

UI5con ON AIR Keynote – Day One

The 2020 Virtual Edition

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July 9th, 2020



UI5 Evolution



UI5con
learn.explore.connect.

Highlights Around UI5 Evolution From Keynote 2019



"A lot of impressive individual innovations!"

Highlights Around UI5 Evolution From Keynote 2019

CHALLENGES OF A MODERN WEB STACK

Replace proprietary framework features with web standards

The diagram illustrates the transition from Fiori 2 to Fiori 3. It shows a timeline with two main stages: 2018 (Fiori 2) and 2019 (Fiori 3). In 2018, the stack includes SAPUI5, CSS3, and Web Components. By 2019, SAPUI5 has been removed, and the stack now consists of CSS3, Web Components, and Web Standards.

UI5 EVOLUTION FOR RENDERING & CONTROLS

"Increase the performance and the maintainability of UI5 controls!"

A hierarchical tree diagram where each node is a yellow circle containing a smaller tree, symbolizing the modular and recursive nature of the UI5 control evolution process.

...apply the UI5 Evolution Concepts!

...migrate your Renderers!

Now, it's your turn to...

...help us to extend the ecosystem!

...enjoy UI5con!

The UI5con logo is visible in the background of the slide. Below the slide, there is a photograph of a conference audience in a large hall.

A NEW ECOSYSTEM IS GROWING...

To accelerate innovation, we all need to work together...

A network diagram consisting of several hexagons arranged in a grid-like pattern, each containing a small icon representing different technologies or components of the UI5 ecosystem.



"A lot of impressive individual innovations!"

An Community Project Born At UI5con 2019



Volker Buzek; @vobu

An Community Project Born At UI5con 2019



Volker Buzek; @vobu

An Community Project Born At UI5con 2019



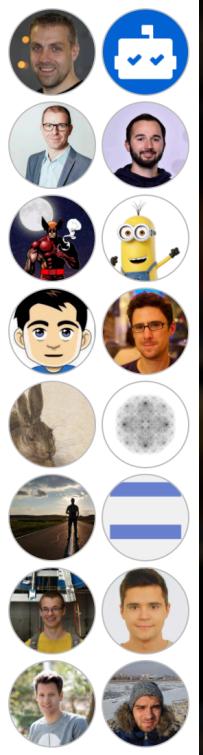
Volker Buzek; @vobu

The UI5 Ecosystem Showcase Project

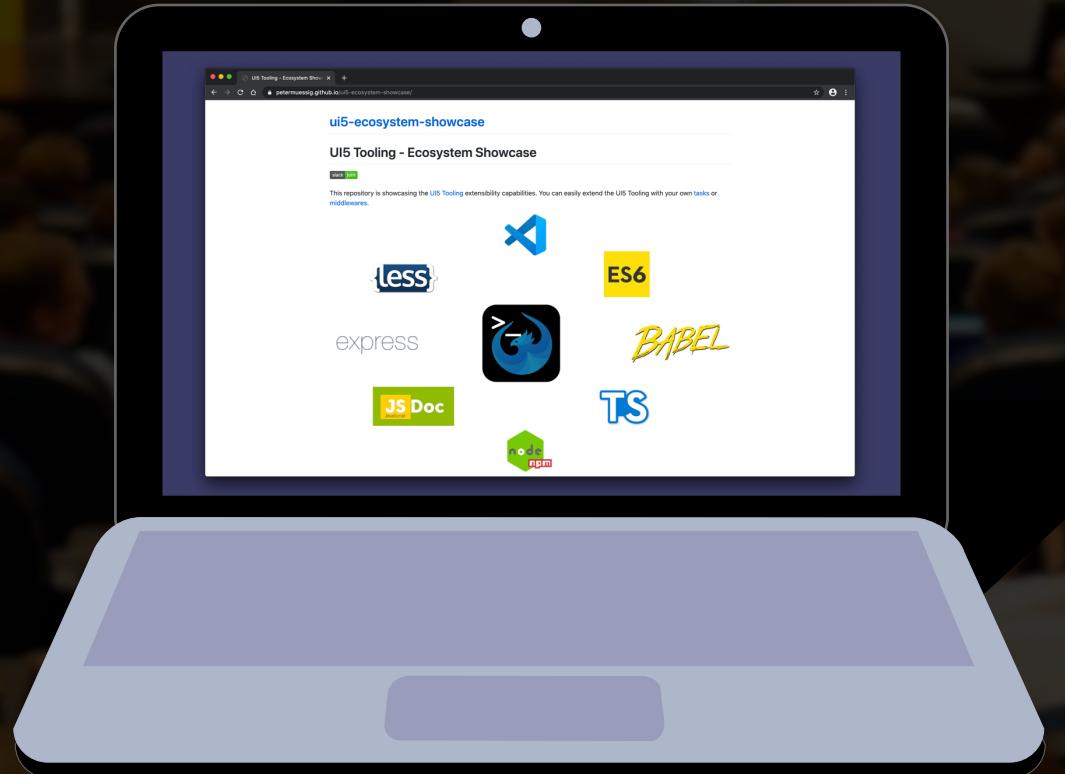
“The proof to demonstrate the extensibility of the UI5 Tooling!”



