



One framework.

```
/**  
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*  @FrankStrieter  
* 31.05.2018  
* Code for this talk can be found at https://github.com/Strulle/wdc-angular  
**/
```

What is Angular

◦ Javascript ,framework' for Single Page Applications

- CLI
- Server Side Rendering (Angular Universal)
- Tools for PWA
- Mobile App Development with NativeScript or IONIC
- Angular Material
- Testing-Modules using Karma & Protractor

◦ Maintained by Google



Why Angular

- Building reusable web components
- Orchestrating numerous web components
- Tooling and integration in IDE
- Very useful and well kept documentation on <https://angular.io>
- Very helpful community all over the world



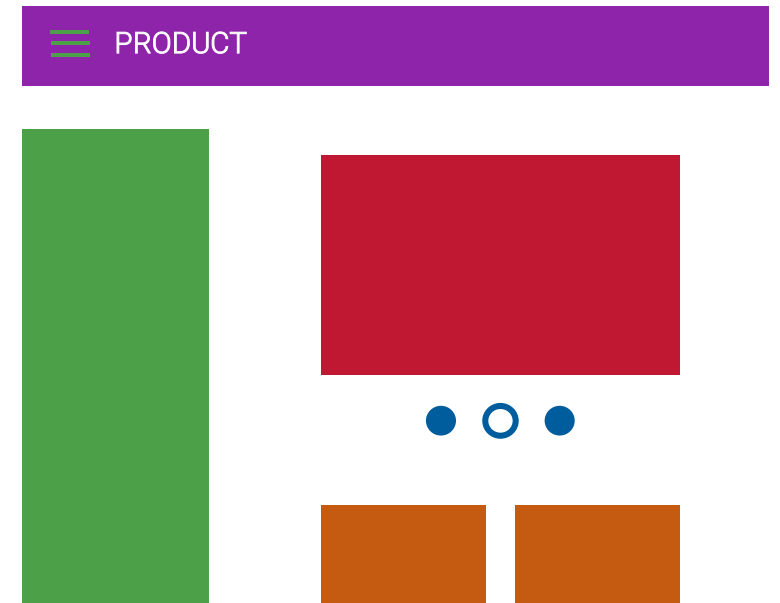
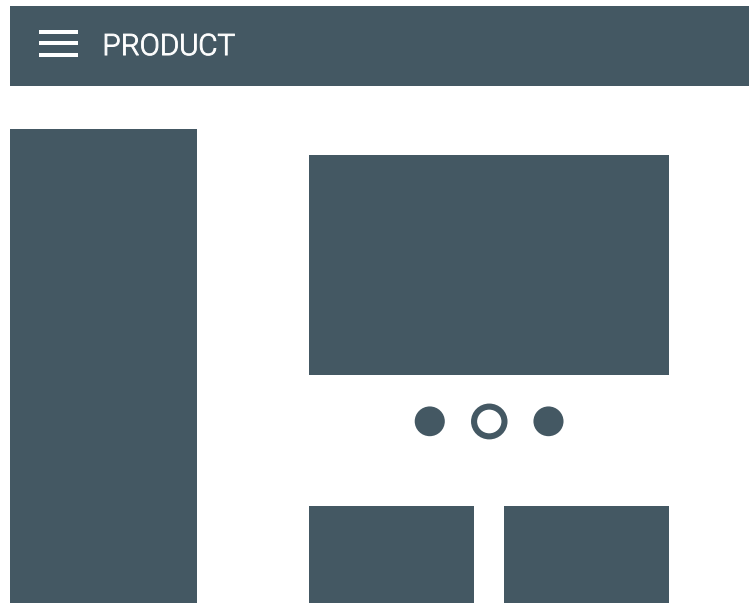


