

# Event binding



Event binding lets you listen for and respond to user actions such as keystrokes, mouse movements, clicks, and touches.

See the [live example](#) / [download example](#) for a working example containing the code snippets in this guide.

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## Prerequisites

- [Basics of components](#)
- [Basics of templates](#)
- [Binding syntax](#)
- [Template statements](#)

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## Binding to events

To bind to an event you use the Angular event binding syntax. This syntax consists of a target event name within parentheses to the left of an equal sign, and a quoted template statement to the right.

Create the following example; the target event name is `click` and the template statement is `onSave()`.

Event binding syntax

```
<button (click)="onSave()">Save</button>
```

The event binding listens for the button's click events and calls the component's `onSave()` method whenever a click occurs.

```
<button (click)="onSave()">Save</button>
```

target event name

template statement

## Determining an event target

To determine an event target, Angular checks if the name of the target event matches an event property of a known directive.

Create the following example: (Angular checks to see if `myClick` is an event on the custom `ClickDirective`)

src/app/app.component.html

```
<h4>myClick is an event on the custom ClickDirective:
</h4>
<button type="button" (myClick)="clickMessage=$event"
clickable>click with myClick</button>
{{clickMessage}}
```

If the target event name, `myClick` fails to match an output property of `ClickDirective`, Angular will instead bind to the `myClick` event on the

underlying DOM element.

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## Binding to passive events

This is an advanced technique that is not necessary for most applications. You may find this useful if you want to optimize frequently occurring events that are causing performance problems.

Angular also supports passive event listeners. For example, use the following steps to make a scroll event passive.

1. Create a file `zone-flags.ts` under `src` directory.
2. Add the following line into this file.

```
(window as any)['__zone_symbol__PASSIVE_EVENTS'] =  
  ['scroll'];
```

3. In the `src/polyfills.ts` file, before importing `zone.js`, import the newly created `zone-flags`.

```
import './zone-flags';  
import 'zone.js'; // Included with Angular CLI.
```

After those steps, if you add event listeners for the `scroll` event, the listeners will be `passive`.

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## What's next

- For more information on how event binding works, see [How event binding works](#).
- [Property binding](#)
- [Text interpolation](#)
- [Two-way binding](#)

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