

# TEST DRIVEN DEVELOPMENT (TDD)



# CODING





# UNIT TEST





# TDD



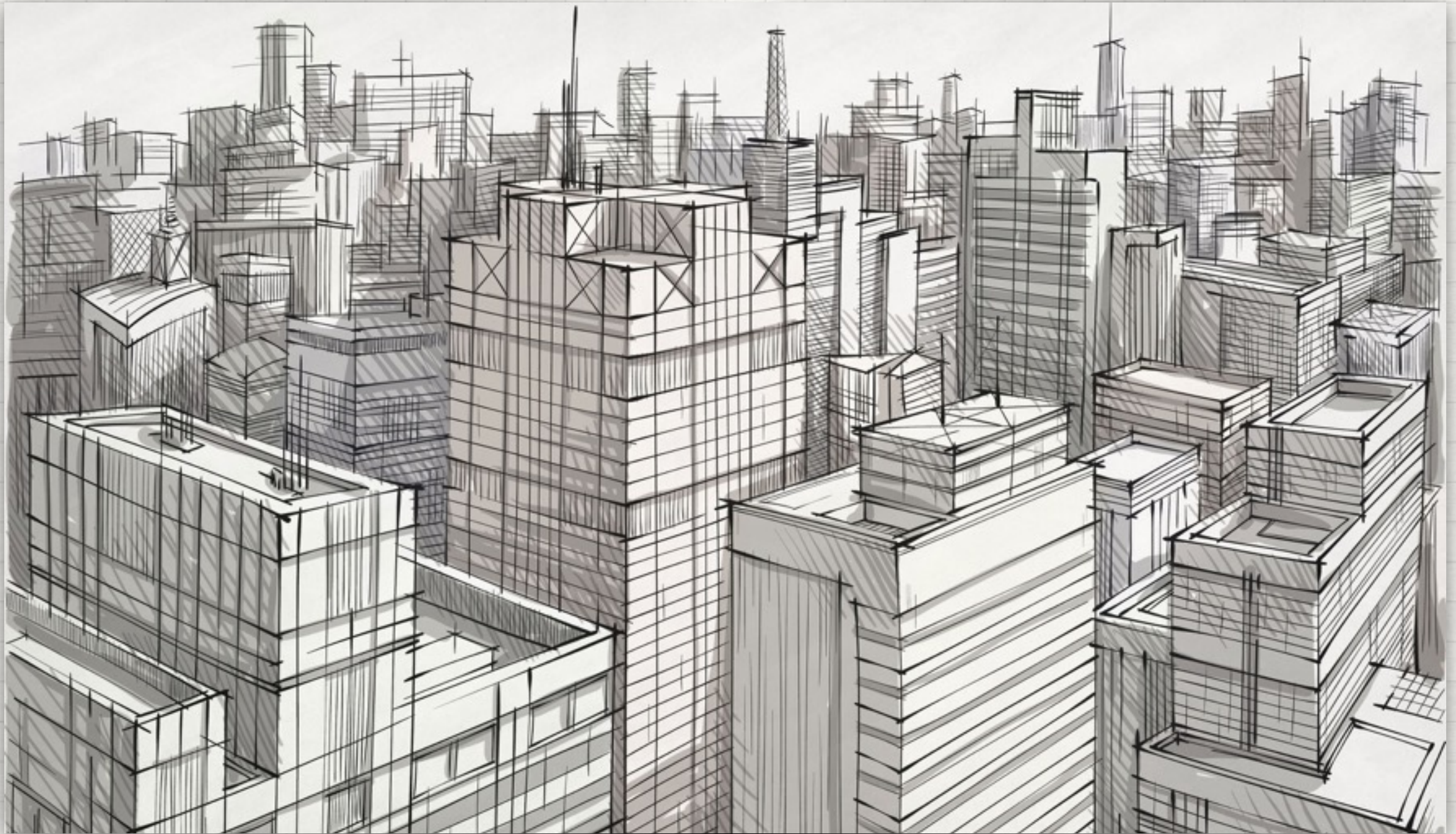


# INSTALL PROGRAM

- NodeJS package manager (NPM)  
<https://nodejs.org/en/download/>
- TypeScript Compiler  
npm install -g typescript
- Sublime Text Plugin  
<https://github.com/Microsoft/TypeScript-Sublime-Plugin>
- Download Angular2 Seed  
<https://github.com/angular/quickstart>



# TYPESCRIPT OVERVIEW





# TYPESCRIPT

## CLASS

```
class Greeter {  
  
    greeting: string;  
  
    constructor(message: string, public wow: string) { // ***public  
  
        this.greeting = message;  
  
    }  
  
    greet() {  
  
        return "Hello, " + this.greeting;  
  
    }  
  
}
```