CONTRIBUTORS



Thank You!



LICENCE





**"We can shape UI5
together!"**





UI5con^{ON AIR}

UI5 Technology Innovation



“Has the goal of modernizing the foundation technology of the Fiori stack: UI5. The UI5 Evolution project, which deals with performance, modularization, standards & trends, openness and compatibility, drives the modernization!”

Modular Core

Reworking the framework to get rid of Globals, provide fine-granular modules, introduce async APIs, remove jQuery, and to support to shift code execution from runtime into build-time.

Rendering

Moving towards DOM-based rendering to increase performance, maintainability and enable side-by-side usage with other UI technologies.

Tooling

Open-source, Node.js-based CLI tooling to build, test and run applications, components and libraries. Extensible by design to enable community driven extensions.

Universal Toolbox

Become a universal toolbox with different kind of individual reuse functionality, such as i18n, CLDR, ...

Standards & Trends

Moving closer to standards, e.g. ES6, TypeScript, CSS Variables, and more to benefit as much as possible from well known tools of the JS ecosystem.

Web Components

Enable support for Web Components in UI5 to allow to integrate UI5 Web Components back into UI5 as the standard way to build agnostic UI elements for UI5.

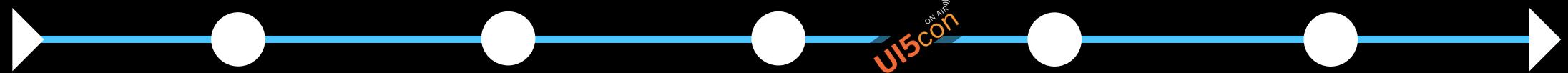
UI5 Evolution

“Individual Innovations!”

UI5 Evolution

“Connecting Innovations!”

UI5 Evolution – The UI5 Technology Innovation



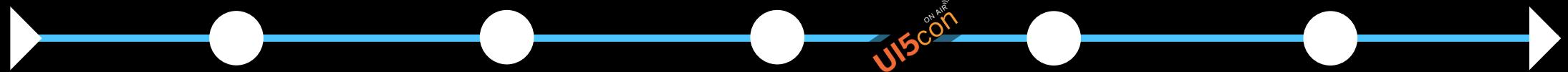
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Tooling and Ecosystem

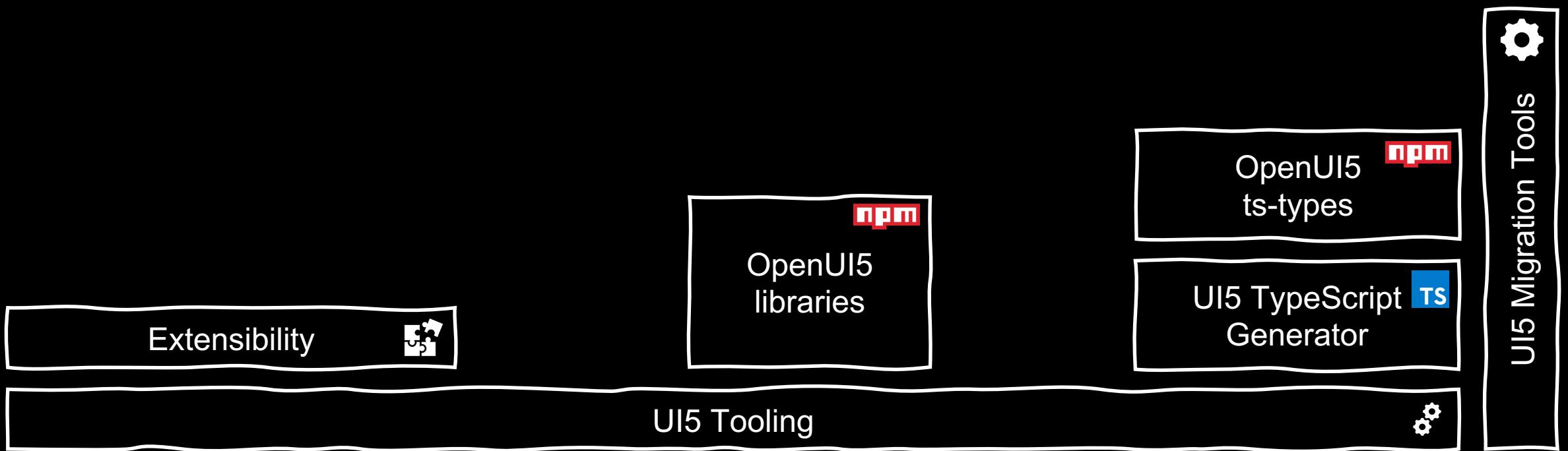


“Connecting Innovations!”

UI5con ON AIR

UI5 Tooling and Ecosystem in 2019 (UI5con)

“Modern, open and extensible development experience!”



“Connecting Innovations!”

ON AIR
UI5con

UI5 Tooling and Ecosystem in 2019 (after UI5con)

“Modern, open and extensible development experience!”



Custom Extensions A dark rectangular box with rounded corners containing the text 'Custom Extensions' and a small icon of a cluster of colorful hexagons.

UI5 Ecosystem Showcase A dark rectangular box with rounded corners containing the text 'UI5 Ecosystem Showcase' and a small icon of a recycling symbol.

