



Angular Advanced Working with 3rd party libraries

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WORLDWIDE LOCATIONS



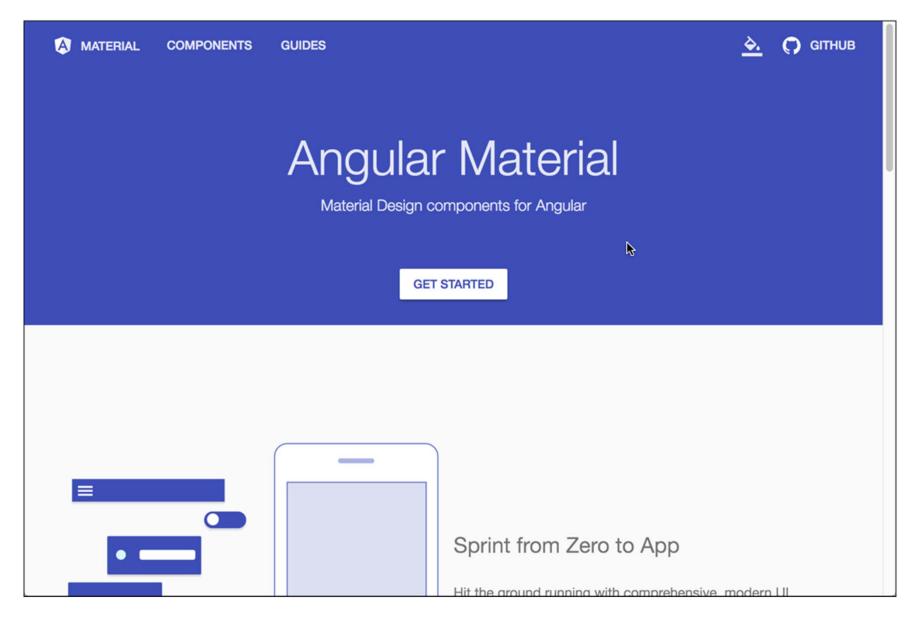
User Interface Libraries

Not reinventing the wheel every time

UI Libraries

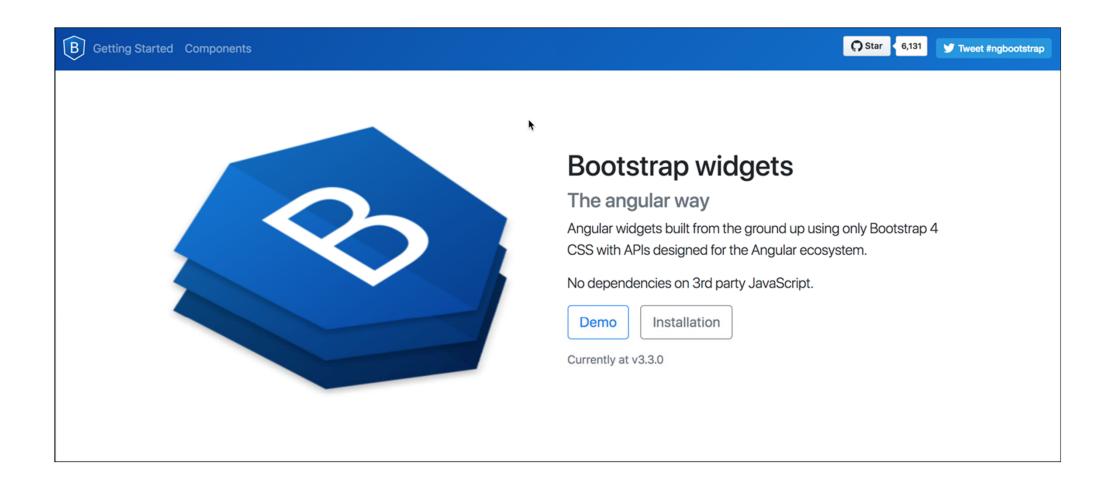
- LOTS(!) of options available
- Angular Material
 - Officially endorsed by Google
- NG Bootstrap
 - Angular Port of the popular Bootstrap Library
- PrimeNG
 - Angular Port of the popular Java PrimeFaces Library
- SyncFusion
 - Paid option, lots of components
- They are ALL good, all have also their drawbacks
 - DON't mix-n-match. Pick one library, stick with that one for UI consistency

