NgSwitch, NgSwitchcase, NgSwitchDefault Angular Example

5 Comments / March 9, 2023 / 5 minutes of reading

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The `ngSwitch` is an Angular structural directive, which allows us to add or remove DOM elements. It works in conjunction with `ngSwitchcase`, & `ngSwitchDefault` directives. It is similar to the switch statement of JavaScript. In this tutorial, we will look at the syntax of `ngSwitch`, `ngSwitchcase` & `ngSwitchDefault`. We will show you how to use these directives using an example. The examples include ngSwitch Example, multiple `ngSwitchCase` , Loose Equality Checks, etc.

You can download the source code from GitHub

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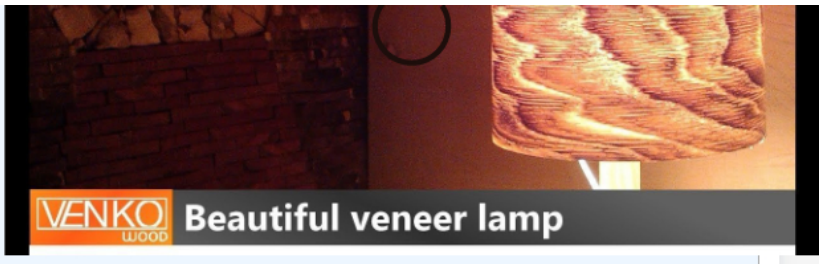

Angular ngSwitch Directive

The `ngSwitch` is an Angular directive, which allows us to display one or more DOM elements based on some pre-defined condition.

The following is the syntax of `ngSwitch`. It contains three separate directives. `ngSwitch`, `ngSwitchCase` & `ngSwitchDefault`.

Syntax

```

<container_element [ngSwitch]="switch_expression">
  <inner_element *ngSwitchCase="match_expresson_1">...</inner_element>
  <inner_element *ngSwitchCase="match_expresson_2">...</inner_element>
  <inner_element *ngSwitchCase="match_expresson_3">...</inner_element>
  <inner_element *ngSwitchDefault>...</element>
</container_element>

```

ngSwitch

`ngSwitch` is bound to `container_element` like `div` etc. We assign a `switch-expression` to the `ngSwitch` via property binding syntax. Angular evaluates the `switch_expression` at runtime and based on its value displays or removes the elements from the DOM.

ngSwitchCase

`ngSwitchCase` is bound to an `inner_element`, which we must place inside the `container_element`. We use `*` (Asterix symbol), because it is a structural directive. We also assign a `match_expression`, which Angular evaluates at runtime. The Angular displays the `inner_element` only when the value of the `match_expression` matches the value of the `switch_expression` else it is removed from the DOM.

If there is more than one match, then it displays all of them.

> Note that the `ngSwitchCase` does not hide the element, but removes them from the DOM.

ngSwitchDefault

`ngSwitchDefault` is also bound to an `inner_element`, which we must place inside the `container_element`. But it does not have any `match_expression`. If none of the `ngSwitchCase` `match_expression` matches the `switch_expression`, then the angular displays the element attached to the `ngSwitchDefault`

You can place `ngSwitchDefault` anywhere inside the container element and not necessarily at the bottom.

You are free to add more than one `ngSwitchDefault` directive. Angular displays all of them.

Important Points

- You must place `ngSwitchCase` & `ngSwitchDefault` inside the `ngSwitch` directive
- Angular displays every element, that matches the `switch_expression`
- If there are no matches, angular displays all the elements, which has `ngSwitchDefault` directive
- You can place one or more than one `ngSwitchDefault` anywhere inside the container element and not necessarily at the bottom.
- Any element within the `ngSwitch` statement but outside of any `NgSwitchCase` or `ngSwitchDefault` directive is displayed as it is.
- The elements are not hidden but removed from the DOM.
- Angular uses loose equality checks to compare the `ngSwitchCase` expression with the `ngSwitch` expression. This means that the empty string `""` matches 0.
- You can share the template between multiple `ngSwitchCase` using the `ngTemplateOutlet`

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ngSwitch Example

Create a new Angular project. Add the bootstrap CSS to the project by adding the following in the `index.html`

```

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.m

```

Component Class

Create a variable `num` in your Angular Component class

```

num: number= 0;

```

Template

```

<div class='card'>
  <div class='card-header'>
    ngSwitch Example
  </div>
  <div class="card-body">
    Input string : <input type='text' [(ngModel)]="num" />

    <div [ngSwitch]="num">
      <div *ngSwitchCase="'1'">One</div>
      <div *ngSwitchCase="'2'">Two</div>
      <div *ngSwitchCase="'3'">Three</div>
      <div *ngSwitchCase="'4'">Four</div>
      <div *ngSwitchCase="'5'">Five</div>
      <div *ngSwitchDefault>This is Default</div>
    </div>
  </div>
</div>

