#angular : What are Directives?

- Directives are instructions in the DOM.
- They allow us to manipulate the DOM or alter the appearance and behavior of the HTML element.

There are different ways, we can categorize directives:
e.g.
- Built-in directives
- Custom directives

e.g.
- Components - These are directives with an associated template.
- Structural directives - These add or remove elements from DOM. e.g. ngIf, ngFor, ngSwitch
- Attribute directives - These modify the appearance or define a custom behavior of a DOM element. e.g. ngStyle, ngClass

following command is used to create directive:
ng generate directive name-of-directive
or
ng g d name-of-directive

Yes, we can also create our own customized Directives.

How custom directive looks like in general:
@Directive(
selector: '[appTurnGreen]'
)
export class TurnGreenDirective{
...
}
Now we can use above directive in our HTML file:
<div appTurnGreen>App Container</div>

use cases:
1. Displaying data conditionally

```
<p *ngIf="name === 'Boothstomper'; else noHero">{{name}} hero works!</p>
<ng-template #noHero>
        <p>Hero was not found</p>
</ng-template>
```

- The ngIf directive adds or removes an HTML element in the DOM, based on the evaluation of an expression.
- You have probably noticed the asterisk, *, that prepends ngIf. Structural directives have such an asterisk. It is syntactic sugar that acts as a shortcut for a more complicated syntax.
- The else statement refers to a noHero variable that is activated if the condition of the ngIf directive is not satisfied.
- The noHero variable is a template reference variable

2. Iterating through data

```
<ul>
        <li *ngFor="let hero of heroes">
                {{hero.name}}
        </li>
</ul>
```

- The ngFor directive allows us to loop over a collection of items and render a template for each one.
- We turn each object fetched from the heroes array into a hero local reference so that we can easily bind the name property in our template using interpolation.

follow and add Rizwan Mushtaq Dhudhaal 🧑🏻‍💻 in your friend list