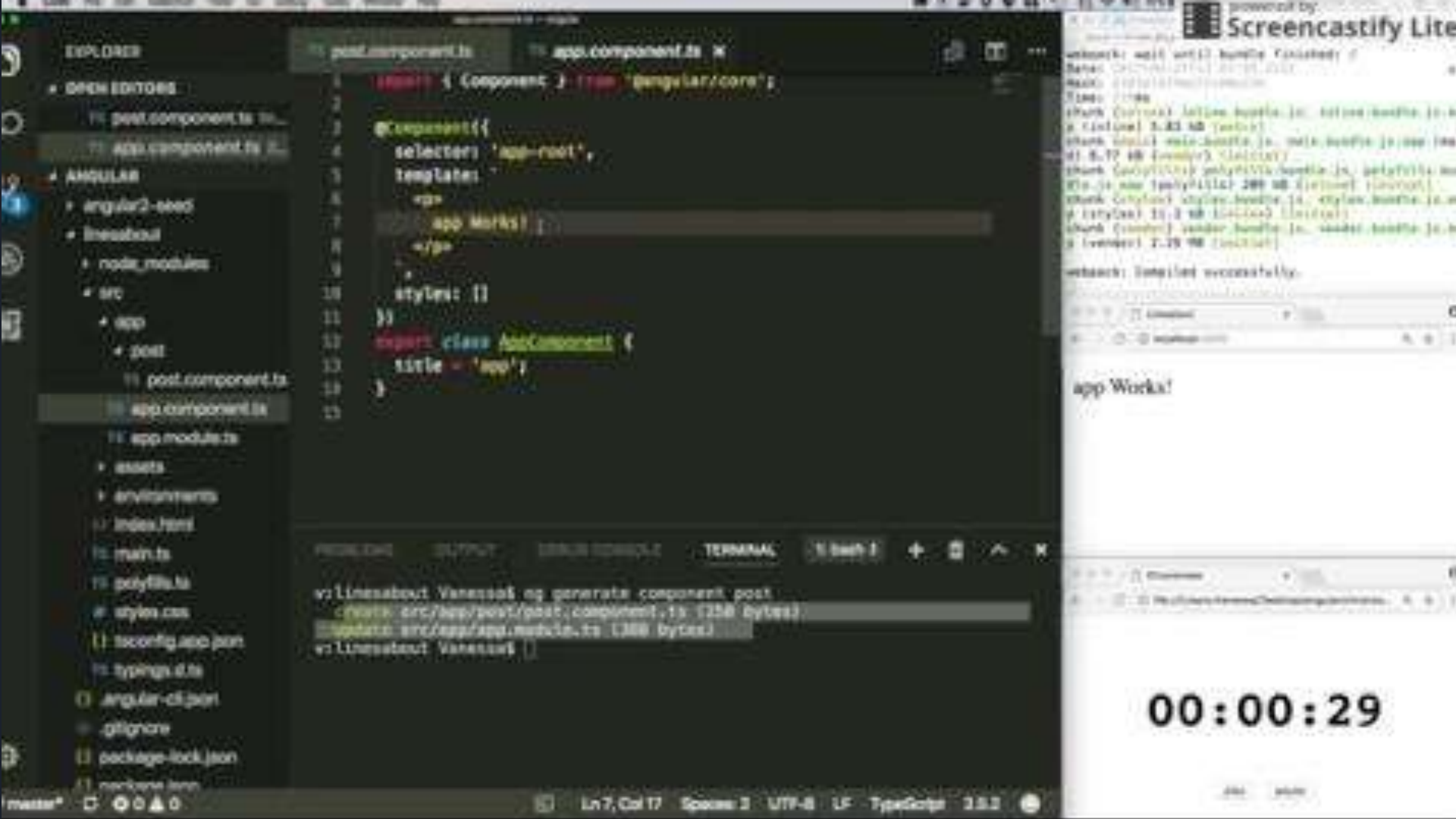
00:01:53

Ln 10, Col 18 Spaces: 2 UTF-8 LF TypeScript 2.5.2

Gerando coisas

**ng generate**







ng generate component



ng generate **component** *nomecomponente*



```
$ ng generate component post  
  create src/app/post/post.component.ts  
(250 bytes)  
  update src/app/app.module.ts (388 bytes)
```



ng g c *nomecomponente*

```
$ ng g c postlist
```

```
create src/app/postlist/postlist.component.css (0 bytes)
```

```
create src/app/postlist/postlist.component.html (27 bytes)
```