Extensibility A dark rectangular box with rounded corners containing the text 'Extensibility' and a small icon of a puzzle piece.

 OpenUI5 libraries

 OpenUI5 ts-types

 UI5 TypeScript Generator

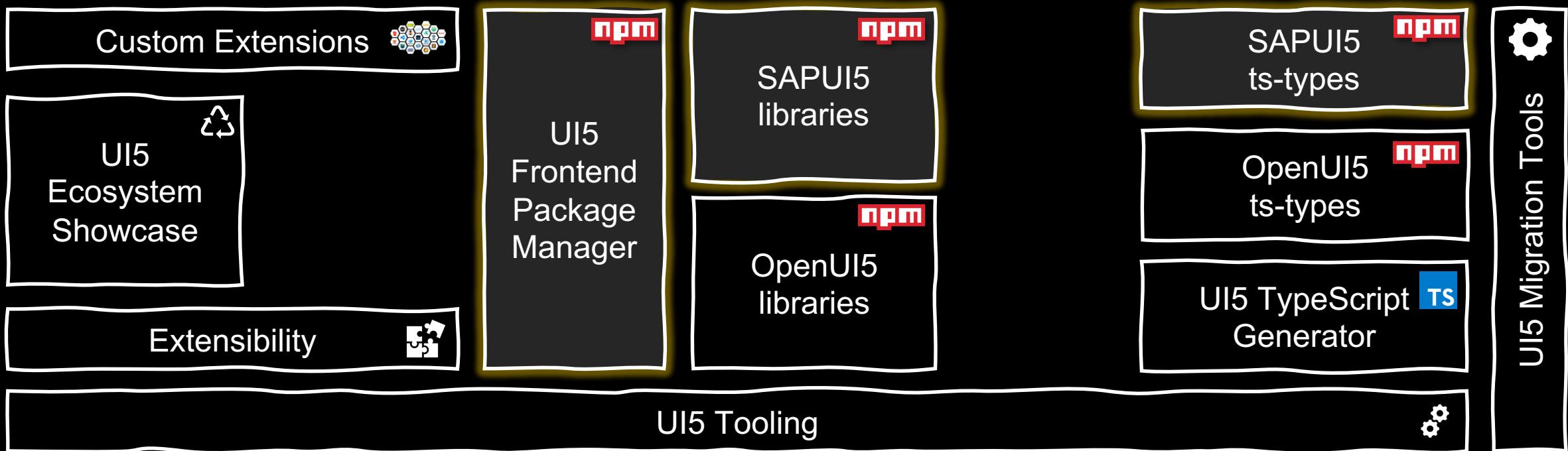
 UI5 Migration Tools

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UI5 Tooling and Ecosystem Today

“Modern, open and extensible development experience!”

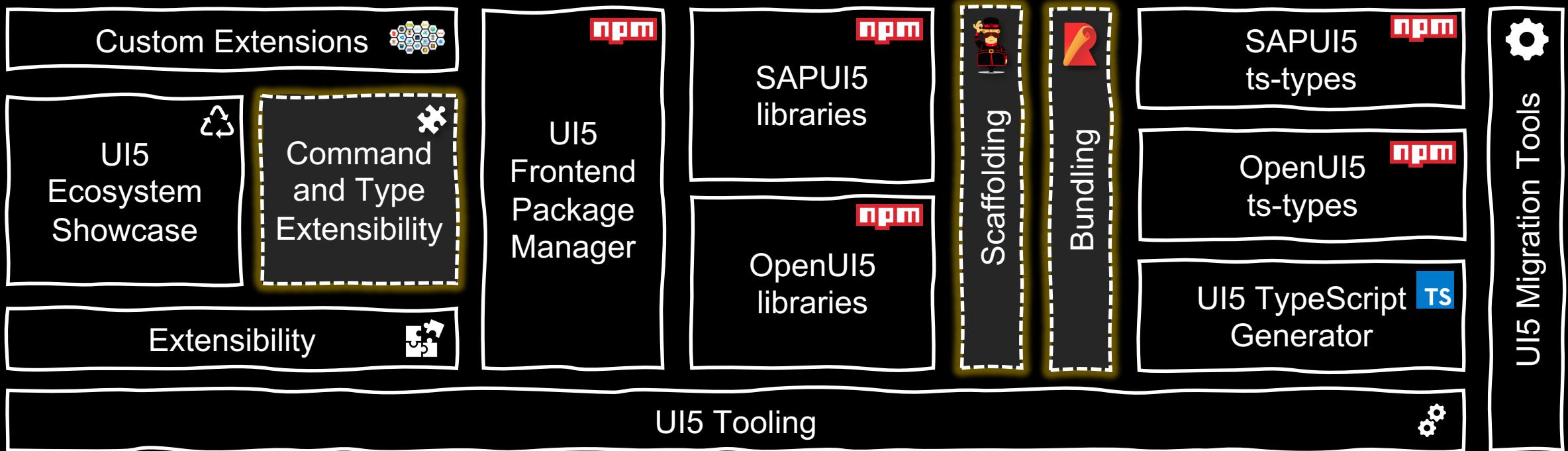


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UI5 Tooling and Ecosystem in 2021

“Modern, open and extensible development experience!”



