**Lesson02 what is the Component in Angular 4**

**What is a component in Angular 2?**

**A component in Angular is a class with a template and a decorator. So in simple terms a component in Angular is composed of these 3 things**

**1-Template - Defines the user interface. Contains the HTML, directives and bindings.**

**2-Class - Contains the code required for template. Just like a class in any object oriented programming language like C# or Java, a class in angular can contain methods and properties. Properties contain the data that we want to display in the view template and methods contain the logic for the view. We use TypeScript to create the class.**

**3-Decorator - We use the Component decorator provided by Angular to add metadata to the class. A class becomes an Angular component, when it is decorated with the Component decorator.**

// Component decorator is provided by the Angular core library, so we

// have to import it before using it. The import keyword is similar to

// using keyword in C#. Any exported member can be imported using import

// keyowrd.

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

// The class is decorated with Component decorator which adds metadata

// to the class. We use the @ symbol to apply a decorator to the class

// Applying a decorator on a class is similar to applying an attribute

// to a class in C# or other programming languages. Component is just

// one of the deveral built-in decorators provided by angular. We will

// discuss the other decorators provided by angular in upcoming videos

@Component({

    // component has several properties. Here we are using just 2. For

    // the full list of properties refer to the following URL

    // https://angular.io/docs/ts/latest/api/core/index/Component-decorator.html

    // To use this component on any HTML page we specify the selector

    // This selector becomes the directive <my-app> on the HTML page

    // At run time, the directive <my-app> is replaced by the template

    // HTML specified below

    selector: 'my-app',

    // The template contains the HTML to render. Notice in the HTML

    // we have a data-binding expression specified by double curly

    // braces. We have a defualt value "Angular" assigned to "name"

    // property in the AppComponent class. This will be used at runtime

    // inplace of the data-binding expression

    template: `<h1>Hello {{name}}</h1>`,

})

// export keyword allows this class to be exported, so other components

// in the application can import and use it if required

export class AppComponent {

    // name is a property and the data type is string and

    // has a default value "angular"

    name: string = 'Angular';

}