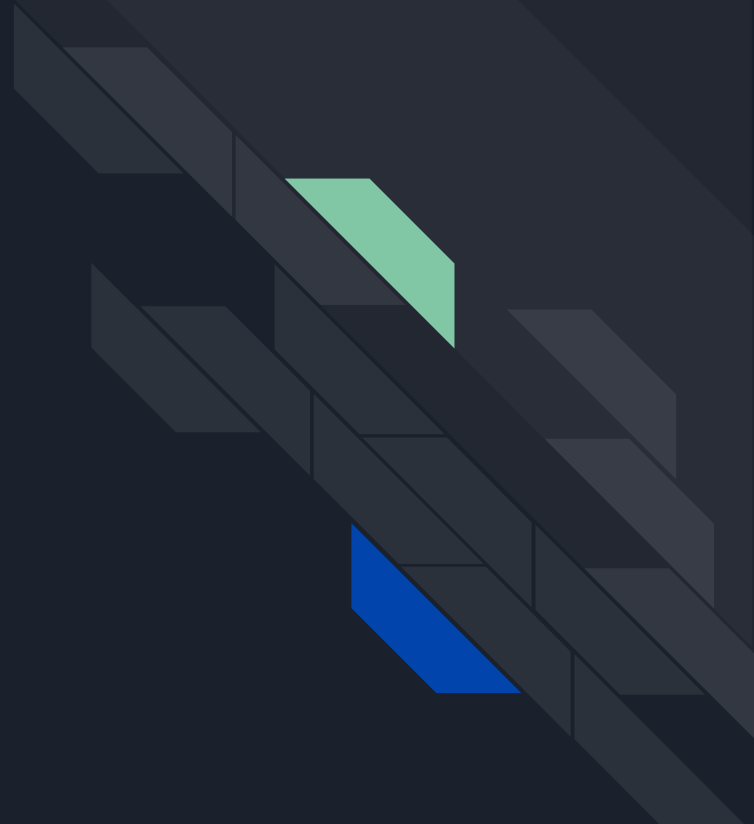
```
create src/app/postlist/postlist.component.spec.ts (642 bytes)
```

```
create src/app/postlist/postlist.component.ts (277 bytes)
```

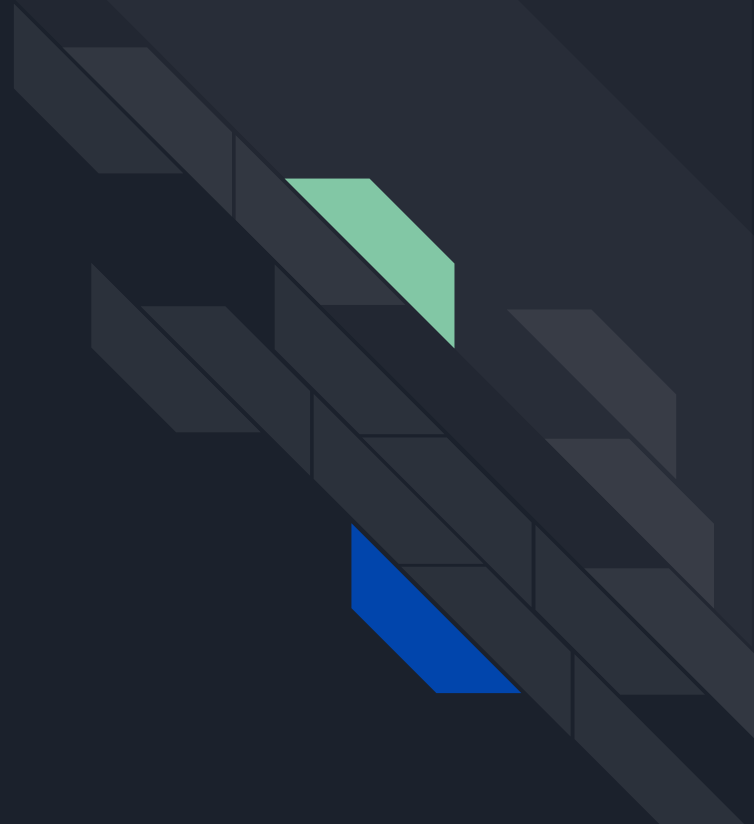
```
update src/app/app.module.ts (478 bytes)
```



