Angular from the Beginning

EMEA PUG Challenge, Prague

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Introduction

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- 17 years experience in web development
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Agenda

- Introduction
- Install
- Webserver
- Browser
- Modules
- Components
- Services
- Router
Introduction

- Angular
  - Angular is a platform that makes it easy to build applications with the web.
  - Angular combines declarative templates, dependency injection, end to end tooling, and integrated best practices to solve development challenges.
  - Angular empowers developers to build applications that live on the web, mobile, or the desktop.
Introduction

Virtual DOM
avoids unnecessary changes in DOM

Angular 4
detects changes updates only parts of DOM

Shadow DOM
encapsulation
<table>
<thead>
<tr>
<th>Package</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>@angular/core</td>
<td>v2.3.0</td>
</tr>
<tr>
<td>@angular/compiler</td>
<td>v2.3.0</td>
</tr>
<tr>
<td>@angular/compiler-cli</td>
<td>v2.3.0</td>
</tr>
<tr>
<td>@angular/http</td>
<td>v2.3.0</td>
</tr>
<tr>
<td>@angular/router</td>
<td>v3.3.0</td>
</tr>
</tbody>
</table>
Introduction

https://www.typescriptlang.org/

TypeScript

JavaScript that scales.

TypeScript is a typed superset of JavaScript that compiles to plain JavaScript.
Any browser. Any host. Any OS. Open source.

Download  Documentation
Node.js® is a JavaScript runtime built on Chrome's V8 JavaScript engine. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient. Node.js' package ecosystem, npm, is the largest ecosystem of open source libraries in the world.

Important security releases, please update now!

Download for macOS (x64)

8.9.0 LTS
Recommended For Most Users

9.0.0 Current
Latest Features

Or have a look at the LTS schedule.

Sign up for Node.js Everywhere, the official Node.js Weekly Newsletter.

https://nodejs.org/en/
Install

One framework. Mobile & desktop.

https://angular.io/

Join us in London for AngularConnect
November 7-8, 2017
Install Angular client:

```
(sudo) npm install -g @angular/cli
```

Create application:

```
ng new my-app
```

Start client:

```
cd my-app
ng serve
```
Browser

what are we?! browsers! browsers

what do we want?! fast internet! fast internet!

when do we want it?! browsers!
BROWSERS
Select up to five browsers and compare their test results in detail

http://html5test.com/
Memory Usage

server {
    listen    80;
    server_name my-app.local;
    client_max_body_size 10M;

    location /lib/ {
        alias /Users/robertprediger/Documents/dev/my-app/node_modules/;
    }

    location /socket.io/ {
        proxy_pass http://testapp.node4biz.de:16022;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection $connection_upgrade;
    }

    location / {
        proxy_redirect off;
        proxy_http_version 1.1;
        proxy_set_header Connection "";
        proxy_pass http://127.0.0.1:4200;
    }
}
Structure

- src
  - app
    - app.component.html
    - app.component.scss
    - app.component.spec.ts
    - app.component.ts
    - app.module.ts
  - assets
  - environments
    - favicon.ico
    - index.html
    - main.ts
import { Component, OnInit } from '@angular/core';

@Component({
    selector: 'app-login',
    templateUrl: './login.component.html',
    styleUrls: ['./login.component.scss']
})

export class LoginComponent implements OnInit {
    constructor() { }
    ngOnInit() {
        ...
    }
}
import { Injectable } from '@angular/core';

@Injectable()
export class EmpService {
    constructor() {
    }
}
appRoutes: Routes = [
{
  path: '',
  component: HomeComponent,
  canActivate: [ AuthenticationService ],
  children: [
    {
      path: 'todo',
      component: TodoComponent
    },
    { path: 'login', component: LoginComponent },
    { path: '', redirectTo: '/todo', pathMatch: 'full' }
  ]
}
@Input

import { Component, OnInit, Input } from '@angular/core';
...
export class LoginComponent implements OnInit {

    @Input() item;

    ...

}
import { Component, OnInit, Output } from '@angular/core';
...
export class LoginComponent implements OnInit {

    @Output() onVoted = new EventEmitter<boolean>();

    ...

    this.onVoted.emit( true );
}
Modules:

- bootstrap (4.0.0-beta.2)
- @ng-bootstrap/ng-bootstrap
- jquery
- moment
- angular2-moment
- underscore
- @ngx-translate/core
- @ngx-translate/http-loader
- ngx-loading
- ng2-toastr
- debug
Questions?

https://github.com/RobertPrediger/pugemea-angular

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