



# Angular Layout

Responsive layout using Angular's API

# Agenda

1. Why use Angular Layout
2. Static API
3. Responsive API
4. Hands on
5. References
6. Q.A & further discussion

# Why use Angular Layout

- HTML markup for layout configuration
- Less CSS
- Supports support for breakpoints and custom breakpoints
- Overall framework consistency

# Static API



# Static API [1]

“ The static API by default targets the the desktop, developers should use e Responsive API to support alternate layout configurations. ”

## API for DOM containers:

| HTML          | API                      |
|---------------|--------------------------|
| fxLayout      | <direction> [wrap]       |
| fxLayoutAlign | <main-axis> <cross-axis> |
| fxLayoutGap   | %   px   vw   vh         |

# Static API [1]

## API for DOM elements:

| HTML           | Allowed values                                  |
|----------------|---|
| flexFlex       | ""   px   %   vw   vh   <grow> <shrink> <basis> |
| flexFlexOrder  | int   |
| flexFlexOffset | %   px   vw   vh                                |
| flexFlexAlign  | start   baseline   center   end                 |
| flexFlexFill   |   |

# Static API [1]

**API for any element:**

| HTML API | Allowed values        |
|----------|-----------------------|
| fxHide   | TRUE   FALSE   0   "" |
| fxShow   | TRUE   FALSE   0   "" |
| ngClass  | css class             |
| ngStyle  | inline style          |
| imgSrc   | img source            |



# Responsive API



# Responsive API [2]

| breakpoint | mediaQuery   |
|------------|--|
| xs         | 'screen and (max-width: 599px)'                          |
| sm         | 'screen and (min-width: 600px) and (max-width: 959px)'   |
| md         | 'screen and (min-width: 960px) and (max-width: 1279px)'  |
| lg         | 'screen and (min-width: 1280px) and (max-width: 1919px)' |
|            |  |
| breakpoint | mediaQuery   |

# Responsive API [2]

## Breakpoint aliases

| breakpoint | mediaQuery                       |
|------------|----------------------------------|
| lt-sm      | 'screen and (max-width: 599px)'  |
| lt-md      | 'screen and (max-width: 959px)'  |
| lt-lg      | 'screen and (max-width: 1279px)' |
| lt-xl      | 'screen and (max-width: 1919px)' |

# Responsive API [2]

## Breakpoint aliases

| breakpoint | mediaQuery                       |
|------------|----------------------------------|
| gt-xs      | 'screen and (min-width: 600px)'  |
| gt-sm      | 'screen and (min-width: 960px)'  |
| gt-md      | 'screen and (min-width: 1280px)' |
| gt-lg      | 'screen and (min-width: 1920px)' |

# Responsive API [2]

“ If we combine the breakpoint alias with the static API, we can easily support responsive breakpoints using a simple markup convention: ”

```
<api>.<breakpoint alias>="<value>"  
[<api>.<breakpoint alias>]="<expression>"
```

# Hands-on



# Reference

- [1]. <https://github.com/angular/flex-layout/wiki/Declarative-API-Overview>
- [2]. <https://github.com/angular/flex-layout/wiki/Responsive-API>
- [3]- <https://github.com/manueltarouca/angular-responsive-ui-workshop>