```

Now let us examine the code in detail

```

Input string : <input type='text' [(ngModel)] ="num"/>

```

We bind the num variable to the input box.

```

<div [ngSwitch]="num">
```

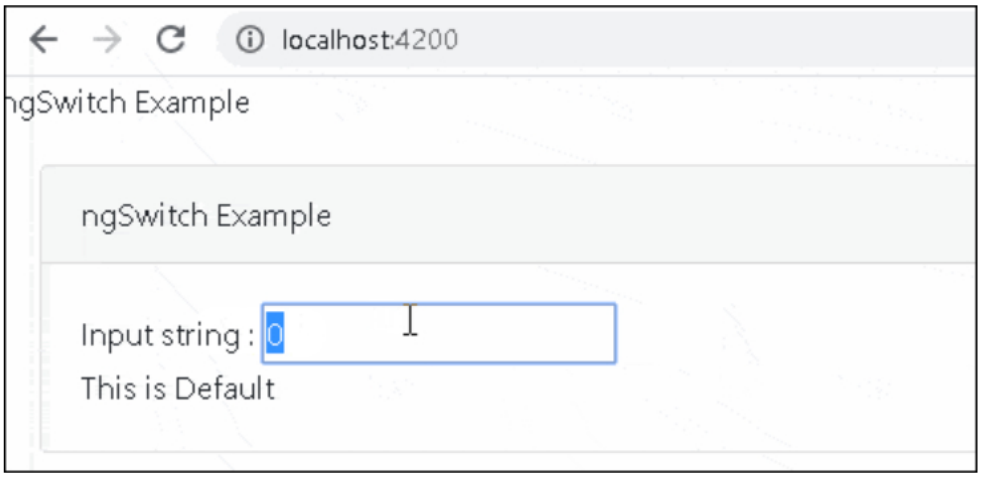
We attach the `ngSwitch` directive to the `div` element, then bind it to the expression `num`.

```
<div *ngSwitchCase="'1'">One</div>
```

Next, we have a few `ngSwitchCase` directives attached to the `div` element with matching expressions “1”,”2” etc. Whenever the num matches these expressions, the ngSwitchCase displays the element attached to it else it removes it from DOM.

```
<div *ngSwitchDefault>This is Default</div>
```

The `ngSwithcDefault` does not take any expression, but it is displays only when all other `ngSwitchCase` match expressions fail.



More Examples

The following uses the array of objects instead of a variable.

Component class

```
class item {
   name: string;
   val: number;
}

export class AppComponent
{
   items: item[] = [{name: 'One', val: 1}, {name: 'Two', val: 2}, {name: 'Three', val: 3}, {na
   selectedValue1: string= 'One';
   selectedValue2: string= 'One';
   selectedValue3: string= 'One';
   selectedValue4: string= 'One';
}

```

Template

Note that we have two matches for `*ngSwitchCase="'Two'"`. `ngSwitchcase` renders both.

```
<div class='card'>
  <div class='card-header'>
    Multiple ngSwitchCase with same condition
  </div>

  <div class="card-body">
    <select [(ngModel)]="selectedValue1">
      <option *ngFor="let item of items;" [value]="item.name">{{item.name}}</option>
    </select>

    <div [ngSwitch]="selectedValue1">
      <p *ngSwitchCase="'One'">One is Selected</p>
      <p *ngSwitchCase="'Two'">Two is Selected</p>
      <p *ngSwitchCase="'Two'">Two Again used in another element</p>
      <p *ngSwitchDefault>This is Default</p>
    </div>
  </div>

</div>

```

You can also make use of `ng-template` directly instead of `*ngSwitchCase`. In fact `*ngSwitchCase="'One'"` is a shortcut to `ng-template [ngSwitchCase]="'One'"`.

```
<div class='card'>
  <div class='card-header'>
    ngSwitch using ng-template
  </div>

  <div class="card-body">

    <select [(ngModel)]="selectedValue2">
      <option *ngFor="let item of items;" [value]="item.name">{{item.name}}</option>
    </select>

    <div [ngSwitch]="selectedValue2">
      <ng-template [ngSwitchCase]="'One'">One is Selected</ng-template>
      <ng-template [ngSwitchCase]="'Two'">Two is Selected</ng-template>
      <ng-template ngSwitchDefault>This is Default</ng-template>
    </div>

  </div>
</div>
```

More than one `ngSwitchDefault`. Works perfectly ok.

```
<div class='card'>
  <div class='card-header'>
    Multiple ngSwitchDefault Directives
  </div>

  <div class="card-body">
    <select [(ngModel)]="selectedValue3">
      <option *ngFor="let item of items;" [value]="item.name">{{item.name}}</option>
    </select>


    <div [ngSwitch]="selectedValue3">
      <div *ngSwitchCase="'One'">One is Selected</div>
      <div *ngSwitchDefault>This is Default 1</div>
      <div *ngSwitchCase="'Two'">Two is Selected</div>
      <div *ngSwitchDefault>This is Default 2</div>
    </div>


  </div>
</div>
```

Loose Equality Checks

Angular uses loose equality checks to compare the `ngSwitchCase` expression with the `ngSwitch` expression. This means that the empty string `""` matches 0.