# TYPESCRIPT

## INHERITANCE

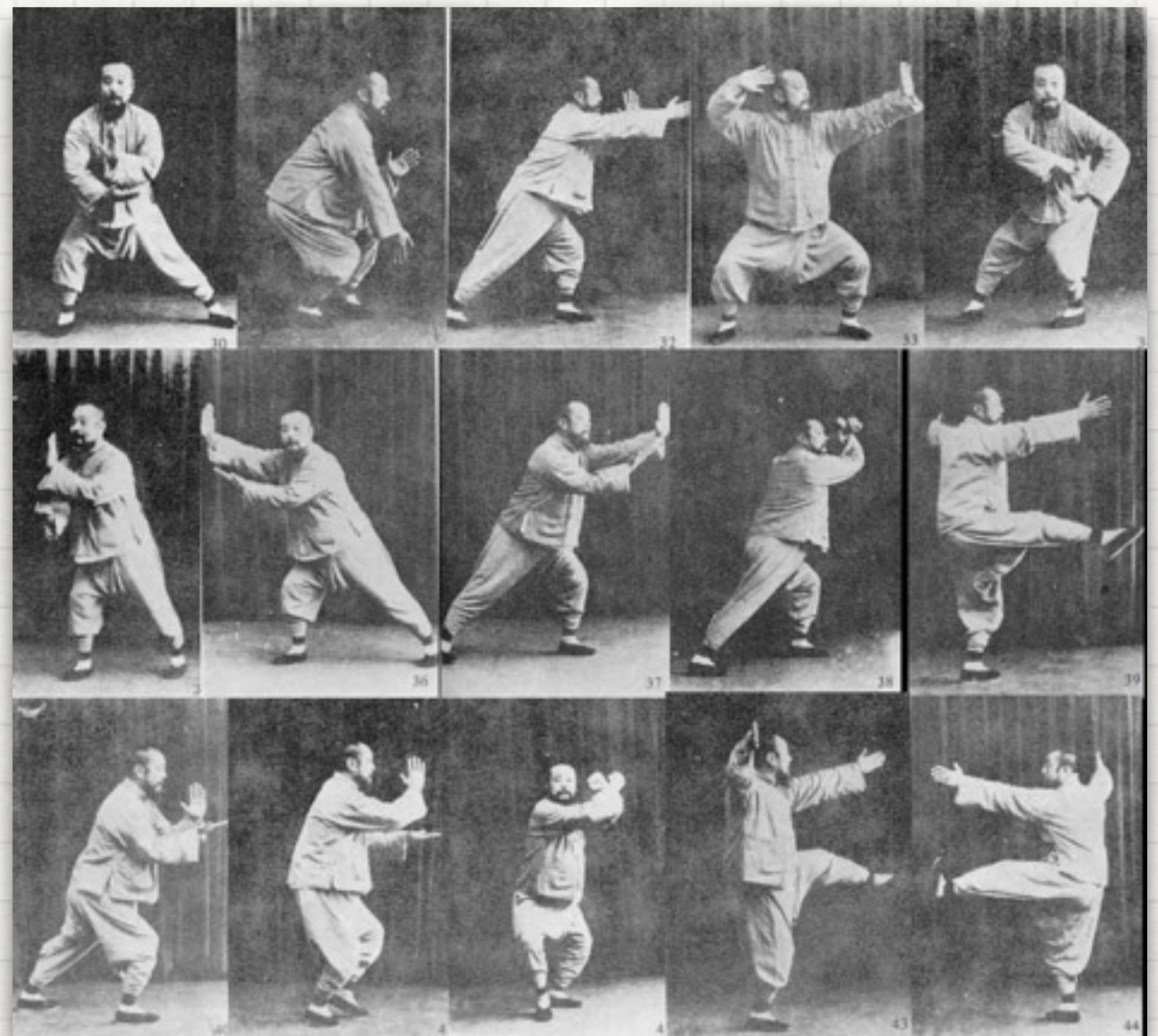
```
class Animal {  
  
    constructor(public name: string) { }  
  
    move(distanceInMeters: number = 0) {  
  
        console.log(`${this.name} moved ${distanceInMeters}m.`);  
  
    }  
  
}  
  
class Snake extends Animal {  
  
    constructor(name: string) { super(name); }  
  
    move(distanceInMeters = 5) {  
  
        console.log("Slithering...");  
  
        super.move(distanceInMeters);  
  
    }  
  
}
```



# TYPESCRIPT

MORE

<http://www.typescriptlang.org/>





# ANGULAR JS 2

WORK SHOP BY KENNY



*2.0 NOW IN BETA!*



# OVERVIEW

- Angular2 Architecture Overview
- Component
- Life cycle
- Injectable
- How to call Data Service Api
- Event
- By pass event



“

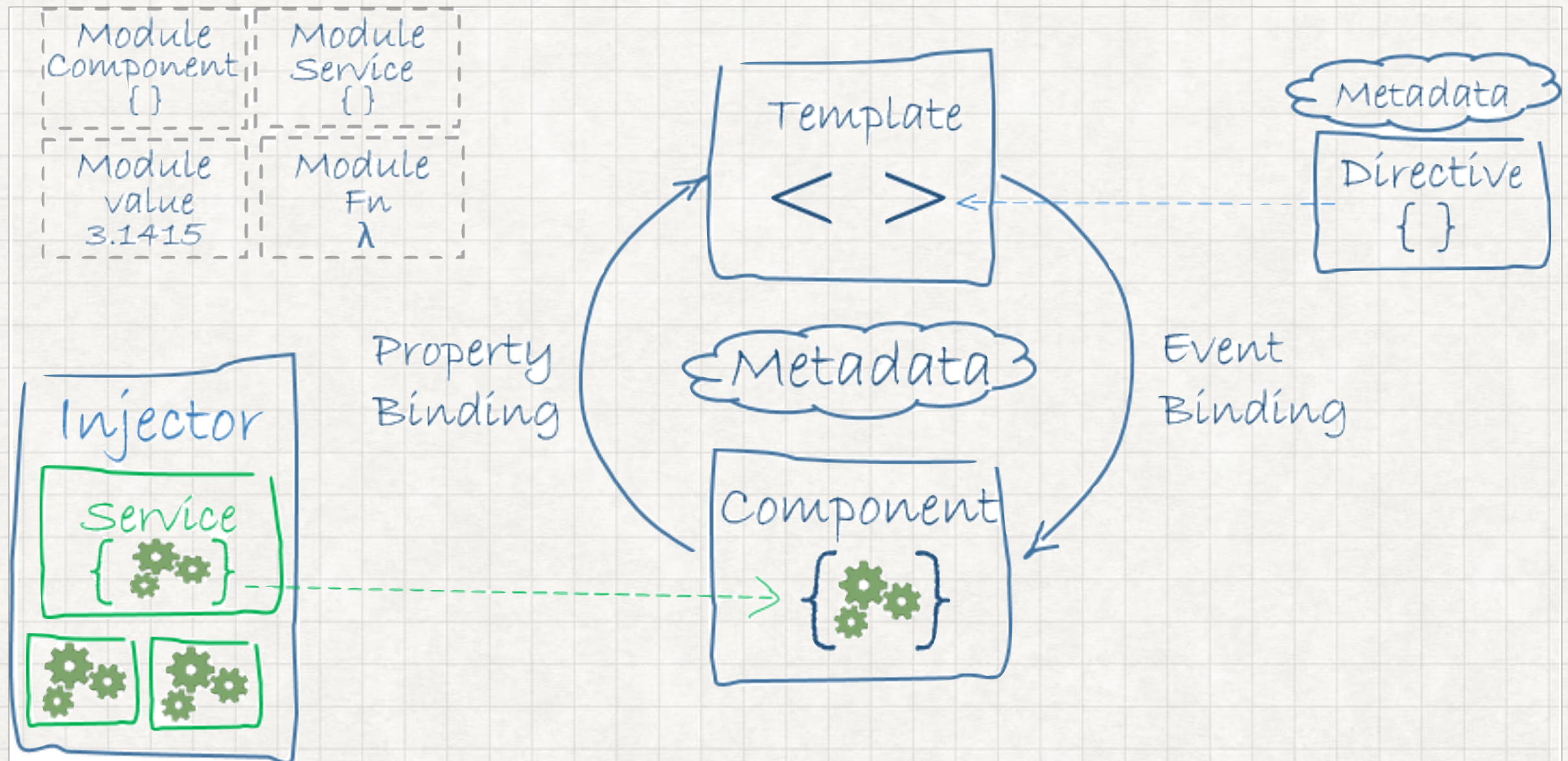
RUN

— *Monojobza*

”