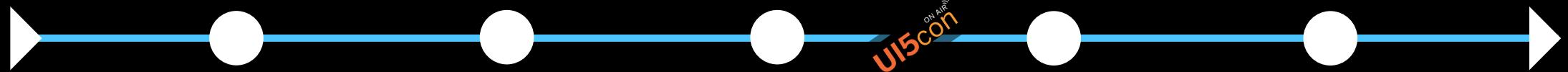
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Tooling and Ecosystem



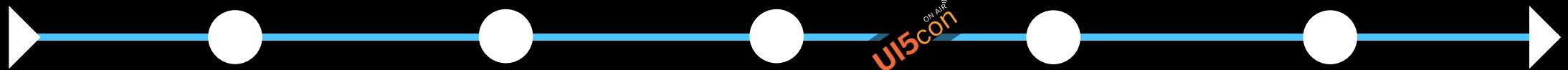
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Tooling and Ecosystem



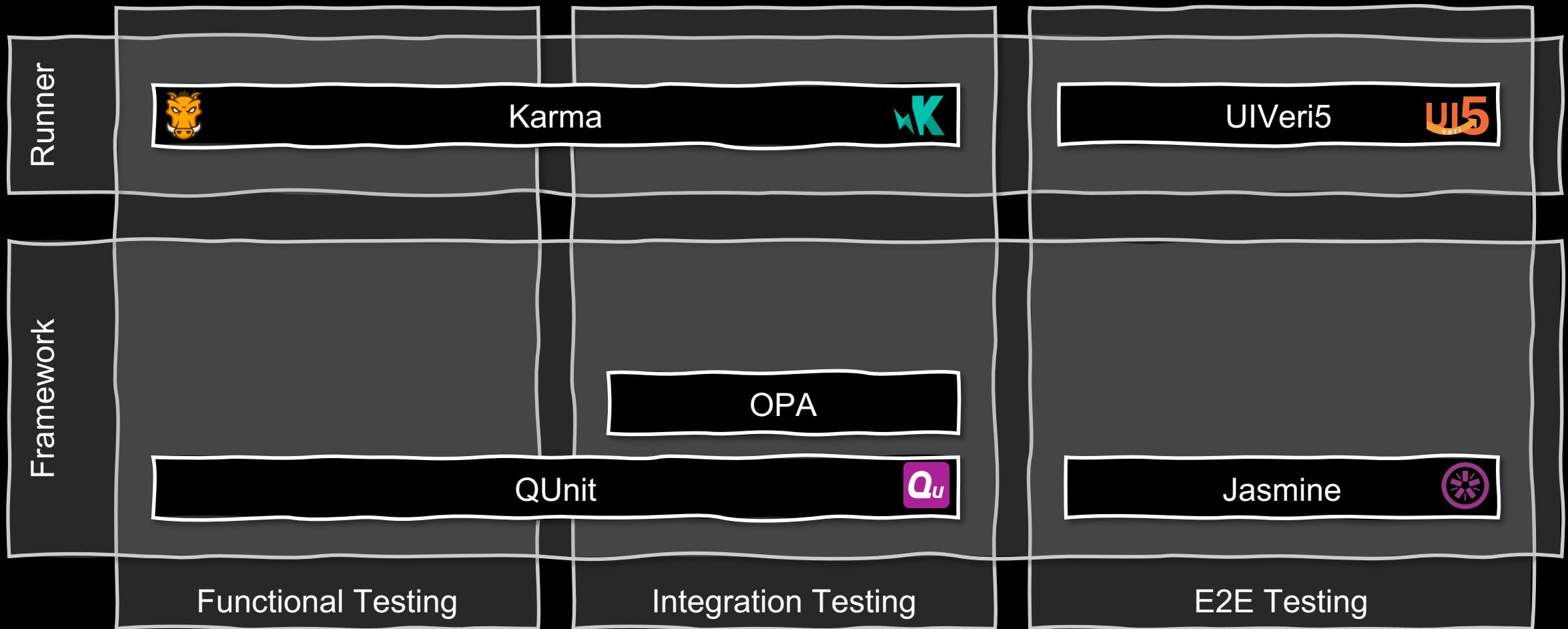