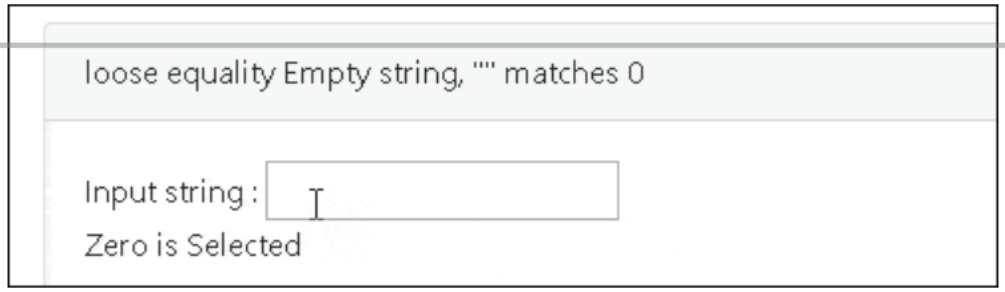
```
<div class='card'>
  <div class='card-header'>
    loose equality Empty string, "" matches 0
  </div>

  <div class="card-body">

    Input string : <input type='text' [(ngModel)]="num" />

    <div [ngSwitch]="num">
      <div *ngSwitchCase="0">Zero is Selected</div>
      <div *ngSwitchCase="1">One is Selected</div>
      <div *ngSwitchCase="2">Two is Selected</div>
      <div *ngSwitchDefault>This is Default 2</div>
    </div>


  </div>
</div>
```



Multiple / Sharing ngSwitchCase

You may also want to share the template between two values. For Example One Template for the values `One` & `Two` & another template for values `Three` & `Four`. One option is to repeat the template under each switch case. Or you can also make use of the `ngTemplateOutlet` to share the template as shown below.

```
<div class='card'>
  <div class='card-header'>
    Sharing Templates
  </div>

  <div class="card-body">

    <select [(ngModel)]="selectedValue4">
      <option *ngFor="let item of items;" [value]="item.name">{{item.name}}</option>
    </select>


    <ng-container [ngSwitch]="selectedValue4">

      <ng-container *ngSwitchCase="'One'">
        <ng-container *ngTemplateOutlet="sharedTemplate12"></ng-container>
      </ng-container>
      <ng-container *ngSwitchCase="'Two'">
        <ng-container *ngTemplateOutlet="sharedTemplate12"></ng-container>
      </ng-container>

      <ng-container *ngSwitchCase="'Three'">
        <ng-container *ngTemplateOutlet="sharedTemplate34"></ng-container>
      </ng-container>

      <ng-container *ngSwitchCase="'Four'">
        <ng-container *ngTemplateOutlet="sharedTemplate34"></ng-container>
      </ng-container>

      <ng-template #sharedTemplate12>Shared between 1,2</ng-template>
      <ng-template #sharedTemplate34>Shared between 3,4</ng-template>
      <ng-container *ngSwitchDefault>Default Template</ng-container>

    </ng-container>

  </div>
</div>

```

Source Code

You can download the source code from GitHub

References

1. ngSwitch
2. ngSwitchCase
3. ngSwitchDefault

Read More

1. Angular Tutorial
2. Angular Directives
3. ngFor
4. ngSwitch
5. ngIf
6. ngClass
7. ngStyle
8. ngFor Trackby
9. Custom Directive

← ngFor Directive Angular Tutorial ngIf Directive →

5 thoughts on “ngSwitch, ngSwitchcase, ngSwitchDefault Angular Example”

MARTIN
JULY 23, 2021 AT 4:41 PM

Multiple / Sharing ngSwitchCase part was JUST what I needed. 👏 👏 👏

Reply

BALVINDER SINGH
JUNE 4, 2021 AT 3:12 PM

Nicely written and explained. I have been using ngIf more than this, time to migrate using this maybe.

Thanks

Reply

NGUYỄN HUY
MAY 25, 2021 AT 5:57 PM

Thanks sir

Reply

VIJAY GAJERA
JANUARY 22, 2020 AT 9:48 AM

Very Good Article
Thanks for post useful tutorial

I have once suggestion here. You explain with good example all elements of angular but if you post out put screen after angular implementation example its best to compare other site post.

Reply

TEKTUTORIALSHUB
JANUARY 22, 2020 AT 3:16 PM

Thanks Vijay.

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