

06

Data Binding and Interpolations

WHAT YOU WILL LEARN

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- **Two-way Data Binding**

- Data flows from view to component and back to component from the view

What is data binding?

Data binding is the core concept of Angular 8 and used to define the communication between a component and the DOM. It is a technique to link your data to your view layer. In simple words, you can say that data binding is a communication between your typescript code of your component and your template which user sees. It makes easy to define interactive applications without worrying about pushing and pulling data.

Data binding can be either **one-way data binding** or **two-way data binding**.

One Way Data Binding

One way databinding is a simple one-way communication where HTML template is changed when we make changes in TypeScript code.

In one-way databinding, the value of the Model is used in the View (HTML page) but you can't update Model from the View. **Angular Interpolation / String Interpolation, Property Binding, and Event Binding** are the example of **one-way databinding**.

1. String Interpolation:

String Interpolation is a **one-way databinding technique** which is used to output the data from a TypeScript code to HTML template (view). It uses the template expression in **double curly braces** to display the data from the component to the view.

For example:

```
{{ data }}
```

String interpolation adds the value of a property from the component:

2. Property Binding

Property Binding is also a **one-way data binding** technique. In property binding, we bind a property of a DOM element to a field which is a defined property in our component TypeScript code. Actually Angular internally converts string interpolation into property binding.

For example:

```
<img [src]="imgUrl" />
```

Property binding is preferred over string interpolation because it has shorter and cleaner code. String interpolation should be used when you want to simply display some dynamic data from a component on the view between headings like h1, h2, p

Syntax:

```
<input type="email" [value]="user.email">
```

etc.

3. Event Binding

event binding is used to handle the events raised from the DOM like button click, mouse move etc. When the DOM event happens (eg. click, change, keyup), it calls the specified method in the component. In the following example, the `cookBacon()` method from the component is called when the button is clicked:

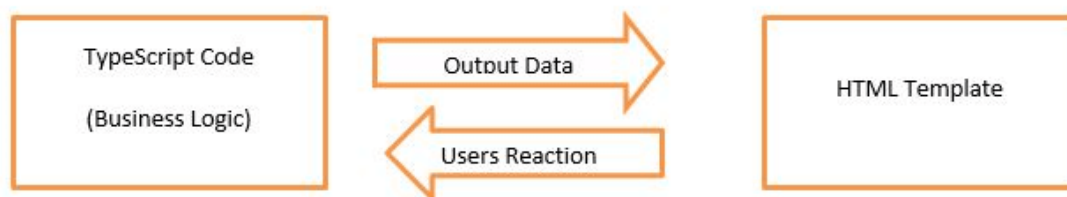
For example:

```
<button (click)="cookBacon()"> </button>
```

Two Data Binding

In two-way databinding, automatic synchronization of data happens between the Model and the View. Here, change is reflected in both components. Whenever you make changes in the Model, it will be reflected in the View and when you make changes in View, it will be reflected in Model.

This happens immediately and automatically, ensures that the HTML template and the TypeScript code are updated at all times.



Angular provides four types of data binding and they are different on the way of data flowing.

Syntax:

```
[(ngModel)] = "[property of your component]"
```



Note: For two way data binding, we have to enable the ngModel directive. It depends upon FormsModule in angular/forms package, so we have to add FormsModule in imports[] array in the AppModule.

All The Best!!!