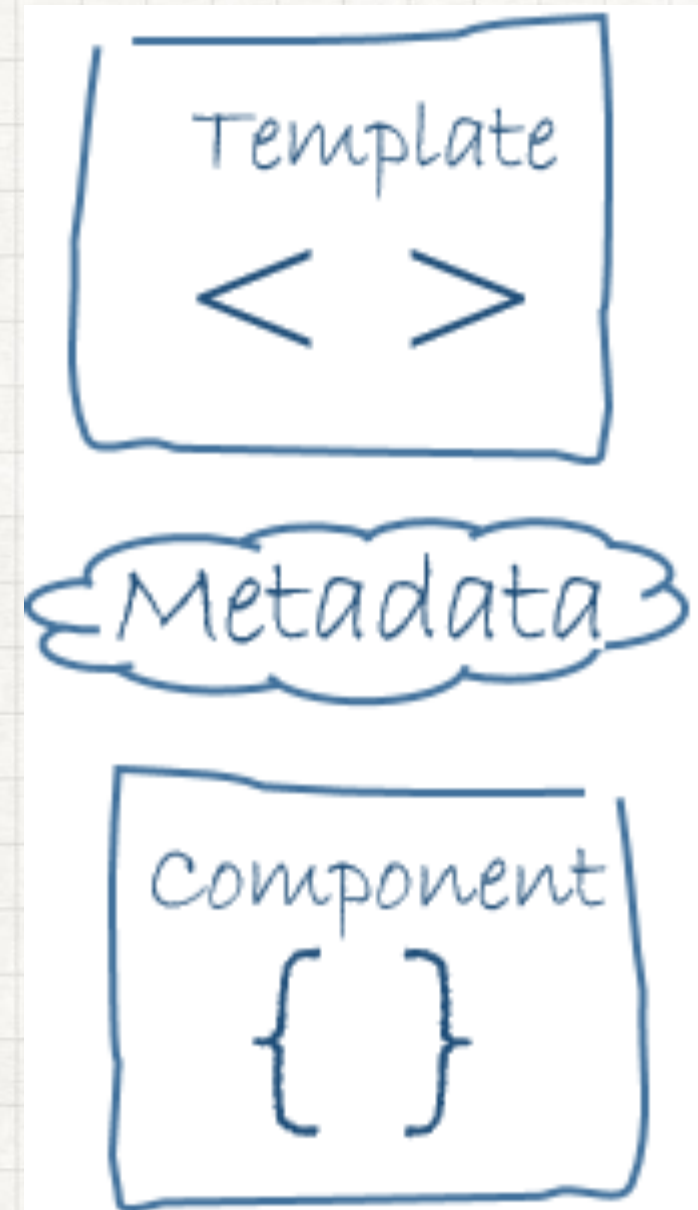


# ARCHITECTURE OVERVIEW





# COMPONENT





“

TEMPLATE => DOM

— *Step D*

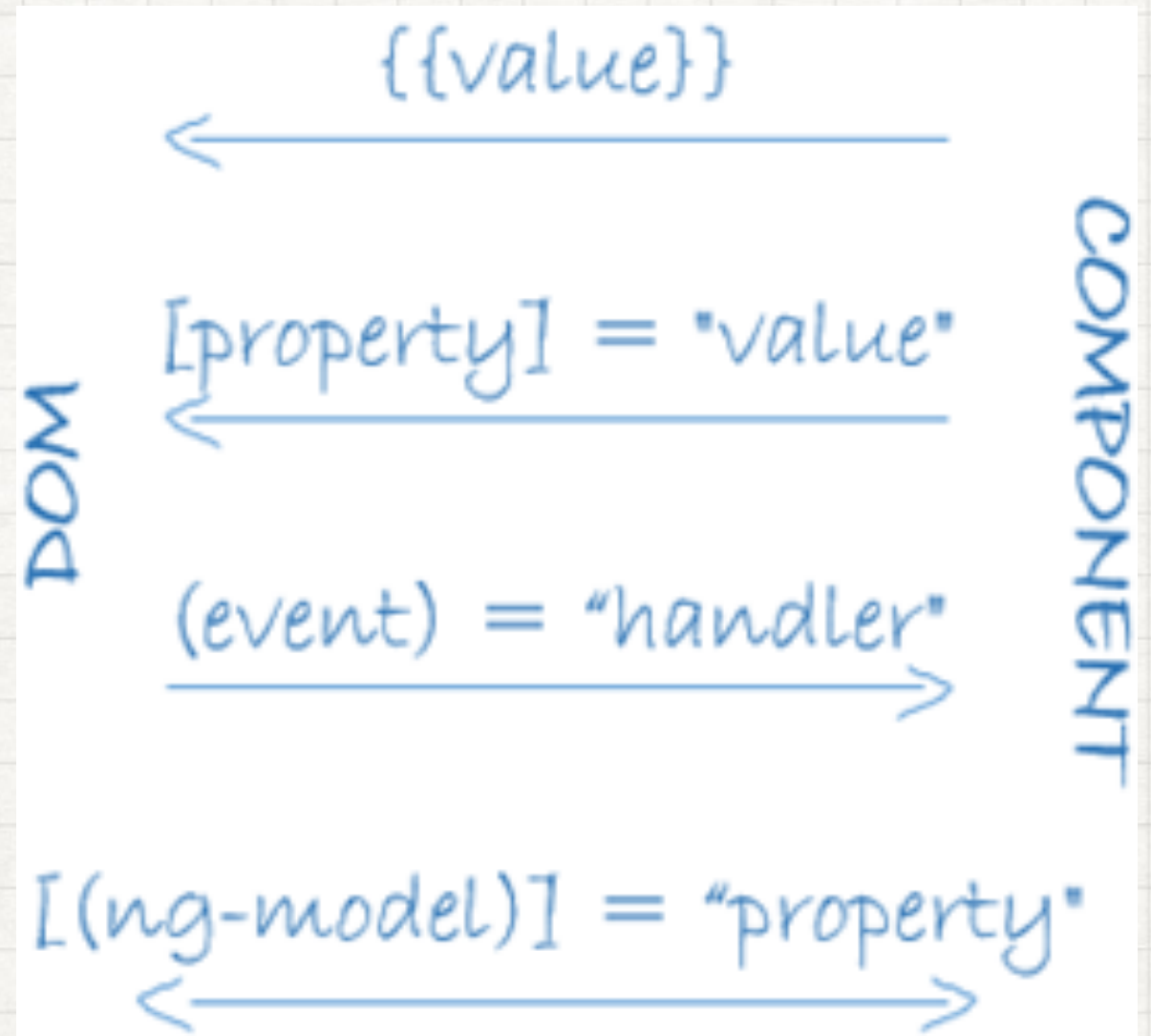
”



```
@Component({  
  selector: 'hero-list',  
  templateUrl: 'app/hero-list.component.html',  
  directives: [HeroDetailComponent],  
  providers: [HeroService]  
})
```



# COMPONENT CONTROLL DOM & EVENT





# EXAMPLE

```
<div>{{hero.name}}</div>
```

```
<hero-detail [hero]="selectedHero"></hero-detail>
```

```
<div (click)="selectHero(hero)"></div>
```



