

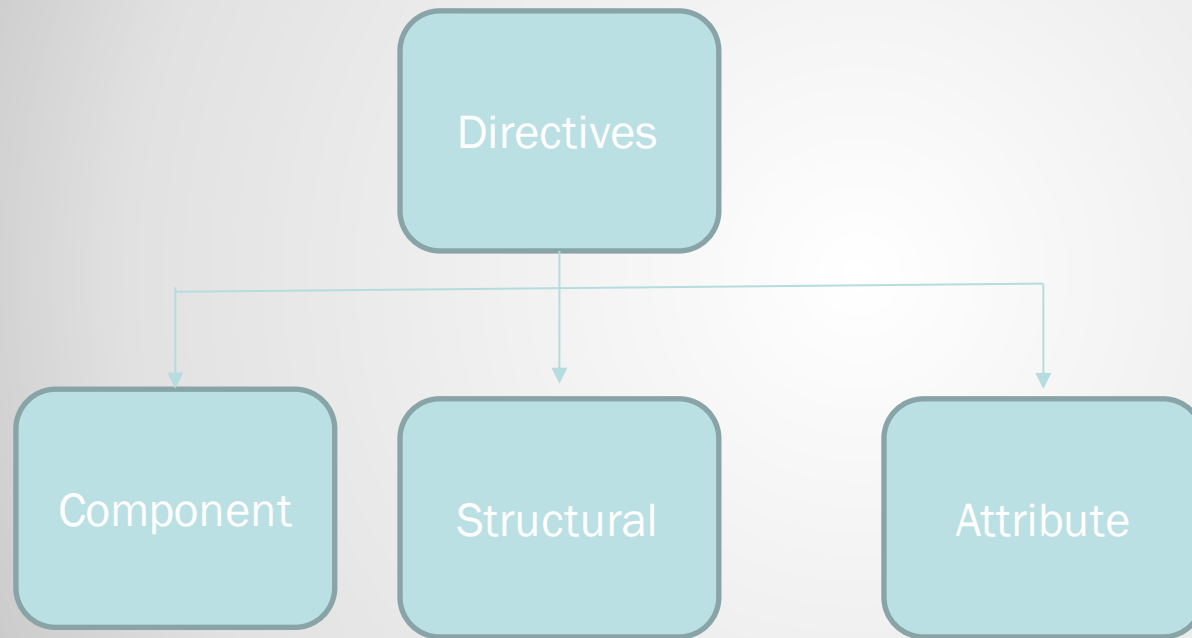
Understanding Angular

Directives in Angular

Directives

- A Directive modifies the DOM to change appearance, behavior or layout of DOM elements.
- Directives are one of the core building blocks Angular uses to build applications
- There are three main types of directives in Angular
 - **Component** - directive with a template.
 - **Attribute directives** - directives that change the behavior of a component or element but don't affect the template
 - **Structural directives** - directives that change the behavior of a component or element by affecting how the template is rendered.

DIRECTIVES



Component Directive

- After creating component if we want to use the component with in another component, we can use with its selector name.

```
import { Component, OnInit } from '@angular/core';

@Component({
  selector: 'app-eventbinding',
  templateUrl: './eventbinding.component.html',
  styleUrls: ['./eventbinding.component.css']
})
```

- We include the same with the selector name in app.component.ts

```
<app-eventbinding></app-eventbinding>
```

Built-in structural Directives

- **NgIf**
 - conditionally creates or destroys sub views from the template.
- **NgFor**
 - repeat a node for each item in a list.
- **NgSwitch**
 - a set of directives that switch among alternative views.

