



# Blazor University

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## Browser DOM events

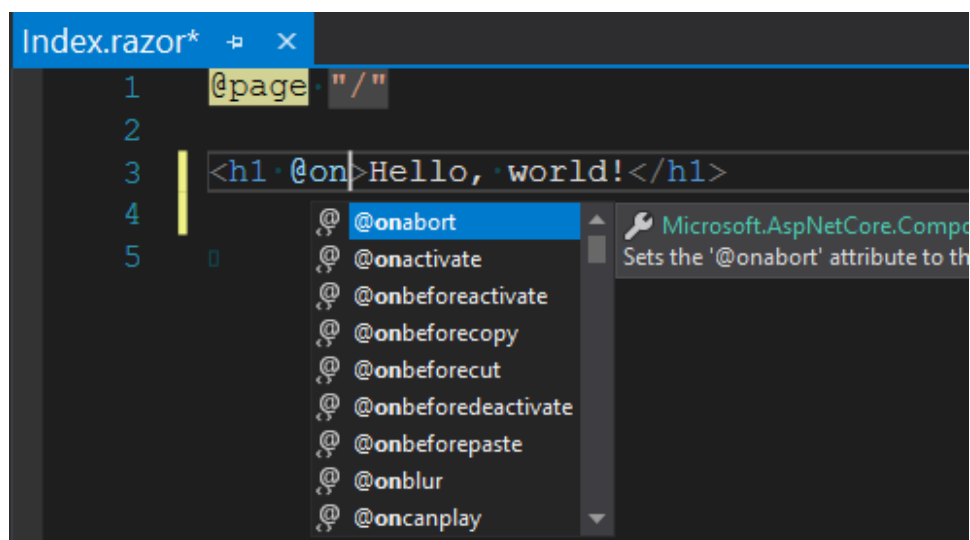


Edit

When rendering any mark-up, it is possible to assign standard JavaScript events on the rendered HTML elements so that our own Blazor C# methods are executed. For example, we have used the `@onclick` [Directive](#) in many samples elsewhere:

```
<button @onclick=ButtonClicked>Click me</button>
```

These event directives have full IntelliSense support within the Visual Studio editor, so starting to type the `@` symbol should present us with a comprehensive list of available directives, along with a description identifying which argument class type the event passes us in our event handler. DOM events start with `@on`.



*"Sets the '@onabort' attribute to the provided string or delegate value. A delegate value should be of type 'Microsoft.AspNetCore.Components.Web.ProgressEventArgs'"*

**Warning:** When writing a Blazor app that runs entirely on the server, Blazor will hook events in the browser and send them to server so our C# methods can be invoked. This can lead to a noticeable slow-down for frequently fired events such as **onmousemove**.

**Note:** Because JavaScript invocation of C# methods is asynchronous, this means that in C# methods we cannot cancel events as we can in JavaScript. This is because cancelling browser DOM events is a synchronous operation, by the time our C# has been asynchronously invoked it is already too late to cancel the event.

Available DOM events and their parameter types include:

## General events

DOM event	Argument type
onactivate	EventArgs
onbeforeactivate	EventArgs
onbeforedeactivate	EventArgs
ondeactivate	EventArgs
onended	EventArgs
onfullscreenchange	EventArgs
onfullscreenerror	EventArgs

<code>onloadeddata</code>	<code>EventArgs</code>
<code>onloadedmetadata</code>	<code>EventArgs</code>
<code>onpointerlockchange</code>	<code>EventArgs</code>
<code>onpointerlockerror</code>	<code>EventArgs</code>
<code>onreadystatechange</code>	<code>EventArgs</code>
<code>onscroll</code>	<code>EventArgs</code>

## Focus events

DOM event	Argument type
<code>onfocus</code>	<code>FocusEventArgs</code>
<code>onblur</code>	<code>FocusEventArgs</code>
<code>onfocusin</code>	<code>FocusEventArgs</code>
<code>onfocusout</code>	<code>FocusEventArgs</code>

## Mouse events

DOM event	Argument type
<code>onmouseover</code>	<code>MouseEventArgs</code>
<code>onmouseout</code>	<code>MouseEventArgs</code>
<code>onmousemove</code>	<code>MouseEventArgs</code>
<code>onmousedown</code>	<code>MouseEventArgs</code>
<code>onmouseup</code>	<code>MouseEventArgs</code>