# COMPONENT LIFE CYCLE

## Peek-A-Boo

Create PeekABooComponent

### -- Lifecycle Hook Log --

- #1 name is not known at construction
- #2 OnChanges: name initialized to "Windstorm"
- #3 OnInit
- #4 DoCheck
- #5 AfterContentInit
- #6 AfterContentChecked
- #7 AfterViewInit
- #8 AfterViewChecked
- #9 DoCheck
- #10 AfterContentChecked
- #11 AfterViewChecked
- #12 DoCheck
- #13 AfterContentChecked
- #14 AfterViewChecked
- #15 OnDestroy



“

Document.ready = ngAfterViewInit

— ไบค์เกอร์ ผู้กลัวเมีย

”



**INJECTABLE**

“

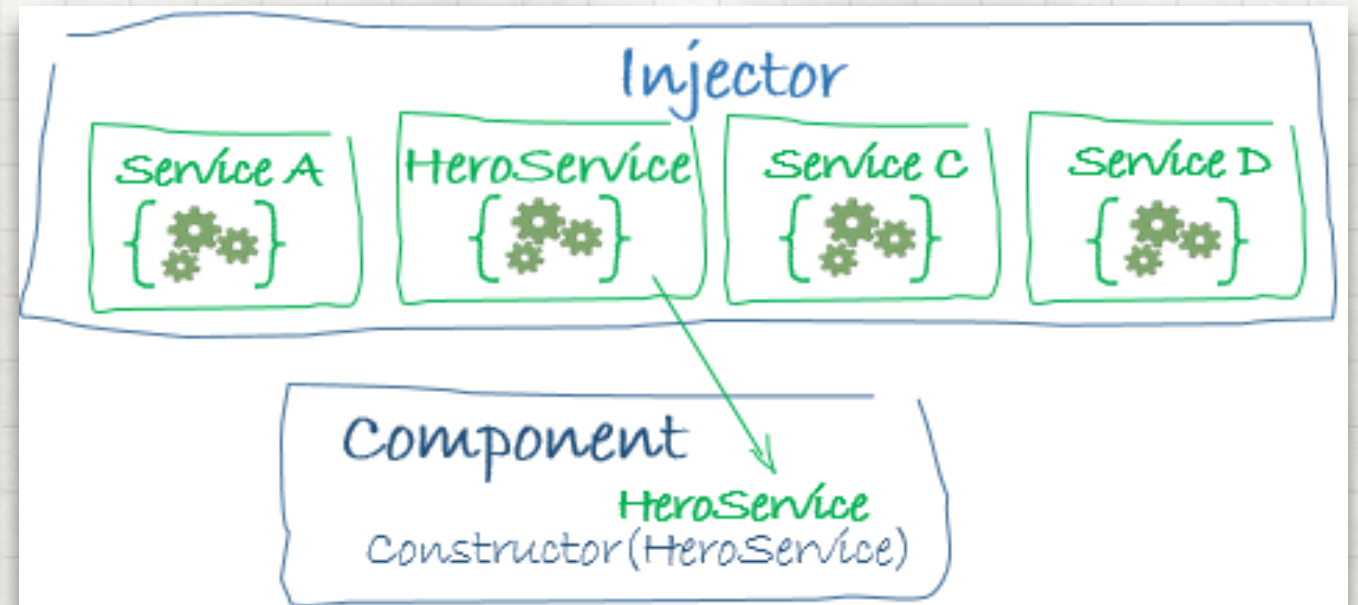
"Dependency Injection" is a way to supply a new instance of a class with the fully-formed dependencies it requires.

— *Teeranai Buddee*

”



# INJECT ON COMPONENT CONSTRUCTOR



“

DON'T FORGET REGISTER  
INJECTABLE IN  
COMPONENT

— *P'Keaw*

”



```
@Component({
```

```
  providers: [HeroService]
```

```
})
```

```
export class HeroesComponent {
```

```
  constructor(private _service: HeroService){ }
```

```
}
```

“

Don't forget add @Injectable()  
annotation on Injectable class

— ยมยานใหญ่

”



@Injectable()