Testing Frameworks



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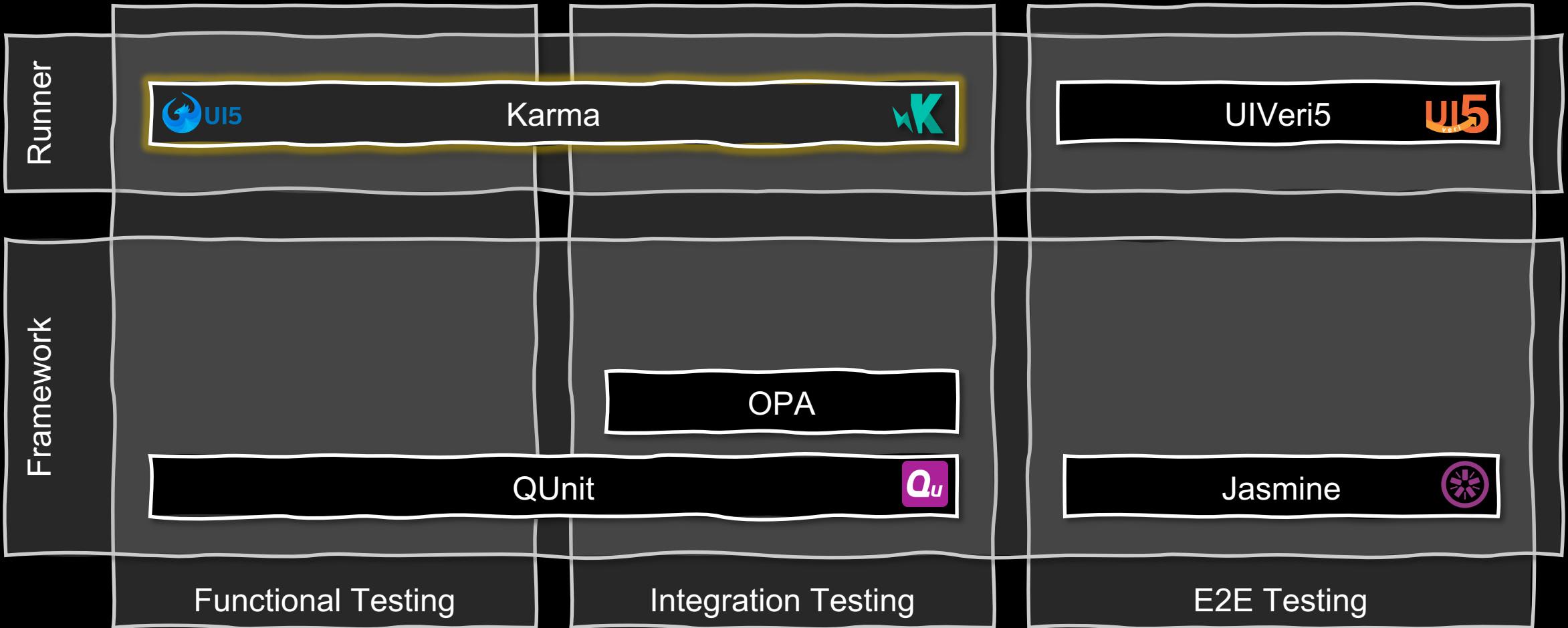
UI5 Testing Frameworks in 2019



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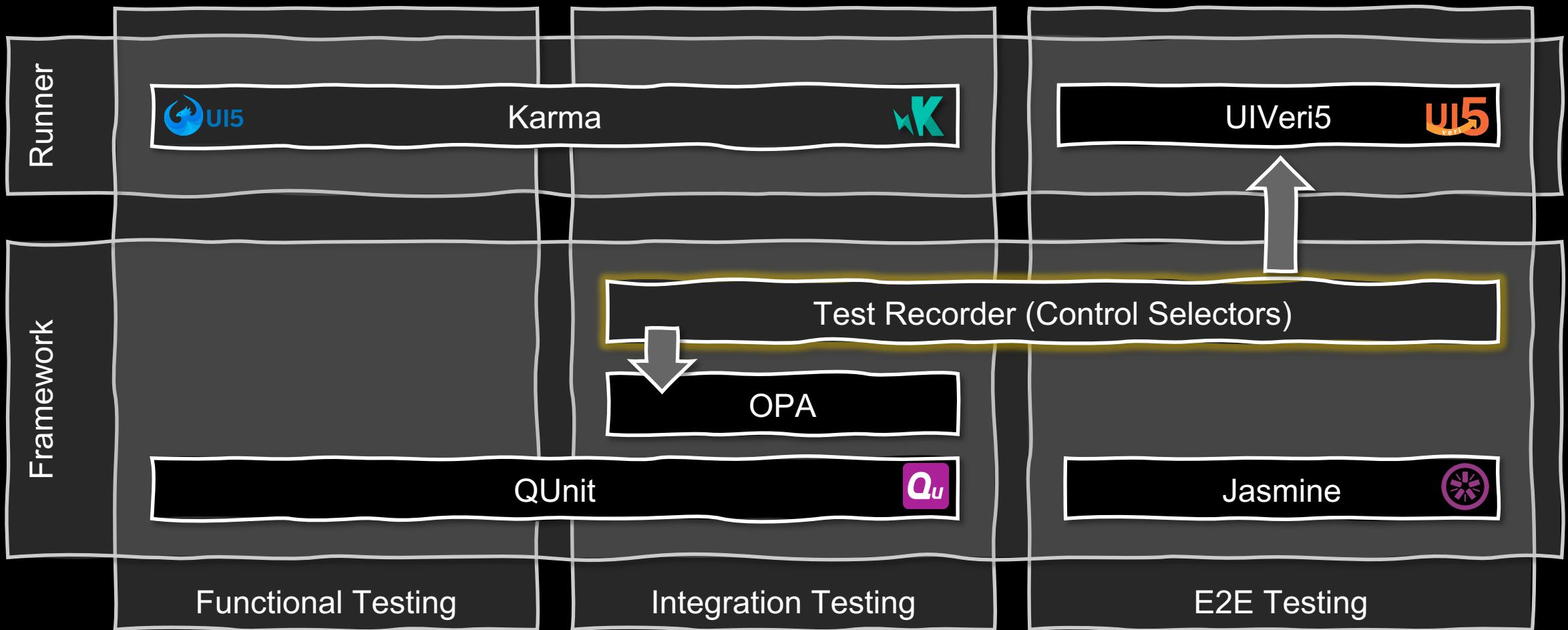
UI5 Testing Frameworks Today