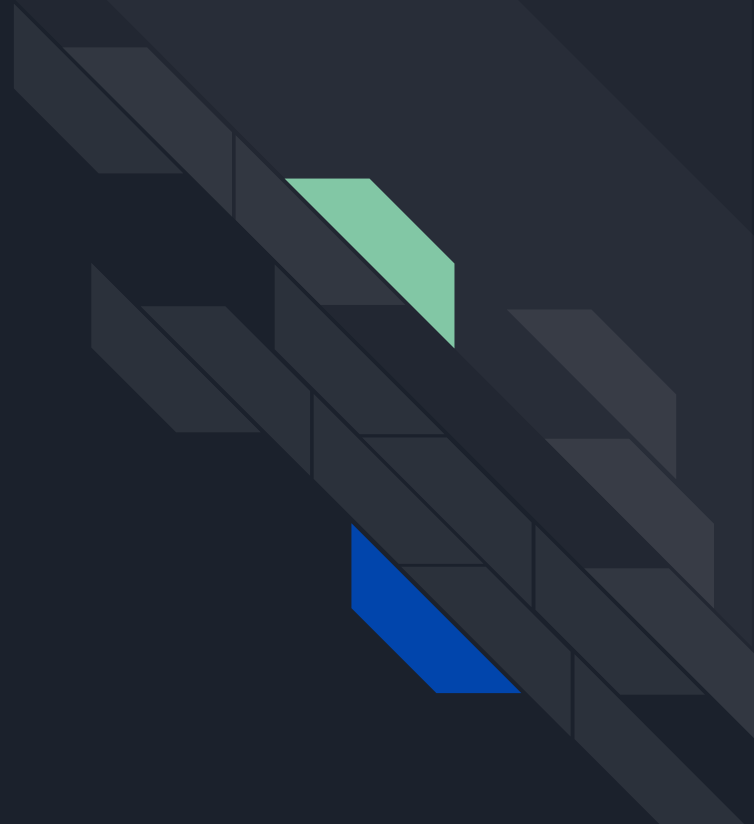
O que mais  
posso gerar?



class  
component  
directive  
enum  
guard  
interface  
module  
pipe  
service



App pronta?