export class HeroService {

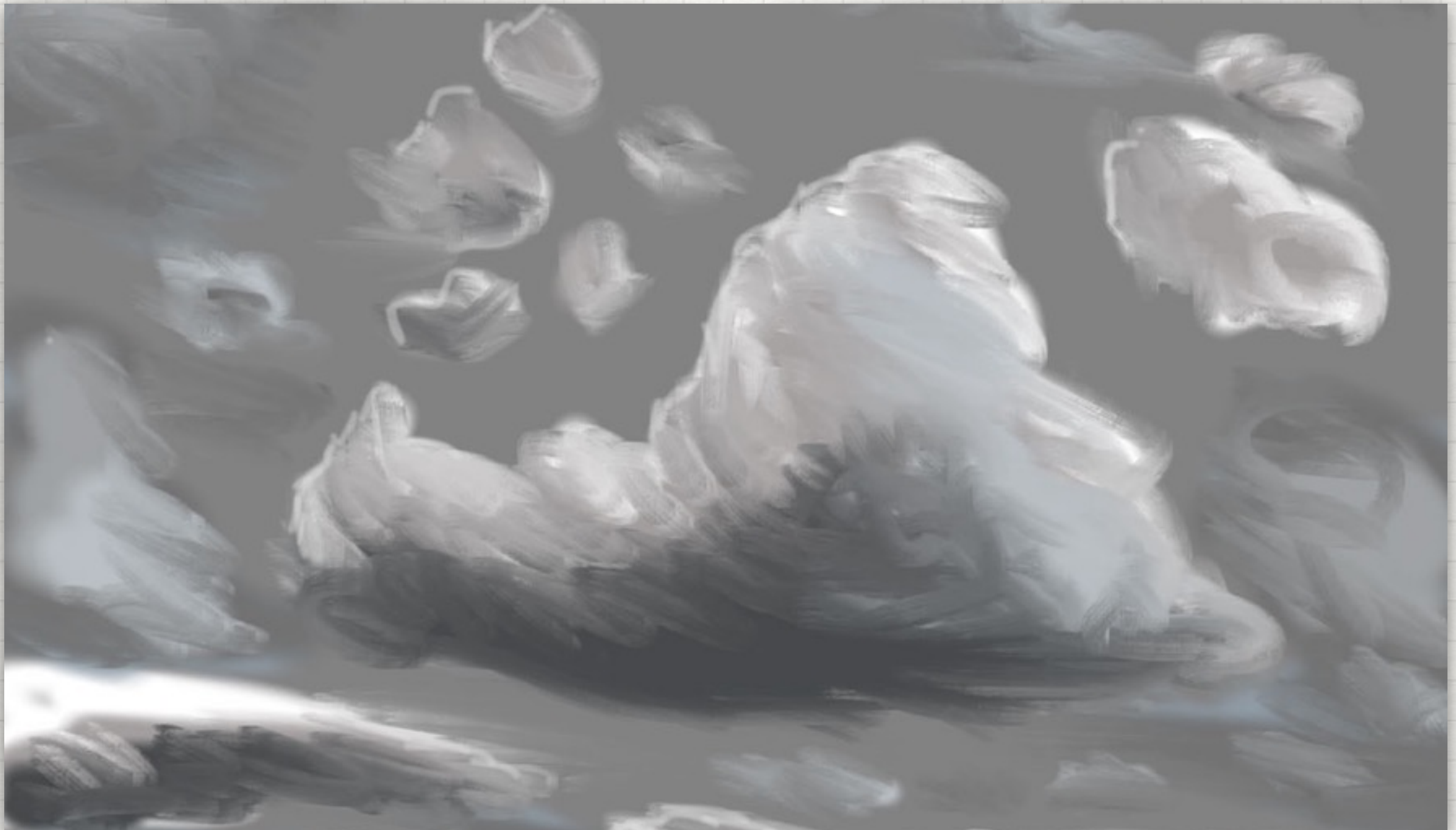
getHeroes() {

}

}

# HOW TO CALL DATA SERVICE API

[HTTPS://ANGULAR.IO/DOCS/TS/LATEST/TUTORIAL/TOH-PT4.HTML](https://angular.io/docs/ts/latest/tutorial/toh-pt4.html)





```
import {Http} from 'angular2/http';
```

```
@Injectable()  
export class service {  
  constructor(private http:Http) {  
  }
```

```
  public GET(url:String, parameters) {  
    url = this.generateGetUrlWithParameter(url, parameters)  
    return new Promise(  
      (resolve) => {  
        this.http.get(url).subscribe(  
          (res) => {  
            resolve(res.json());  
          },  
          (err) => this.errorLogs(connectorType.GET, url, err),  
          () => this.completeLogs(connectorType.GET, url)  
        )  
      })  
    );  
  }  
}
```

**EVENT**



```

@Component({
  selector: 'advertise-card',
  templateUrl: '
    <div class="mdl-grid mdl-cell--12-col">
      <div class="mdl-card__media card-image mdl-cell--4-col mdl-cell--4-col-tablet"
        style="background: url({{card.ImageCover}}) center / cover;">
      </div>
      <div class="mdl-cell--8-col mdl-cell--4-col-tablet">
        <div class="mdl-card__title">{{card.Title}}</div>
        <div class="mdl-card__supporting-text mdl-color-text--grey-600 card-detail-preview">
          <div></div>
          <div>
            <strong>{{card.HeadAds}}</strong>
            <span>{{card.TextAds}}</span>
          </div>
        </div>
        <div class="mdl-card__actions mdl-card--border card-more-detail mdl-cell--8-col mdl-cell--4-col-
tablet">
          <a class="mdl-button mdl-button--colored mdl-js-button mdl-js-ripple-effect button-card-right"
(click)="viewDetail(card.Id)">
            More Detail
          </a>
        </div>
      </div>
    </div>
  ',
  directives: [Dialog]
})

export class AdvertiseCard {
  item:number = 0;
  @Input() card:Card;

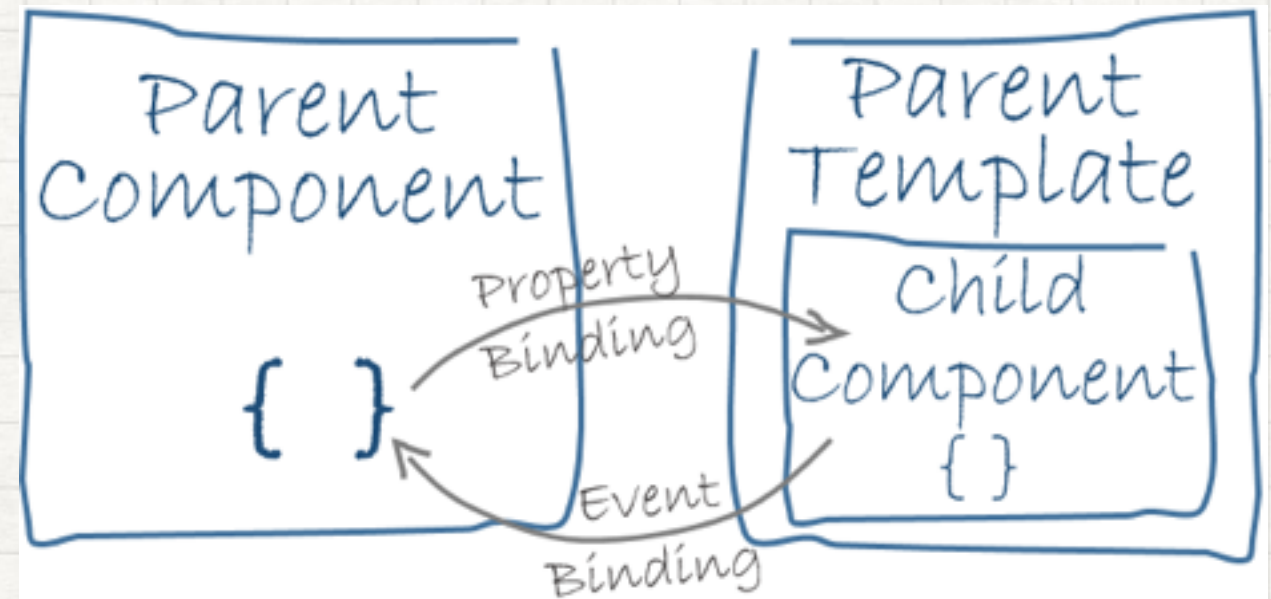
  constructor(private dialog:DialogService) {
  }

  private viewDetail(cardId:number) {
    var dialogProperty = new DialogProperty();
    dialogProperty.title = cardId;
    dialogProperty.content = "this is content of card Id : " + cardId;
    this.dialog.open(dialogProperty);
  }
}