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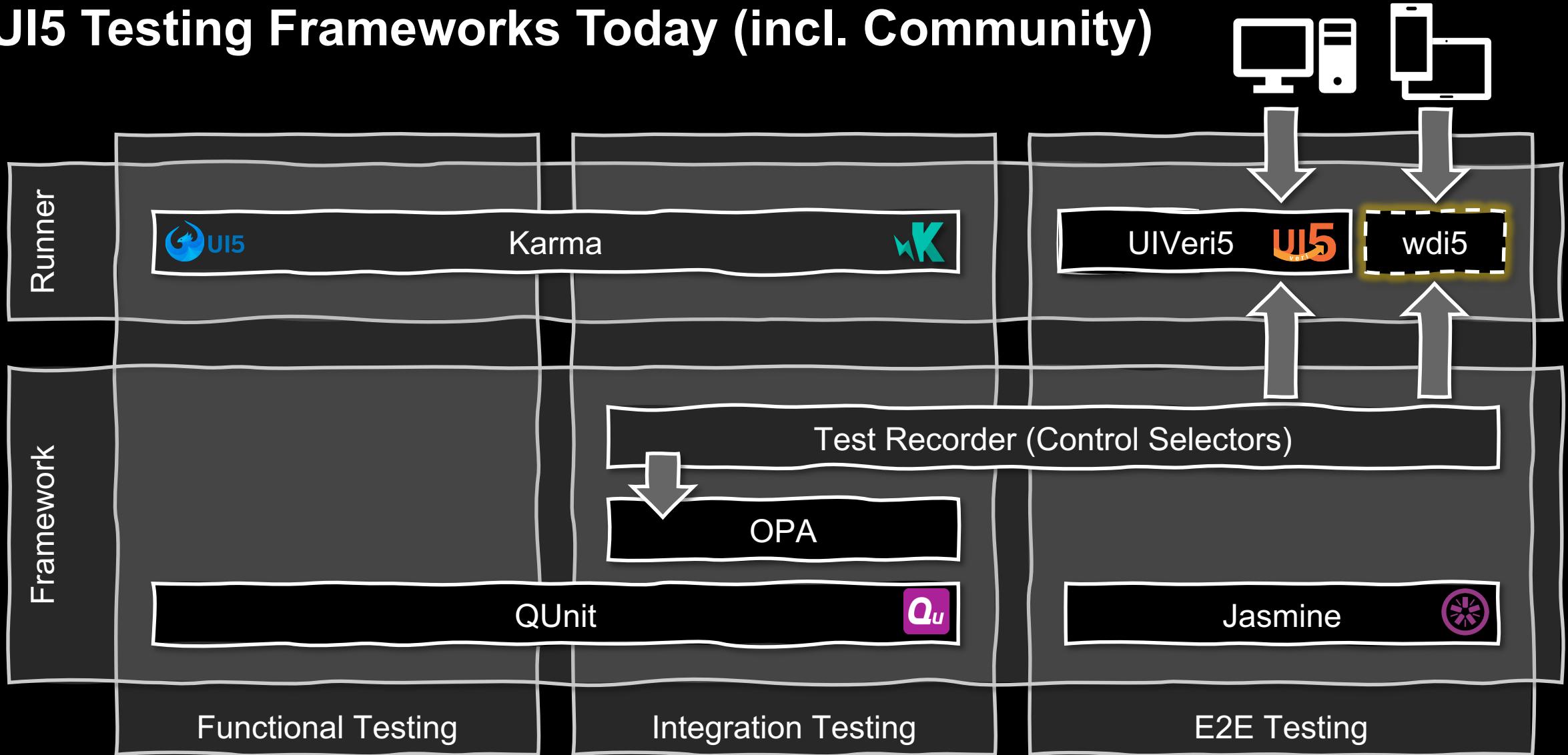
UI5 Testing Frameworks Today



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UI5 Testing Frameworks Today (incl. Community)



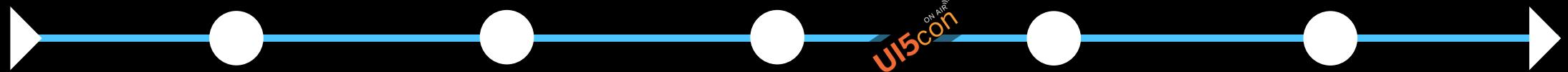
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Tooling and Ecosystem



