***Pipes In Angular***

***Use***[***pipes***](https://angular.io/guide/glossary#pipe)***to transform strings, currency amounts, dates, and other data for display. Pipes are simple functions you can use in***[***template expressions***](https://angular.io/guide/glossary#template-expression)***to accept an input value and return a transformed value. Pipes are useful because you can use them throughout your application, while only declaring each pipe once.***

***Angular provides built-in pipes for typical data transformations, including transformations for internationalization (i18n), which use locale information to format data. The following are commonly used built-in pipes for data formatting:***

* [***DatePipe***](https://angular.io/api/common/DatePipe)***: Formats a date value according to locale rules.***
* [***UpperCasePipe***](https://angular.io/api/common/UpperCasePipe)***: Transforms text to all upper case.***
* [***LowerCasePipe***](https://angular.io/api/common/LowerCasePipe)***: Transforms text to all lower case.***
* [***CurrencyPipe***](https://angular.io/api/common/CurrencyPipe)***: Transforms a number to a currency string, formatted according to locale rules.***
* [***DecimalPipe***](https://angular.io/api/common/DecimalPipe)***: Transforms a number into a string with a decimal point, formatted according to locale rules.***
* [***PercentPipe***](https://angular.io/api/common/PercentPipe)***: Transforms a number to a percentage string, formatted according to locale rules.***

***Using a pipe in a template***

***To apply a pipe, use the pipe operator (* | *) within a template expression***

***Example 1***

***app.component.ts***

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

@Component({

  selector: 'app-root',

 templateUrl: './app.component.html',

  styleUrls: ['./app.component.css']

})

export class AppComponent {

  title = 'Angular-App';

course={

  title:"The Complete Angular Course",

  rating:4.9765,

  students:30123,

  price:190.95,

  relaseDate:new Date(2016,3,1)

}

}

***app.component.html***

<!DOCTYPE html>

<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Document</title>

  </head>

  <body>

    <h1>angular</h1>

    <p>{{ course.title | uppercase  }} <br /></p>

    <p>{{ course.students | number}} <br /></p>

    <p>{{ course.rating | number:'1.1-1'}} <br /></p>

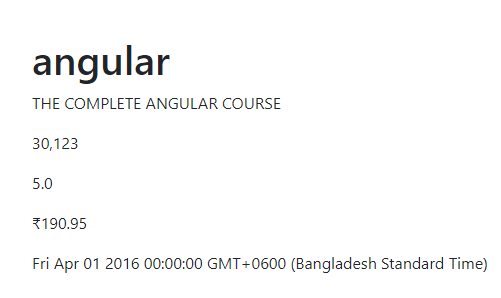
    <p>{{ course.price | currency:'INR':true:'3.2-2' }} <br /></p>

    <p>{{ course.relaseDate }} <br /></p>

  </body>

</html>

***BrowserOutput***

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***Custom Pipes***

***If we want to create custom pipes or also known as user defined pipes***

***To create pipe using CLI***

***ng generate pipe <pipe-name> (or) ng g p <pipe-name>***

***ex: ng g p custom-pipe***

***app.component.ts***

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

@Component({

  selector: 'app-root',

 templateUrl: './app.component.html',

  styleUrls: ['./app.component.css']

})

export class AppComponent {

  title = 'Angular-App';

  text='Lorem ipsum dolor sit amet consectetur adipisicing elit. Adipisci, repudiandae?'

}

***app.component.html***

import { Pipe, PipeTransform } from '@angular/core';

@Pipe({

  name: 'customPipe'

})

export class CustomPipePipe implements PipeTransform {

  transform(value: string):any {

    if(!value)

    return null;

   return value.substring(0,50)+'...'

  }

}

***app.component.html***

<!DOCTYPE html>

<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Document</title>

  </head>

  <body>

    <h1>Hello World</h1>

      {{text | customPipe}}

  </body>

</html>

***app.module.ts***

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { AppRoutingModule } from './app-routing.module';

import { AppComponent } from './app.component';

import { CustomPipePipe } from './custom-pipe.pipe';

@NgModule({

  declarations: [

    AppComponent,

    CustomPipePipe

  ],

  imports: [

    BrowserModule,

    AppRoutingModule

  ],

  providers: [

  ],

  bootstrap: [AppComponent]

})

export class AppModule { }

***BrowserOutput:::***

Hello World

Lorem ipsum dolor sit amet consectetur adipisicing...