Component Based UI

Reuse the web



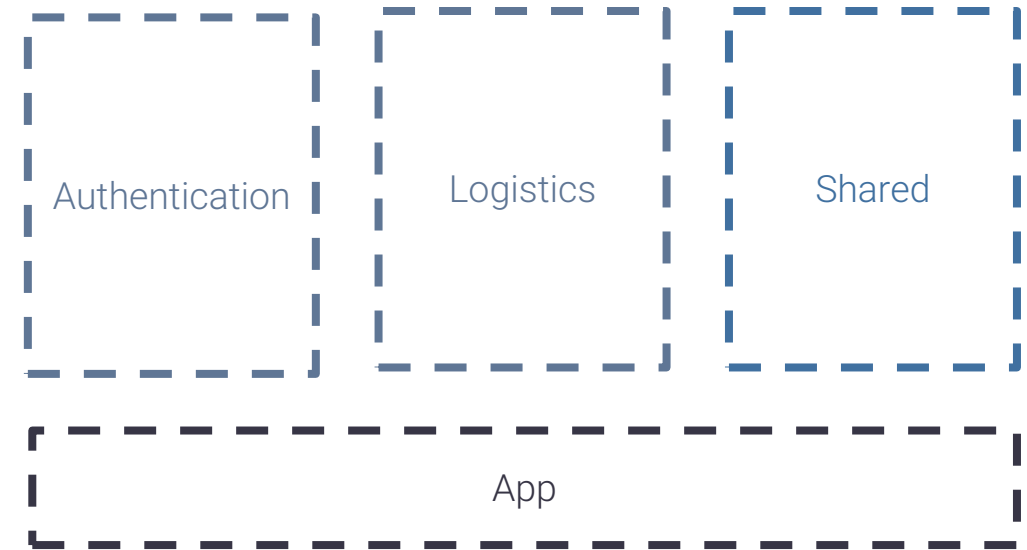
</> Component Based UI





@NgModule – Feature Driven Development

- **Structure** for our modules & components
- Controls the **visibility** of components
- enables **codesplitting**

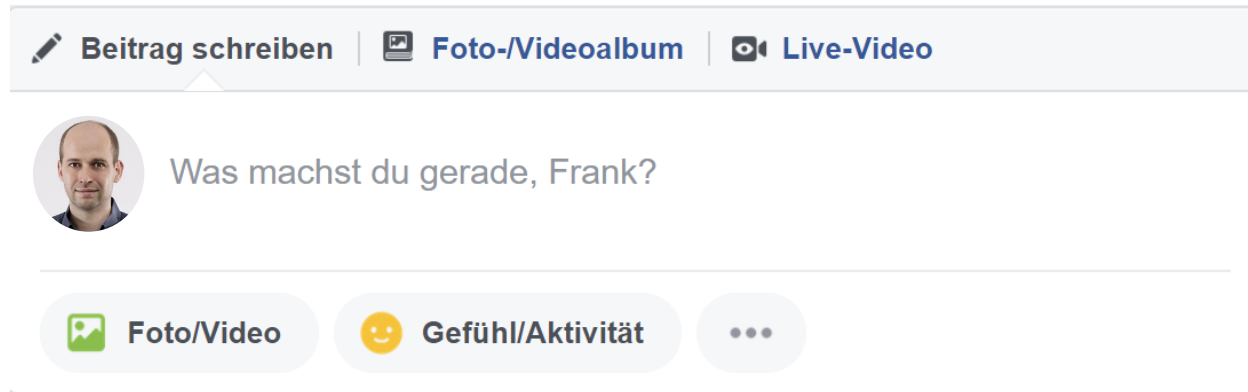


- `@NgModule({`
- `declarations: [`
- `// Declare all components of the module`
- `],`
- `imports: [`
- `// Dependencies for the module (e.g. HttpClientModule)`
- `],`
- `exports: [`
- `// visible components outside of this module`
- `],`
- `bootstrap: [`
- `// Komponente für den Start der Anwendung (only in AppModule)`
- `]`
- `})`
- `export class AppModule { }`

*This slide was not part of the Presentation.
It's an overview of the configuration für ngModules.*