```

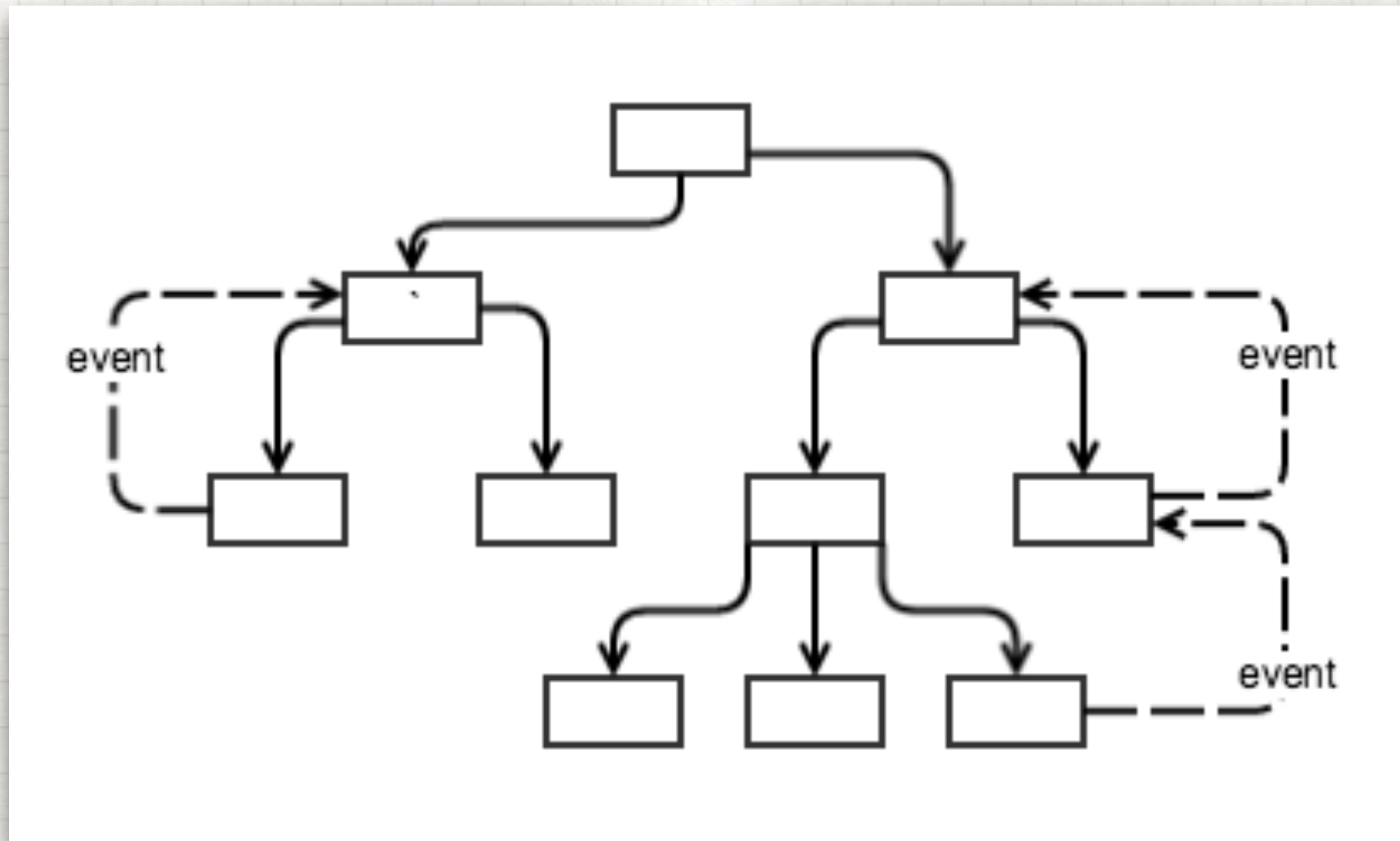
EVENT

BYPASS  
BETWEEN  
COMPONENT

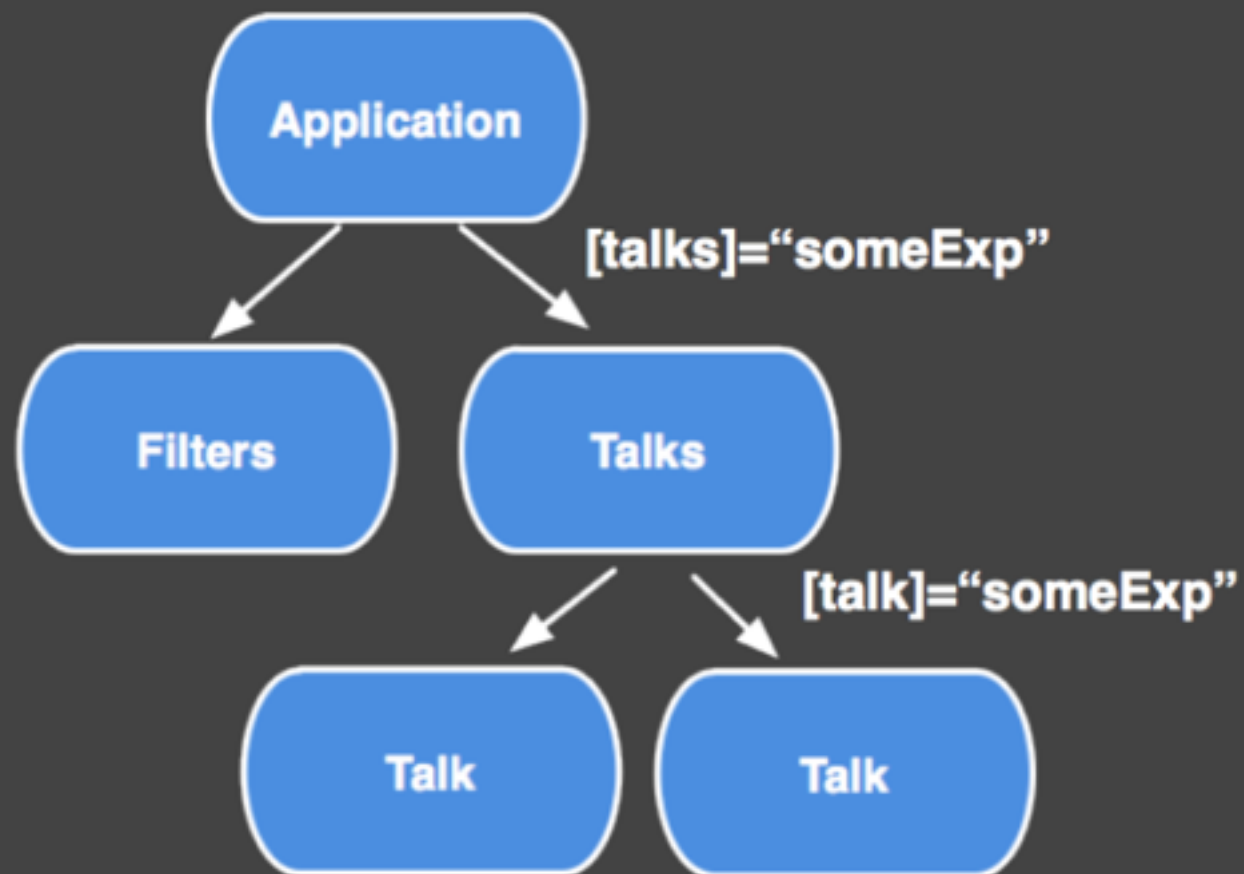




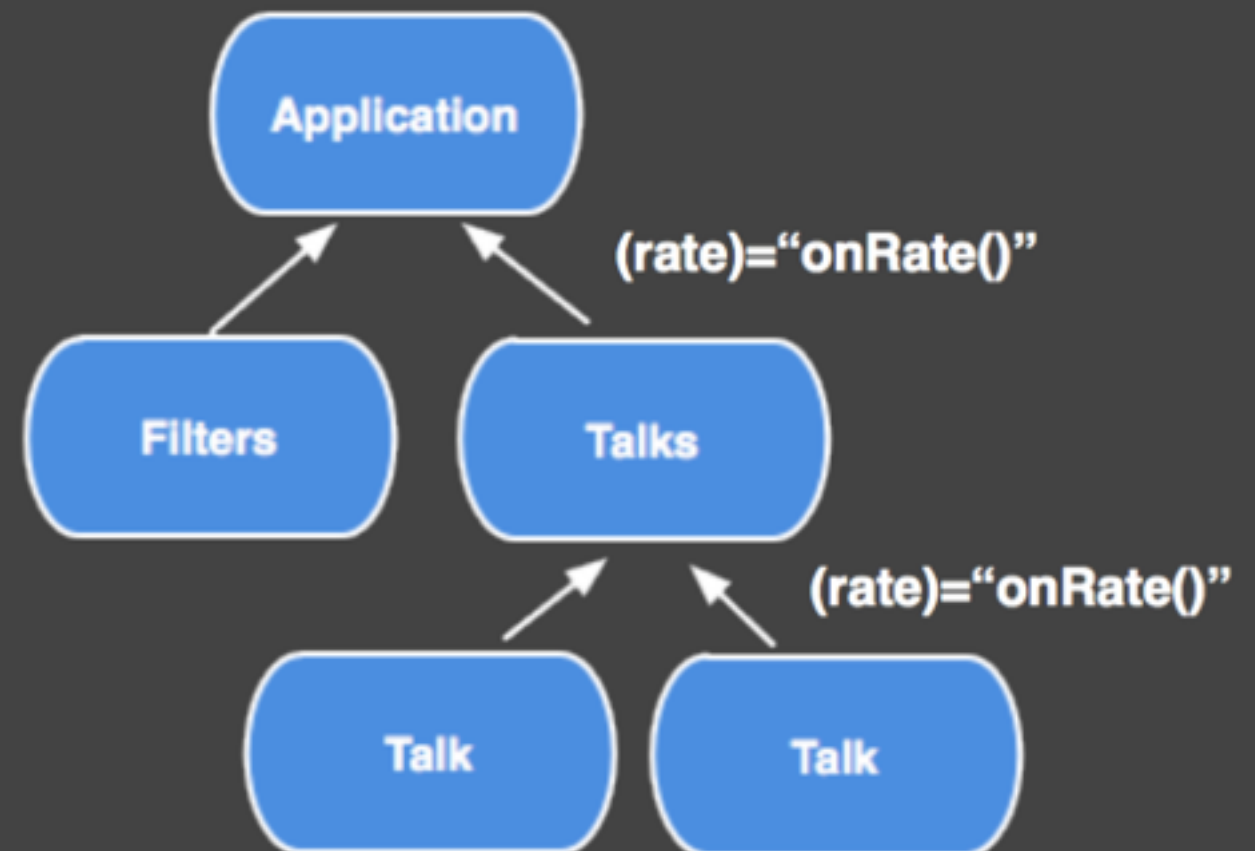
# NORMAL PASS EVENT



Parent -> Child

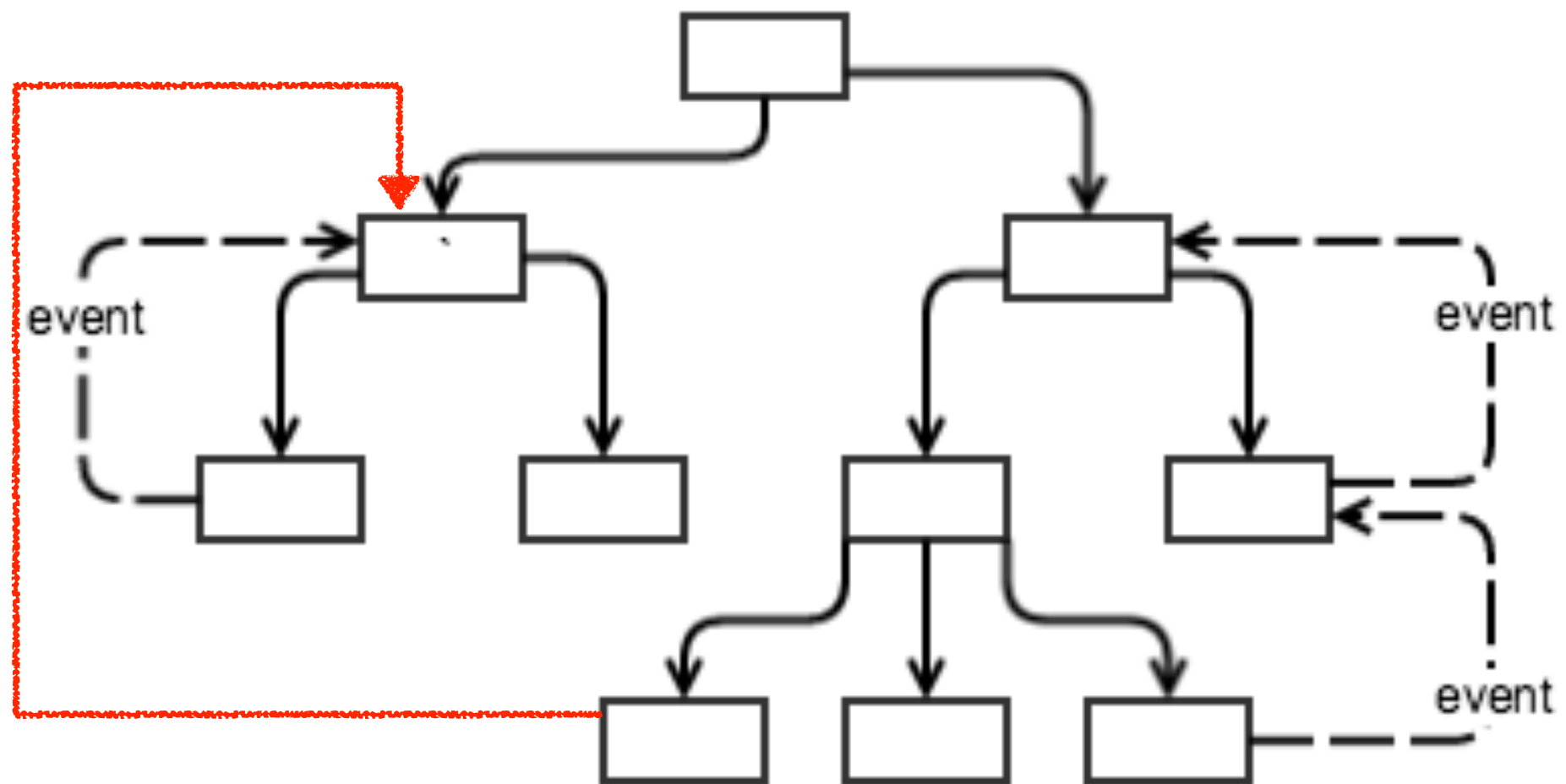


Child -> Parent



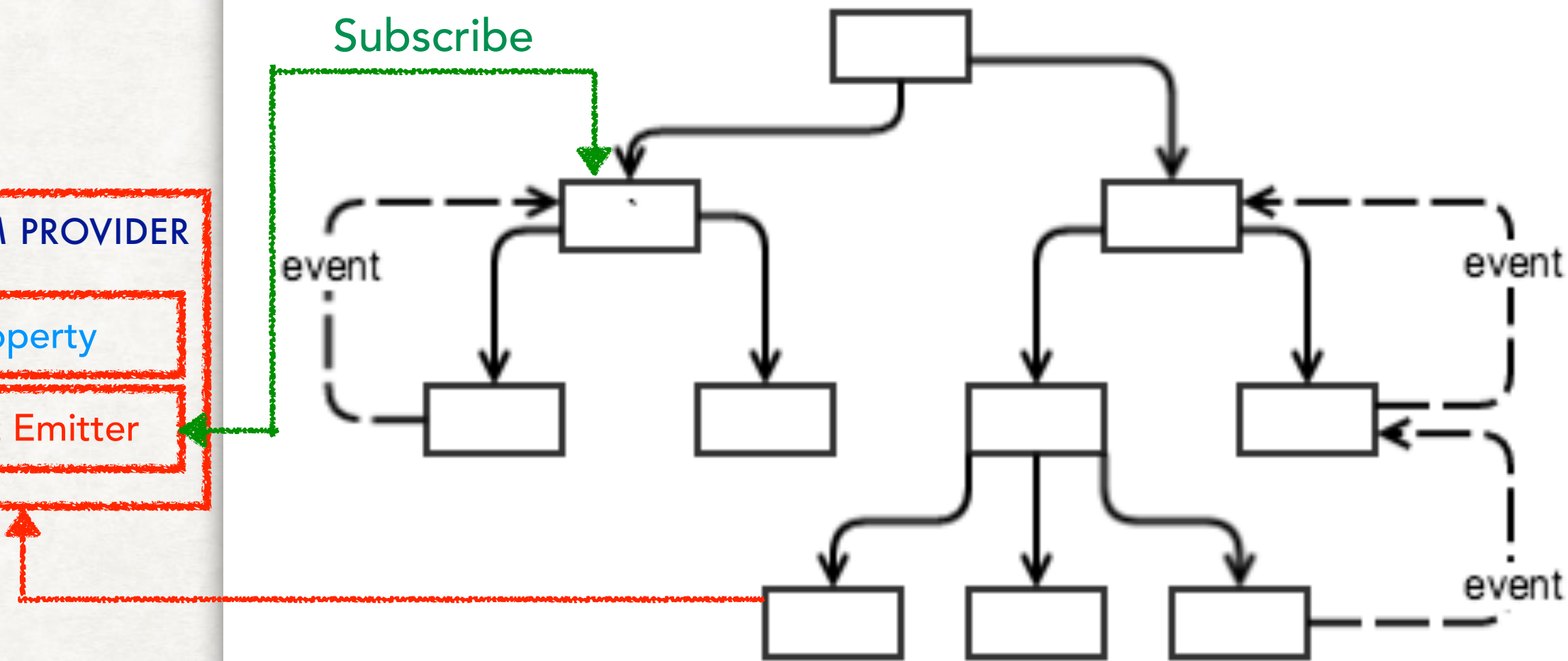
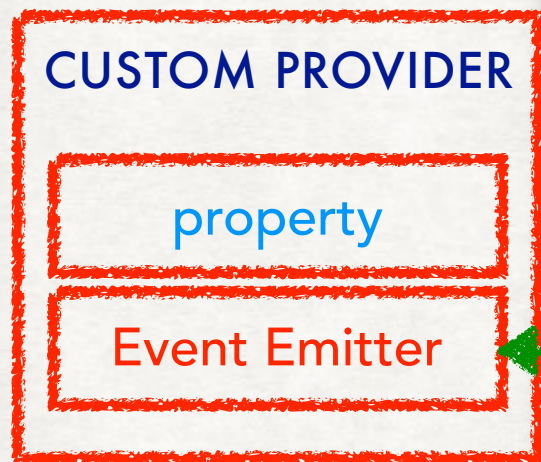


HOW WE CALL SUPER  
MOTHER FUCKER  
COMPONENT?





# CUSTOM PROVIDERS





```
export bootstrap(appComponentType: Type,  
customProviders?: Array<any /*Type | Provider | any[]*/>)
```

**CREATE SERVICE  
PROVIDER**



# SERVICE PROVIDER

- Service Property (What we pass Object.)

```
export class DialogProperty {  
  title:string;  
  content:any;  
  show:boolean = true;  
}
```