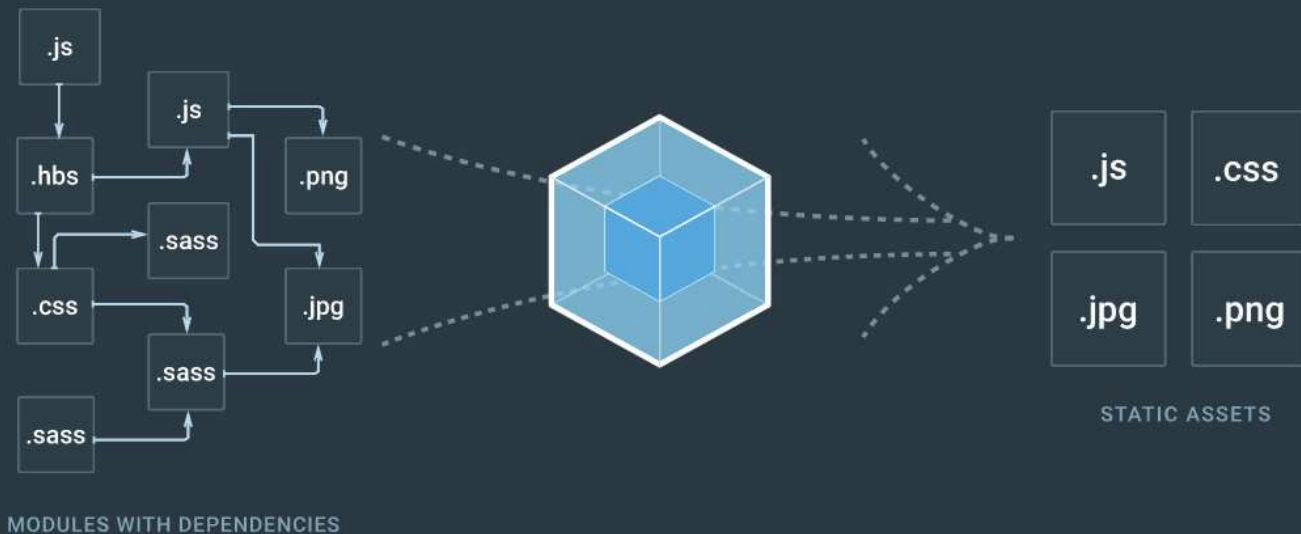




# Hora de empacotar



# bundle your assets



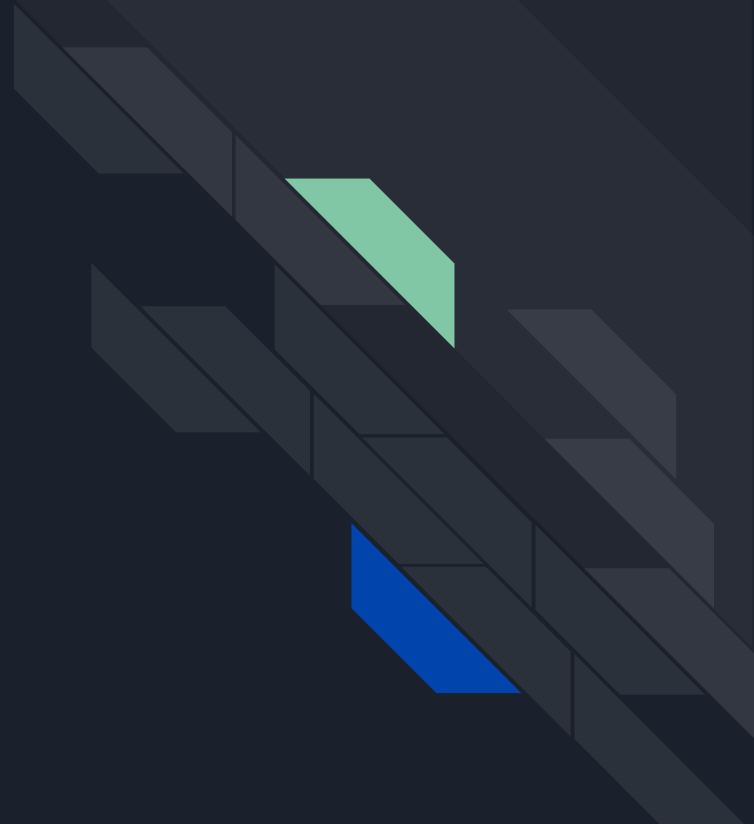
```
1  var webpack = require('webpack');
2  var path = require('path');
3  var webpackMerge = require('webpack-merge');
4  var HtmlWebpackPlugin = require('html-webpack-plugin');
5
6  // Webpack Config
7  var webpackConfig = {
8    entry: {
9      'main': './src/main.browser.ts',
10    },
11
12    output: {
13      publicPath: '',
14      path: path.resolve(__dirname, './dist'),
15    },
16
17    plugins: [
18      new webpack.ContextReplacementPlugin(
19        // The (\\|\/) piece accounts for path separators in *nix and Windows
20        /angular(\\|\/)core(\\|\/)@angular/,
21        path.resolve(__dirname, '../src'),
22        {
23          // your Angular Async Route paths relative to this root directory
24        }
25      ),
26
27      new HtmlWebpackPlugin({
28        template: 'src/index.html'
29      }),
30
31    ],
32  }
```

JS webpack.config.js x

```
1  var webpack = require('webpack');
2  var path = require('path');
3  var webpack = require('webpack');
4  var HtmlWebpackPlugin = require('html-webpack-plugin');
5
6  // Webpack configuration
7  var webpackConfig = {
8    entry: './src/index.js',
9    output: {
10     path: path.resolve(__dirname, 'build'),
11     filename: 'main.js'
12   },
13   plugins: [
14     new HtmlWebpackPlugin({
15       template: './src/index.html'
16     })
17   ]
18 };
19
20 module.exports = webpackConfig;
```



ng build








# ng build

```
v:\linesabout Vanessa$
```



ng build --base-href “”



v:linesabout Vanessa\$ ng build --base-href ""