</> If components could speak to us



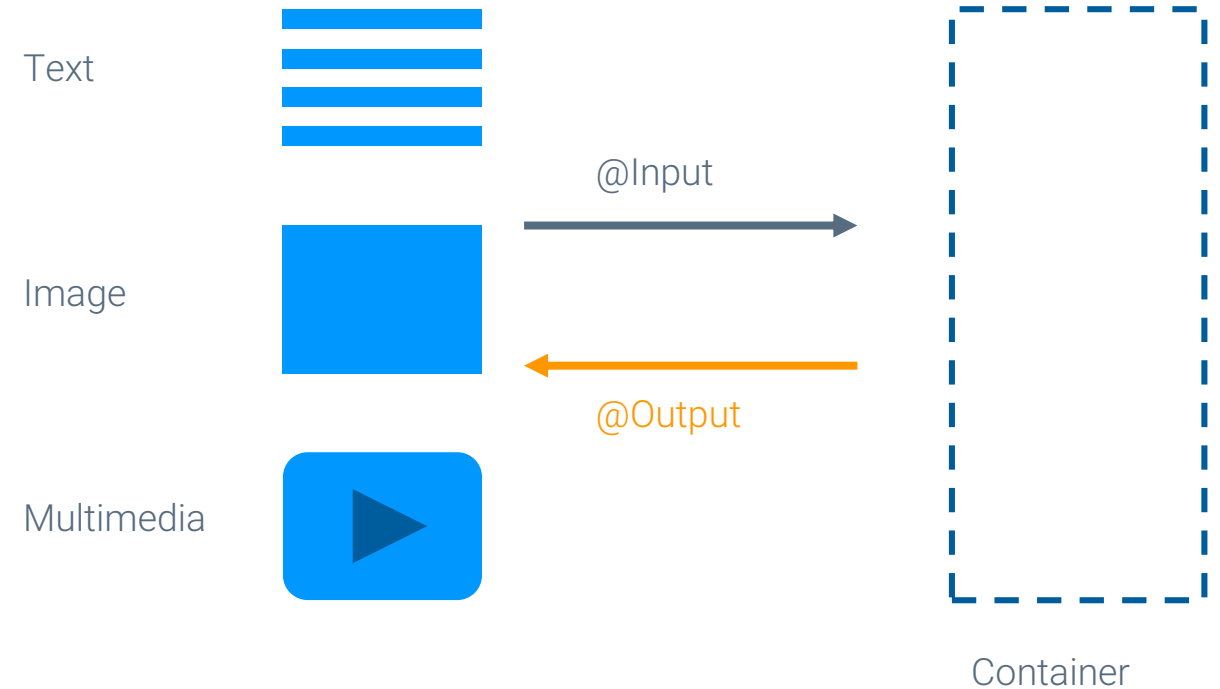
<fb-state-box

```
message="I am happy to be here."  
location="Chemnitz"  
on-sent="post()"/>
```



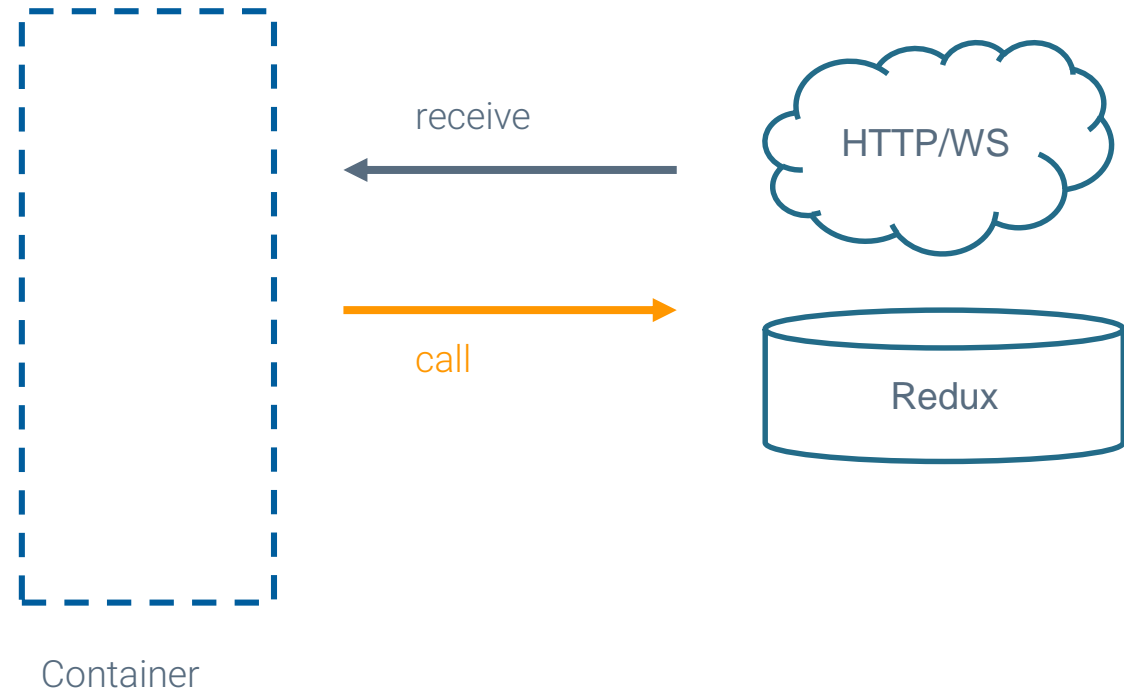
Presentational Components

- Present Data
 - Handle UI-Logic
 - Animations
- Events
- Do not consume data services
- Are reusable building blocks



Container Components

- Orchestrate components
 - Host Components
 - Setup Communication
- Provide data from APIs
- Made for a certain use case



Preperation – Angular CLI

- Can be installed from npm

```
npm install --global @angular/cli  
or  
yarn global add @angular/cli
```

- Can be used to reduce boilerplate

- Create Components, Services, Guards ...
- Add libraries to the project (e.g. universal, material)
- Run the project with a development server
- Build, pack, deploy
- Extendable through schematics
- Create a new App



```
ng new wdc-angular --prefix=wdc --style=scss
```

 <1> /c/Users/frank....