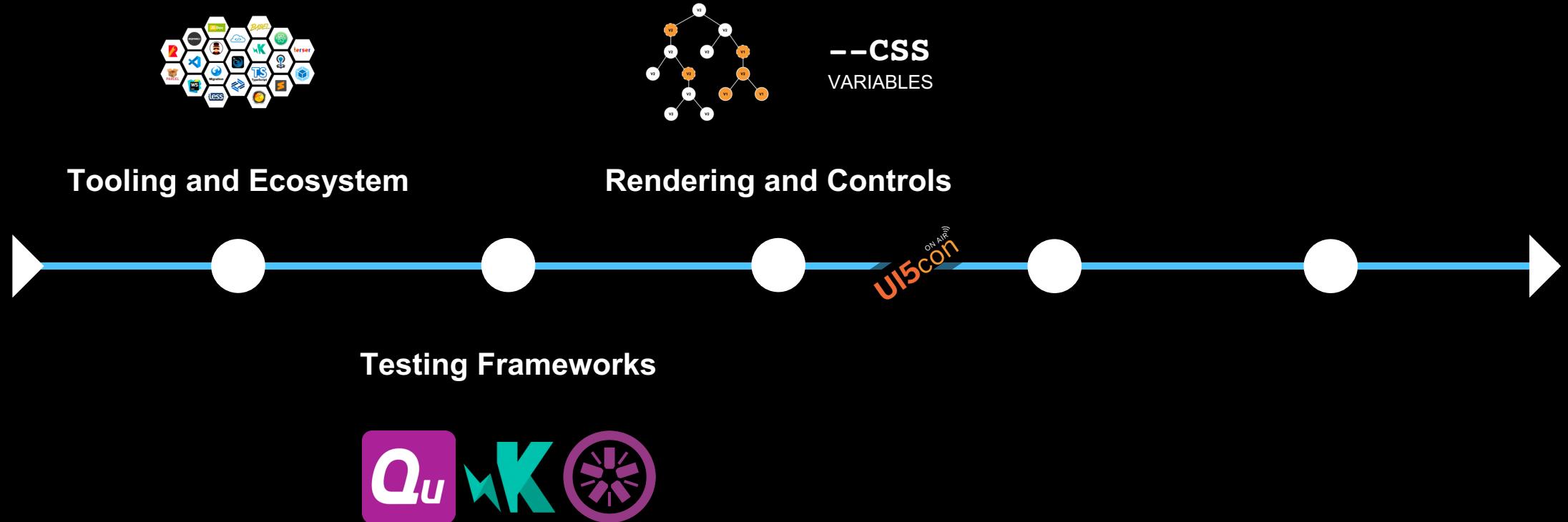
Testing Frameworks



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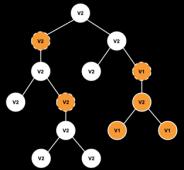
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UI5 Rendering and Controls



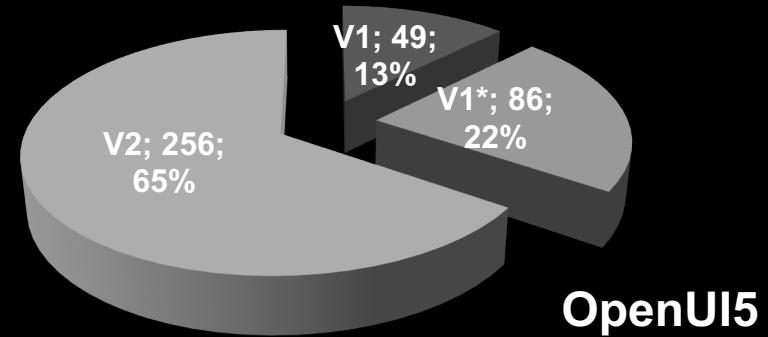
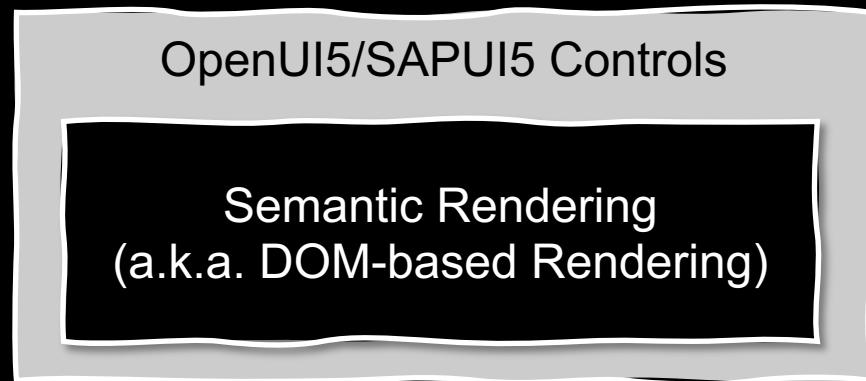
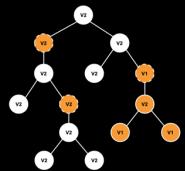
OpenUI5/SAPUI5 Controls

Semantic Rendering (a.k.a. DOM-based Rendering)

