



# PURE JAVASCRIPT WEB COMPONENTS

Two-day workshop with Dylan Beattie

[www.itkonekt.com](http://www.itkonekt.com)



## DYLAN BEATTIE

// Consultant, Software Developer  
and Microsoft MVP

<https://twitter.com/dylanbeattie>

**Dylan Beattie** is a consultant, software developer and international keynote speaker. He's been building web applications since the 1990s, and works primarily on Microsoft .NET, HTTP APIs, UX design, and distributed systems. Dylan is a Microsoft MVP for Developer Technologies, and the creator of the Rockstar programming language.

Dylan lives and works in London and when he's not writing code he plays guitar and writes songs.

# About workshop

## PURE JAVASCRIPT WEB COMPONENTS

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- IN THIS TWO-DAY WORKSHOP, YOU'LL FIND OUT HOW TO DESIGN, BUILD AND DEPLOY CUSTOM WEB COMPONENTS BUILT WITH PURE NATIVE JAVASCRIPT.
- OVER THE COURSE OF THE WORKSHOP, ATTENDEES WILL BUILD SEVERAL WEB COMPONENTS, FROM A SIMPLE "HELLO WORLD" APP TO AN INTERACTIVE PUZZLE GAME IMPLEMENTED ENTIRELY AS A CUSTOM ELEMENT BUILT WITH HTML AND JAVASCRIPT.

# About workshop - what will you learn?

## OVERVIEW OF MODERN WEB COMPONENT ARCHITECTURE

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- ✓ Modern browser APIs:  
web components, custom elements
- ✓ Understanding events and event handlers
- ✓ Client-side tooling:  
working with the DOM inspector
- ✓ Server-side tooling:  
introducing Webpack and Babel

## WORKING WITH THE SHADOW DOM

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- ✓ What is a shadow DOM, why does it matter?
- ✓ Rendering HTML elements via JavaScript
- ✓ Working with templated HTML
- ✓ Styling components with CSS

# About workshop - what will you learn?

## ARCHITECTURE OF A WEB COMPONENT

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- ✓ Working with JavaScript classes
- ✓ Registering custom elements
- ✓ Structuring your code:  
models, views, renderers and handlers
- ✓ Putting it all together:  
building your first web component

## RENDERING STRATEGIES FOR WEB COMPONENTS

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- ✓ Managing state via models and views
- ✓ CSS layouts: document, flex and grid
- ✓ Working with the HTML `<canvas>`  
element
- ✓ Responsive design considerations  
for web components

# About workshop - what will you learn?

## USER INTERACTIONS AND EVENTS

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- ✓ Handling mouse and keyboard events
- ✓ Mobile and tablet interfaces:  
working with touch events
- ✓ Animations, loops and timeouts
- ✓ Interacting with components via  
custom events

## TESTING WEB COMPONENTS WITH JEST

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- ✓ Introduction: unit testing JavaScript  
with Jest
- ✓ Application testing: validating behaviour  
with the arrange/act/assert pattern
- ✓ Interaction testing: simulating events  
and mocking handlers
- ✓ Testing strategies for web components:  
how much test coverage is enough?

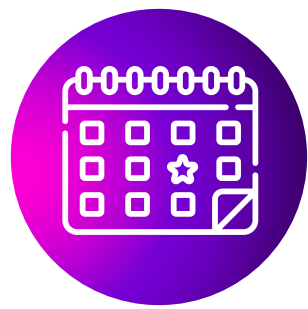
# About workshop - what will you learn?

## WEB COMPONENT TOOLING

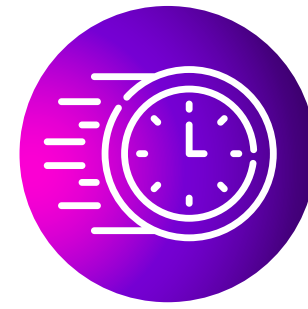
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- ✓ Bundling and publishing your component using Webpack
- ✓ Working with SASS and SCSS
- ✓ Supporting older browsers using Babel
- ✓ Versioning and release management

# Workshop details



**MAY**  
**23<sup>RD</sup> & 24<sup>TH</sup>**



**TIME: 10h-17h CEST**



**LIMITED NUMBER  
OF PARTICIPANTS:  
24 MAX.**



**ACTIVITIES:**  
lectures + live coding  
+ exercises



**ONLINE**



**NUMBER OF  
PARTICIPANTS IS  
LIMITED! HURRY  
UP AND BOOK  
YOUR SPOT!**

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