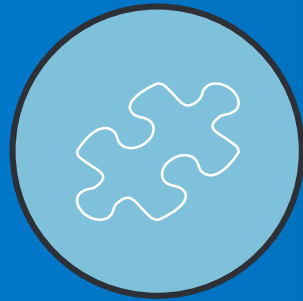
Search



frank.strieter@PC-401130 /c/Users/frank.strieter

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Demo Time

An events App with Angular

@Injectable – Services

- Used to load and transform data
- Shares information for the whole Module or app

```
@Injectable({  
    providedIn: 'root',  
})  
export class EventsService {}
```

```
@Component({...})  
export class EventsBoardComponent {  
    constructor(  
        private EventsService: EventsService  
    ) { }
```





Async Operations

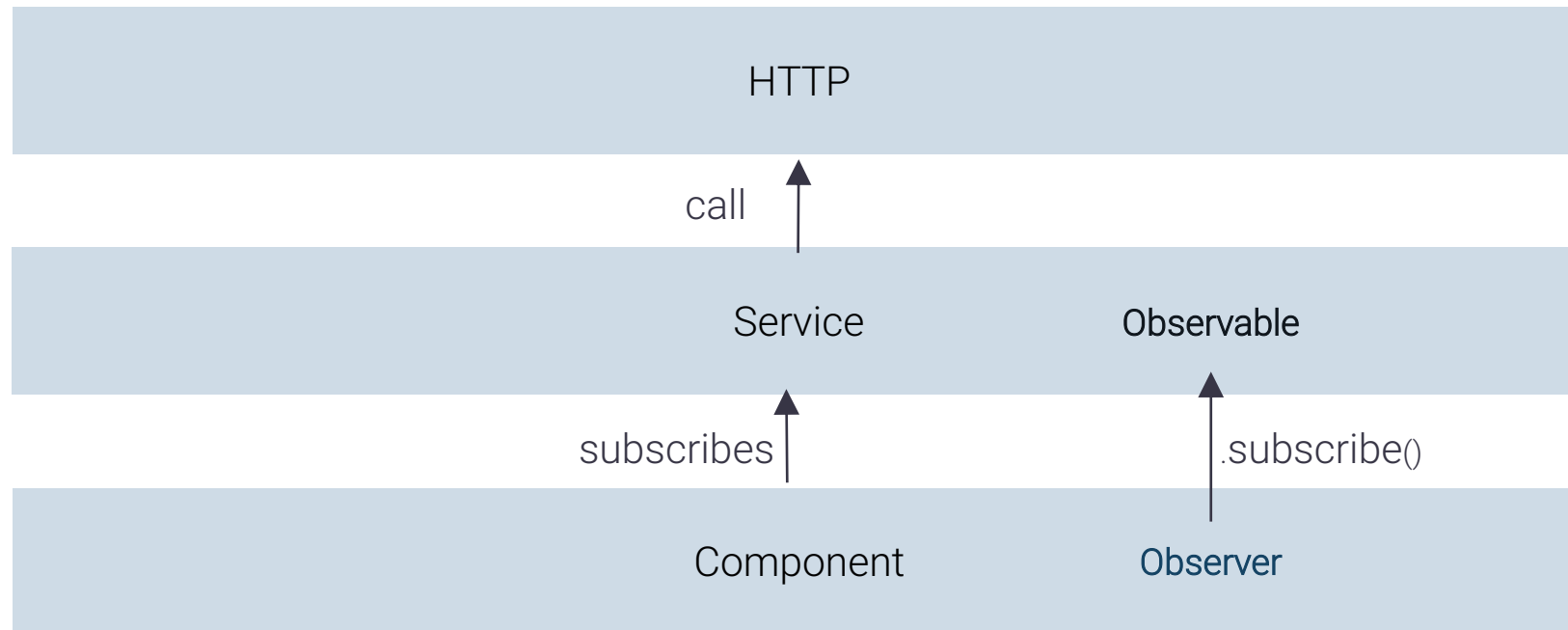
HttpClient - RxJS

Reactive programming

- We are working on a data **stream**.
- We control, which data we want to receive.
- We can transform data easily.
- Have a look at <https://www.youtube.com/watch?v=uQIzhJHclvs>



http – some advices





Thank you

/**

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Angular