Ngif Example

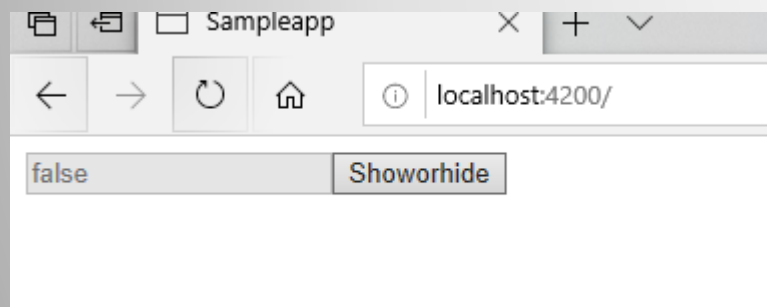
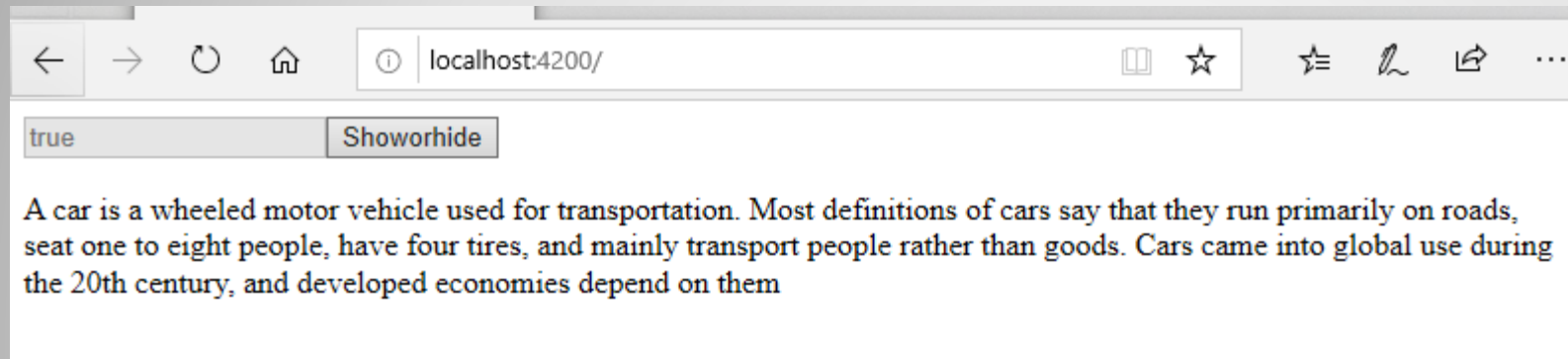
ts code

```
import { Component, OnInit } from '@angular/core';
@Component({
  selector: 'app-ng-if',
  templateUrl: './ng-if.component.html',
  styleUrls: ['./ng-if.component.css']
})
export class NgIfComponent implements OnInit {
  show:boolean=true;
  constructor() { }
  ngOnInit(): void
  {
  }
  showorhide()
  {
    if(this.show==true)
      this.show=false;
    else
      this.show=true;
  }
}
```

Html code

```
<input type="text" [(ngModel)]="show" disabled>
<button (click)="showorhide()">Showorhide</button>
<div *ngIf="show">
<p>A car is a wheeled motor vehicle used for transporta
tion. Most definitions of cars say that they run primar
ily on roads, seat one to eight people, have four tires
, and mainly transport people rather than goods. Cars c
ame into global use during the 20th century, and develo
ped economies depend on them</p>
</div>
```

Output



NGFOR

- The **ngFor** directives instantiates a template once per item from an iterable.
- The context of each instantiated template inherits from the outer context with the given loop variable.
- **ngFor** provides several exported values that can be used to local variables :-
 - **index** :will be set to the current loop iteration for each template context
 - **first** :will be set to a boolean value indicating whether the item is the first one in the iteration.
 - **last** :will be set to a boolean value indicating whether the item is the last one in the iteration.
 - **even** :will be set to a boolean value indicating whether this item has an even index.
 - **odd** :will be set to a boolean value indicating whether this item has an odd index

NGFor Example

```
import { Component, OnInit } from '@angular/core';

@Component({
  selector: 'app-ng-for',
  templateUrl: './ng-for.component.html',
  styleUrls: ['./ng-for.component.css']
})
export class NgForComponent implements OnInit {
  productList:Array<any>=[];
  constructor() {
    this.productList=[{ProductName:"Pen","ProductPrice":30,"ProductQuantity":50},
                      {ProductName:"Pencil","ProductPrice":15,"ProductQuantity":25}]
  }
  ngOnInit(): void {
  }
}
```

ts code

```
<div *ngFor="let product Of productList;let idx=index,let first=first,let last=last">
  <li>
    {{product.ProductName}}
    {{product.ProductPrice}}
  </li>
</div>
```

Html file

NgSwitch

- The ngSwitch directives is actually compromise of two directives, an attribute directives and a structural directives
- It is similar like switch statement in JavaScript or other languages. ngSwitch stamps our nested views when their match expression value matches the value of the switch expression

Ng Switch Example

```
import { Component, OnInit } from '@angular/core';

@Component({
  selector: 'app-ng-for',
  templateUrl: './ng-for.component.html',
  styleUrls: ['./ng-for.component.css']
})
export class NgForComponent implements OnInit {
  productList:Array<any>=[];
  constructor() {
    this.productList=[
      {ProductName:"ParkerPen","ProductPrice":1000,"ProductQuantity":50,"rating":1},
      {ProductName:"CelloPen","ProductPrice":500,"ProductQuantity":50,"rating":2},
      {ProductName:"WatermanPen","ProductPrice":900,"ProductQuantity":50,"rating":1},
      {ProductName:"CamlinPen","ProductPrice":400,"ProductQuantity":25,"rating":2}
    ]
  }

  ngOnInit(): void {
  }
}
```

Built-in Directive

- NGSTYLE DIRECTIVE
- NGCLASS DIRECTIVE

NGSTYLE DIRECTIVE

```
<some-element [ngStyle]="{font-style: styleExp}">...</some-element>
```

NGClass

```
<some-element [ngClass]="['first second']">...</some-  
element>
```

Recap

- Angular Introduction
- Angular Directives

Web Resource

- <https://angular.io/guide/attribute-directives>
- <https://www.youtube.com/watch?v=LtT01ZCHRjk>