<code>onclick</code>	<code>MouseEventArgs</code>
<code>ondblclick</code>	<code>MouseEventArgs</code>
<code>oncontextmenu</code>	<code>MouseEventArgs</code>
<code>onwheel</code>	<code>WheelEventArgs</code>
<code>onmousewheel</code>	<code>WheelEventArgs</code>

## Drag events

DOM event	Argument type
<code>ondrag</code>	<code>DragEventArgs</code>
<code>ondragend</code>	<code>DragEventArgs</code>
<code>ondragenter</code>	<code>DragEventArgs</code>
<code>ondragleave</code>	<code>DragEventArgs</code>
<code>ondragover</code>	<code>DragEventArgs</code>
<code>ondragstart</code>	<code>DragEventArgs</code>
<code>ondrop</code>	<code>DragEventArgs</code>

## Keyboard events

DOM event	Argument type
<code>onkeydown</code>	<code>KeyboardEventArgs</code>
<code>onkeyup</code>	<code>KeyboardEventArgs</code>
<code>onkeypress</code>	<code>KeyboardEventArgs</code>

## Input events

DOM event	Argument type
onchange	ChangeEventArgs
oninput	ChangeEventArgs
oninvalid	EventArgs
onreset	EventArgs
onselect	EventArgs
onselectstart	EventArgs
onselectionchange	EventArgs
onsubmit	EventArgs

## Clipboard events

DOM event	Argument type
onbeforecopy	EventArgs
onbeforecut	EventArgs
onbeforepaste	EventArgs
oncopy	ClipboardEventArgs
oncut	ClipboardEventArgs
onpaste	ClipboardEventArgs

## Touch events

DOM event	Argument type
<code>ontouchcancel</code>	<code>TouchEventArgs</code>
<code>ontouchend</code>	<code>TouchEventArgs</code>
<code>ontouchmove</code>	<code>TouchEventArgs</code>
<code>ontouchstart</code>	<code>TouchEventArgs</code>
<code>ontouchenter</code>	<code>TouchEventArgs</code>
<code>ontouchleave</code>	<code>TouchEventArgs</code>

## Pointer events

DOM event	Argument type
<code>ongotpointercapture</code>	<code>PointerEventArgs</code>
<code>onlostpointercapture</code>	<code>PointerEventArgs</code>
<code>onpointercancel</code>	<code>PointerEventArgs</code>
<code>onpointerdown</code>	<code>PointerEventArgs</code>
<code>onpointerenter</code>	<code>PointerEventArgs</code>
<code>onpointerleave</code>	<code>PointerEventArgs</code>
<code>onpointermove</code>	<code>PointerEventArgs</code>
<code>onpointerout</code>	<code>PointerEventArgs</code>
<code>onpointerover</code>	<code>PointerEventArgs</code>
<code>onpointerup</code>	<code>PointerEventArgs</code>

## Media events

DOM event	Argument type
<code>oncanplay</code>	<code>EventArgs</code>
<code>oncanplaythrough</code>	<code>EventArgs</code>
<code>oncuechange</code>	<code>EventArgs</code>
<code>ondurationchange</code>	<code>EventArgs</code>
<code>onemptied</code>	<code>EventArgs</code>
<code>onpause</code>	<code>EventArgs</code>
<code>onplay</code>	<code>EventArgs</code>
<code>onplaying</code>	<code>EventArgs</code>
<code>onratechange</code>	<code>EventArgs</code>
<code>onseeked</code>	<code>EventArgs</code>
<code>onseeking</code>	<code>EventArgs</code>
<code>onstalled</code>	<code>EventArgs</code>
<code>onstop</code>	<code>EventArgs</code>
<code>onsuspend</code>	<code>EventArgs</code>
<code>ontimeupdate</code>	<code>EventArgs</code>
<code>onvolumechange</code>	<code>EventArgs</code>
<code>onwaiting</code>	<code>EventArgs</code>

## Progress events

DOM event	Argument type
<code>onloadstart</code>	<code>ProgressEventArgs</code>
<code>ontimeout</code>	<code>ProgressEventArgs</code>
<code>onabort</code>	<code>ProgressEventArgs</code>
<code>onload</code>	<code>ProgressEventArgs</code>
<code>onloadend</code>	<code>ProgressEventArgs</code>
<code>onprogress</code>	<code>ProgressEventArgs</code>
<code>onerror</code>	<code>ErrorEventArgs</code>