Angular Material



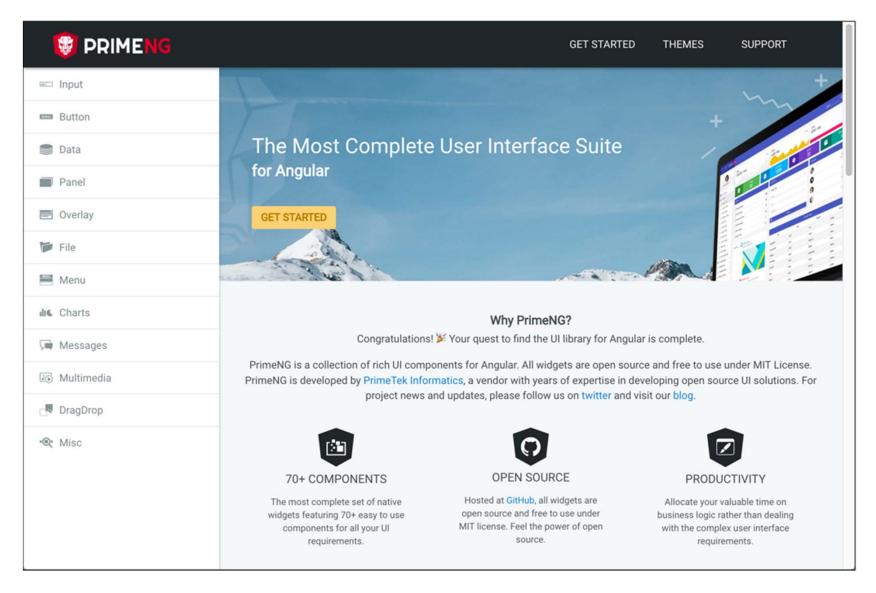
https://material.angular.io/

NG Bootstrap



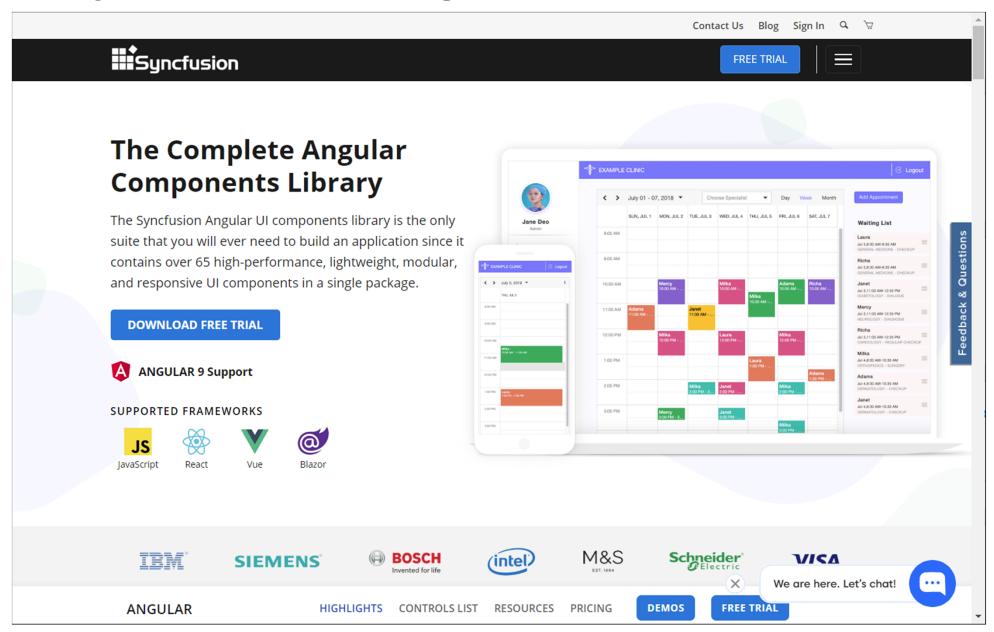
https://ng-bootstrap.github.io/#/home

Prime NG



https://www.primefaces.org/primeng/#/

Syncfusion for Angular



Same setup procedure

- 1. The all have the same setup procedure
 - npm install <library-name>
 - Angular Material also has ng add @angular/material schematics
- 2. Import the modules and/or components you need
 - For instance
- 3. Mention the components by their selector
- 4. Learn the API what goes into a component, what comes out

Angular Material – Getting Started

- Inside a project, add the material library
 - ng add @angular/material
- This will update your project:
 - Add project dependencies to package.json
 - Add the Roboto font to your index.html
 - Add the Material Design icon font to your index.html
- Add a few global CSS styles to:
 - Remove margins from body
 - Set height: 100% on html and body
 - Set Roboto as the default application font

ng add @angular/material

Pick a font color/theme

The name will be written in index.html

```
Installed packages for tooling via npm.

? Choose a prebuilt theme name, or "custom" for a custom theme: Pink/Blue Grey

?theme=pink-bluegrey ]

? Set up global Angular Material typography styles? No

? Set up browser animations for Angular Material? Yes

UPDATE package.json (1355 bytes)

| Installing packages...
```