- Service Event (Pipe for call Component, what we want.)

```
private dialogChange:EventEmitter<DialogProperty> = new EventEmitter();
```

# EventEmitter

- `emit(value: T)`
- `next(value: any)`
- `subscribe(generatorOrNext?: any, error?: any, complete?: any) : any`



# SERVICE PROVIDER

```
export class DialogProperty {
  title:string;
  content:any;
  show:boolean = true;
}

export class DialogService {
  private dialogChange:EventEmitter<DialogProperty> = new EventEmitter();
  private _dialogProperty:DialogProperty = new DialogProperty();

  open(dialogProperty:DialogProperty) {
    this._dialogProperty = dialogProperty;
    this._dialogProperty.show = true;
    this.emitDialogServiceEvent(this._dialogProperty);
  }

  close() {
    this._dialogProperty.show = false;
    this.emitDialogServiceEvent(this._dialogProperty);
  }

  private emitDialogServiceEvent(dialogProperty:DialogProperty) {
    this.dialogChange.emit(dialogProperty);
  }

  getDialogServiceEmitter() {
    return this.dialogChange;
  }
}
```

# EVENT SUBSCRIBER

```
export class Dialog {  
  ...  
  constructor(private dialogService:DialogService) {  
    this.dialogSubscription();  
  }  
  
  ...  
  
  private dialogSubscription() {  
    this.subscription =  
    this.dialogService.getDialogServiceEmitter()  
      .subscribe(item => {  
        this.title = item.title;  
        this.content = item.content;  
        this.showDialog(item.show);  
      });  
  }  
  
  ...  
}
```



