

A collection of various light blue geometric shapes including triangles, squares, circles, and diamonds, some containing icons like gears and question marks, arranged in a loose cluster on the left side of the slide.

# ANGULAR 2

## PIPES

## USING PIPES

```
import {Component} from 'angular2/core'

@Component({
  selector: 'hero-birthday',
  template: `<p>The hero's birthday is
    {{ birthday | date: 'dd.MM.yyyy' }}</p>`
})
export class HeroBirthday {
  birthday = new Date(1988,3,15); // April 15, 1988
}
```

## CHAINING PIPES

```
import {Component} from 'angular2/core'

@Component({
  selector: 'hero-birthday',
  template: `<p>The hero's birthday is
    {{ birthday | date: 'dd.MM.yyyy' | uppercase }}</p>`
})
export class HeroBirthday {
  birthday = new Date(1988,3,15); // APRIL 15, 1988
}
```

## DEFINE CUSTOM PIPE

```
import { Pipe, PipeTransform } from '@angular/core';  
  
/* Raise the value exponentially  
 * Takes an exponent argument that defaults to 1.  
 * Usage:  
 * value | exponentialStrength:exponent  
 * Example: {{ 2 | exponentialStrength:10 }} formats to: 1024 */  
@Pipe({name: 'exponentialStrength'})  
export class ExponentialStrengthPipe  
  implements PipeTransform {  
  
  transform(value: number, exponent: string): number {  
    let exp = parseFloat(exponent);  
    return Math.pow(value, isNaN(exp) ? 1 : exp);  
  }  
}
```

## USE CUSTOM PIPE

```
import {Component} from '@angular/core';

@Component({
  selector: 'power-booster',
  template: `
    <h2>Power Booster</h2>
    <p>
      Super power boost: {{2 | exponentialStrength: 10}}
    </p>`
})
export class PowerBooster { }
```

## USE ASYNC PIPE

```
import {Component} from '@angular/core';
```

```
// Initial view: "Message: "
```

```
// After 500ms: Message: You are my Hero!"
```

```
@Component({  
  selector: 'hero-message',  
  template: `Message: {{delayedMessage | async}}`,  
})  
export class HeroAsyncMessageComponent {  
  myObj = {a:10,b:20}  
  arr = [1,2,3,4,5]  
  delayedMessage:Promise<string> =  
    new Promise((resolve, reject) => {  
      setTimeout(() => resolve('You are my Hero!'), 500);  
    });  
}
```