Date: 2017-09-27T15:12:52.946Z

Hash: 5401c461a7d5380d6eba

Time: 7297ms

chunk {inline} inline.bundle.js, inline.bundle.js.map (inline) 5.83 kB [entry] [rendered]

chunk {main} main.bundle.js, main.bundle.js.map (main) 14.1 kB {vendor} [initial] [rendered]


chunk {polyfills} polyfills.bundle.js, polyfills.bundle.js.map (polyfills) 209 kB {inline} [initial] [rendered]

chunk {styles} styles.bundle.js, styles.bundle.js.map (styles) 11.3 kB {inline} [initial] [rendered]

chunk {vendor} vendor.bundle.js, vendor.bundle.js.map (vendor) 1.95 MB [initial] [rendered]



```
ng build --base-href "" --prod
```



```
v:\linesabout Vanessa$ ng build --base-href "" --prod
```

```
Date: 2017-09-27T15:31:02.750Z
```

```
Hash: 24ac8acc72bc6e88525d
```

```
Time: 8223ms
```


```
chunk {0} polyfills.81bfb9793231bc1ae345.bundle.js (polyfills) 64.1 kB {4} [initial] [rendered]
```

```
chunk {1} main.ca16eadf65b9f6ec9830.bundle.js (main) 2.63 kB {3} [initial] [rendered]
```

```
chunk {2} styles.d41d8cd98f00b204e980.bundle.css (styles) 0 bytes {4} [initial] [rendered]
```

```
chunk {3} vendor.5ad0bc1e3db0a70361b6.bundle.js (vendor) 216 kB [initial] [rendered]
```

```
chunk {4} inline.774aa01c718d3091fb13.bundle.js (inline) 1.45 kB [entry] [rendered]
```



```
v:linesabout Vanessa$ ng bui
Date: 2017-09-27T15:31:02.75
Hash: 24ac8acc72bc6e88525d
Time: 8223ms
chunk {0} polyfills.81bfb979
chunk {1} main.ca16eadf65b9f
chunk {2} styles.d41d8cd98f0
chunk {3} vendor.5ad0bc1e3db
chunk {4} inline.774aa01c718
```

## ▲ linesabout

### ▲ dist

≡ 3rdpartylicenses.txt

<> index.html

JS inline.774aa01c718d3091fb13.bundle.js

JS main.ca16eadf65b9f6ec9830.bundle.js

JS polyfills.81bfb9793231bc1ae345.bundle.js

# styles.d41d8cd98f00b204e980.bundle.css

JS vendor.5ad0bc1e3db0a70361b6.bundle.js

v:linesabout V  
Date: 2017-09-  
Hash: 24ac8acc  
Time: 8223ms  
chunk {0} poly  
chunk {1} main  
chunk {2} styl  
chunk {3} vend  
chunk {4} inli