Pick other options

Project is updated

```
? Set up global Angular Material typography styles? No
? Set up browser animations for Angular Material? Yes
UPDATE package.json (1355 bytes)

V Packages installed successfully.
UPDATE src/app/app.module.ts (423 bytes)
UPDATE angular.json (3848 bytes)
UPDATE src/index.html (490 bytes)
UPDATE src/styles.css (181 bytes)
PS C:\Users\Gebruiker\Desktop\ng-material>
```

Import modules to display components

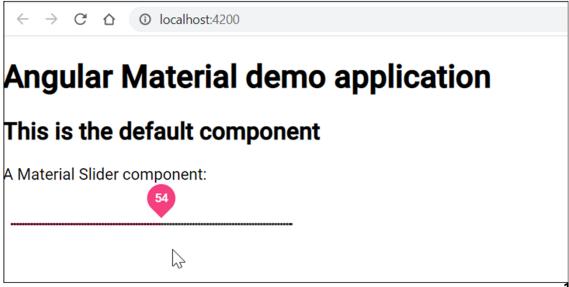
For instance, a slider component, in the MatSliderModule

```
import { BrowserModule } from '@angular/platform-browser';
import { NgModule } from '@angular/core';
import { AppComponent } from './app.component';
import { BrowserAnimationsModule } from '@angular/platform-browser/animations';
// Angular Material stuff
import {MatSliderModule} from '@angular/material/slider';
@NgModule({
  imports: [
    BrowserModule,
    BrowserAnimationsModule,
    MatSliderModule
export class AppModule { }
```

Update your component

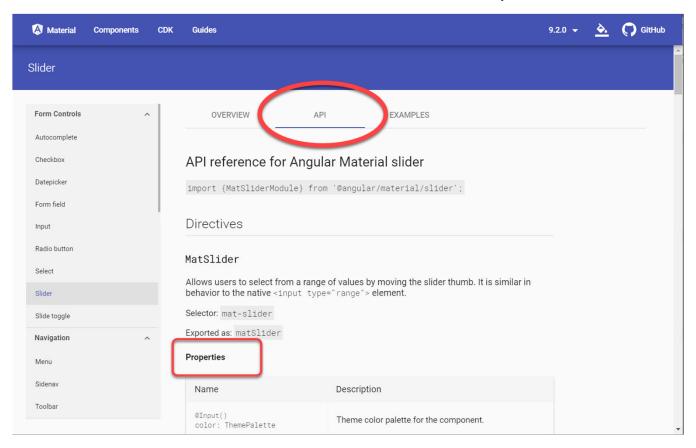
Check if your CSS is correct:

```
/* You can add global styles to this file, and also import other style files */
@import '@angular/material/prebuilt-themes/indigo-pink.css';
html, body { height: 100%;}
body { margin: 0; font-family: Roboto, "Helvetica Neue", sans-serif; }
```



Learn/read the API

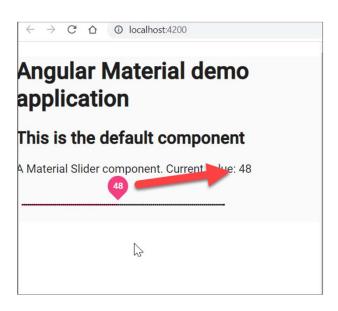
- Read and learn the API to see what the slider can do
 - @Input() to put data into the component
 - @Output() to bind to events from the component



HTML, class and Result

```
export class AppComponent {
    sliderValue: number;

    onSliderChange(event: MatSliderChange) {
        this.sliderValue = event.value;
    }
}
```



More components

Workflow is always the same

- 1. Install the correct module
- 2. Import / add it to the main module
- 3. Use component in your template
- 4. Learn/use the API to react to the component

Workshop

- Install Angular Material in your own project, OR,
 - Work from the example ../660-angular-material
- Add a few new components. For instance:
 - DatePicker show it in the UI, show also which date the user selected
 - Slide-Toggle show in the UI, also show the current state (on/off). Create a disabled slide toggler
 - Card Create a card with a Card Title, a picture and a description. Can look like

this:

Don't copy it from the documentation ;-)



```
I will practice my modeling technique 2 hours every day
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