Angular Material

[Version 12.0.4]

- Material provides UI and UX components form Angular.
- It is native to Angular.
- It is built-by Google Angular Team
- Provide Unified UX across devices.

Install Angular Material

- You have to add "Angular Material" to existing project.
- Run the following command in Angular Workspace

> ng add @angular/material

    *Would you like to add Typography? Y

    *Select a Pre-built Theme: Choose any theme

    *Add Browser Animations Module? Y

- This will update following files
  - package.json
  - index.html
    Roboto font
  - angular.json
    Configure Styles
  - app.module.ts
- Setup theme file in "Styles.css"

@import '@angular/material/prebuilt-themes/indigo-pink.css';

Angular Components

How to Explore Components?

- Visit
  https://material.angular.io/components
- Select any component

- Go to "API" tab to know about the properties, methods and modules required for component
  - Know your component module name
  - Know the dependencies for required module
  - Know the selector for component
  - Know the properties and methods for component

Component: Form Field [Directive as Element]

- Module Required for Form Field
  - **MatFormFieldModule**
- Dependencies
  - **MatError**
  - **MatFormField**
  - **MatHint**

- ○ **MatPlaceholder**
- ○ **MatPrefix**
- ○ **MatSuffix**
- ○ **MatLabel**
- Get Selector Name from API
  - ○ **mat-form-field**
- Get Properties from API
  - ○ @Input() appearance: MatFormFieldAppearance **[appearance]**
  - ○ @Input() color: ThemePalette **[color]**
- Go to "Interfaces" category in API to get information about property values.
  - ○ **MatFormFieldAppearance = 'legacy' | 'standard' | 'fill' | 'outline'**

Syntax:

```
<mat-form-field
appearance="legacy | standard | fill |
outline">
      </mat-form-field>
```

Component: Input [Directive as Attribute]

- Module
  - **MatInputModule**
- Attribute Name
  - **matInput**

Syntax:

```
<input type="text"  matInput>
```

Ex: Implementing Material Components

- **Go to "app.module.ts"**
  import { MatFormFieldModule } from
  '@angular/material/form-field';

```
import { MatInputModule } from
'@angular/material/input';

@NgModule({
  imports: [
  BrowserModule,
  FormsModule,
  BrowserAnimationsModule,
  MatFormFieldModule,
  MatInputModule
   ],
  })
```
- Go to your "component.html"
```
<div class="container">

  <h2>Material Demo</h2>

  <mat-form-field appearance="legacy"
class="block-style" >

    <mat-label>User Name</mat-label>
```

```html
    <input [(ngModel)]="UserName" type="text" matInput placeholder="Enter User Name">
    <mat-hint>Name in Block Letters</mat-hint>
    <mat-error>Name Required</mat-error>
  </mat-form-field>
  <h3>Hello ! {{UserName}} </h3>
</div>
```

- **Component.css**
```css
.block-style {
    width: 100%;
}
```
- Component.ts
```
UserName = ' ';
```