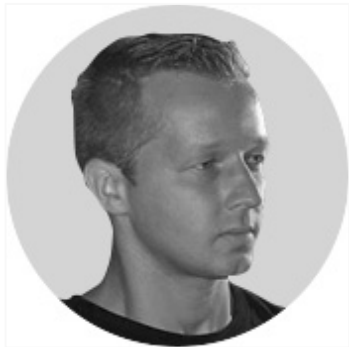# Digging Deeper into Angular Animation

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Animation Timing

Duration

Delay

Easing

'0.8s 500ms ease-in'

Duration

Controls how long an animation lasts

Milliseconds: 400

String in Milliseconds: 400ms

String in Seconds: 0.5s

Delay

Controls when an animation starts

Accepts the same values as duration

Delay comes first, animation comes second

'0.5s 1000ms'

Easing

Controls acceleration of animation

Controls deceleration of animation

'0.5s 1000ms ease-in-out'

Multi-step Animations

Keyframes Function

```
transition('void => *', [

    animate(300, keyframes([

        // animation steps here

    ]))

]),
```

Keyframe Styles

```
keyframes([

    style({opacity: 0,  offset: 0}),

    style({opacity: 1,  offset: .3}),

    style({opacity: .3, offset: 1})

]))
```

Animatable Styles

```
keyframes([

    style({opacity: 0,  offset: 0}),

    style({opacity: 1,  offset: .3}),

    style({opacity: .3, offset: 1})

]))
```

Offset

```
keyframes([

    style({opacity: 0,  offset: 0}),

    style({opacity: 1,  offset: .3}),

    style({opacity: .3, offset: 1})

]))
```

Example

```
transition('void => *', [

  animate(1000, keyframes([

    style({opacity: 0,  offset: 0}),

    style({opacity: 1,  offset: .3}),

    style({opacity: .3, offset: 1})

  ]))

])
```

Animation Callbacks

Animation TransitionEvent

fromState

toState

totalTime

phaseName

Event Binding

```
<div

    (@trigger.start)="sometMethodStart($event)"

    (@trigger.done)="sometMethodEnd($event)"

    [@trigger]="state"

>
```

Event Binding

```
<div

    (@trigger.start)="sometMethodStart($event)"

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    [@trigger]="state"

>
```