le.js

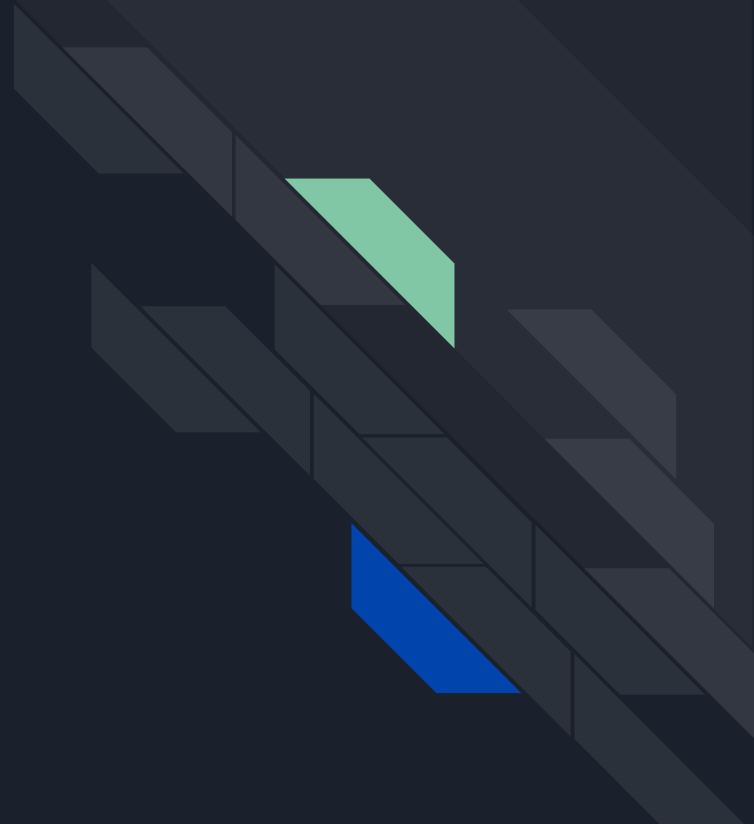
le.js

undle.js

undle.css

undle.js

**Cli is alive!**







# Nos últimos meses

- **Junho:** `--minimal`  
named bundles  
3rd party: licenças unidas
- **Agosto:** `--build-optimizer`  
Angular Universal (server rendering app)  
Initial Support for early betas of v5



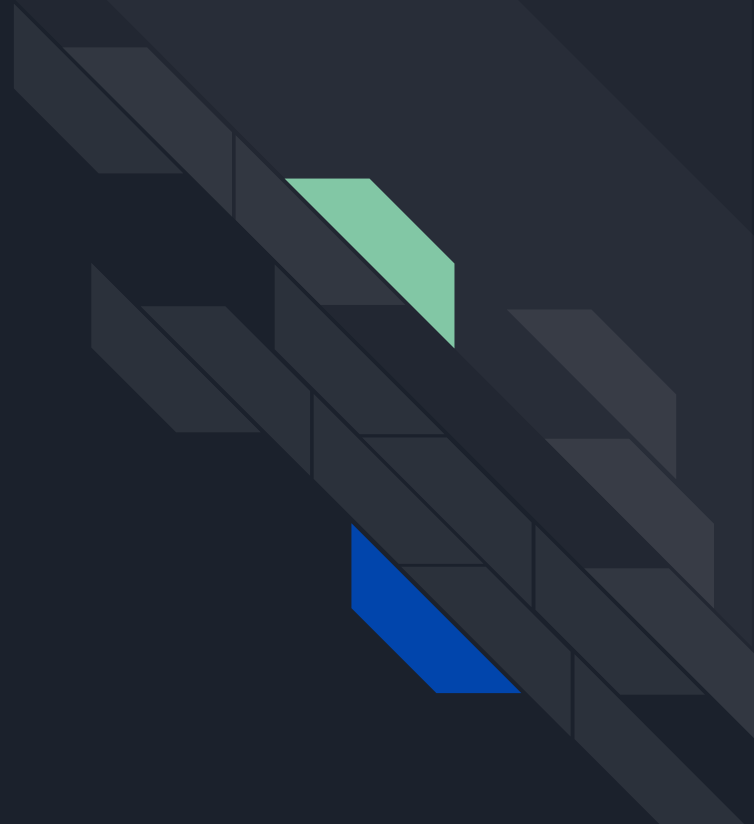
# Nos últimos meses

- **Setembro:**

Schematics.

Permite gerar seu próprios templates do seu projeto ou da sua empresa usando os comando da CLI

`cli next()`





# E nos próximos

- **Ahead of Time (AOT) por padrão** - Melhorar o tempo de compilação
- **Ng update** - ajudar deixar seu projeto sempre atualizado, em conjunto com Material components, e os recursos de i18n



# E nos próximos

- **Library Support** - De Angular App para outras Angular Apps
- **Build Optimizer por padrão** - consolidar as otimizações e build ser o mais otimizado possível
- **Services Workers por padrão** - PWAs com Angular



Stephen Fluin

Follow

Sep 20 · 6 min read

# The Past, Present, and Future of the Angular CLI

The Angular CLI is a command-line interface for building Angular applications, and over the last year it has become one of the most essential tools in an Angular developer's toolbox.



Obrigada!

vanessametonini

@

twitter

github

gmail