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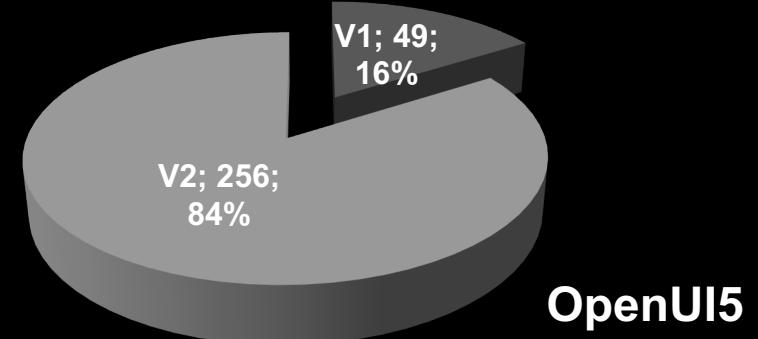
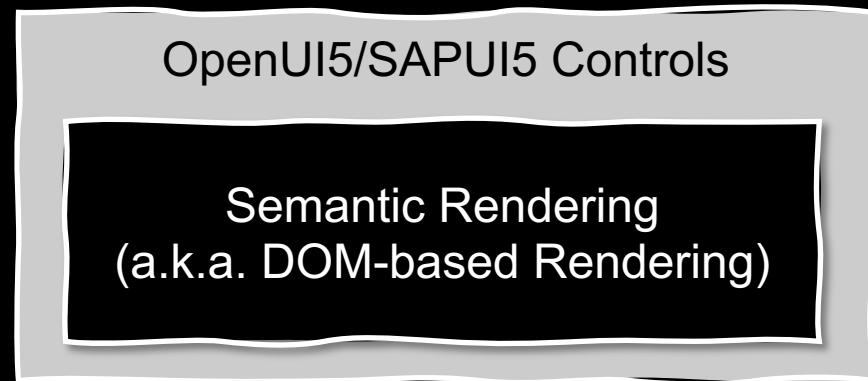
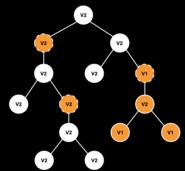
UI5 Rendering and Controls



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UI5 Rendering and Controls



“Connecting Innovations!”

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UI5 Rendering and Controls

--CSS
VARIABLES

OpenUI5/SAPUI5 Controls

Semantic Rendering
(a.k.a. DOM-based Rendering)

UI5 Web Components

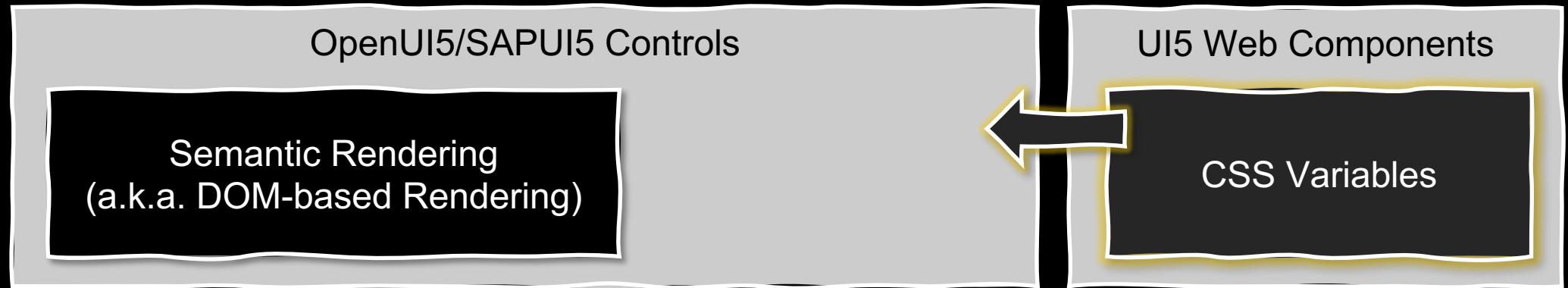
CSS Variables

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UI5 Rendering and Controls

--CSS
VARIABLES

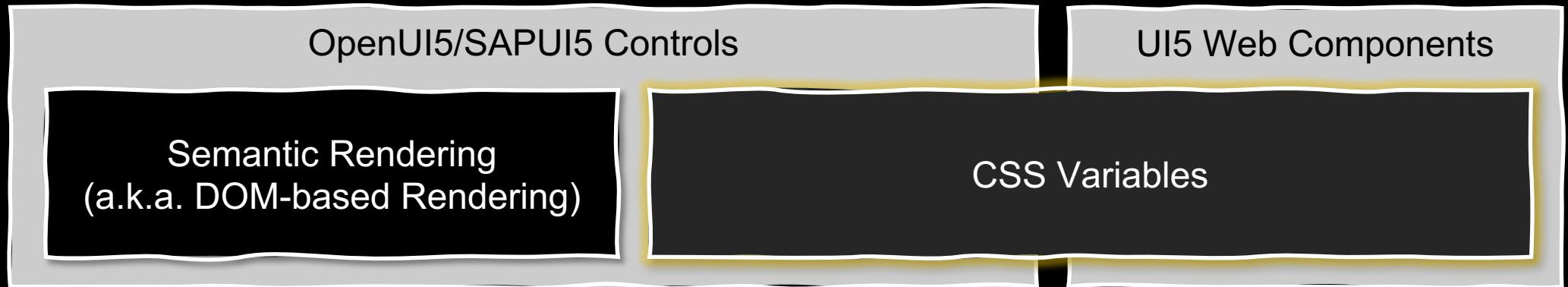


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UI5 Rendering and Controls

--CSS
VARIABLES

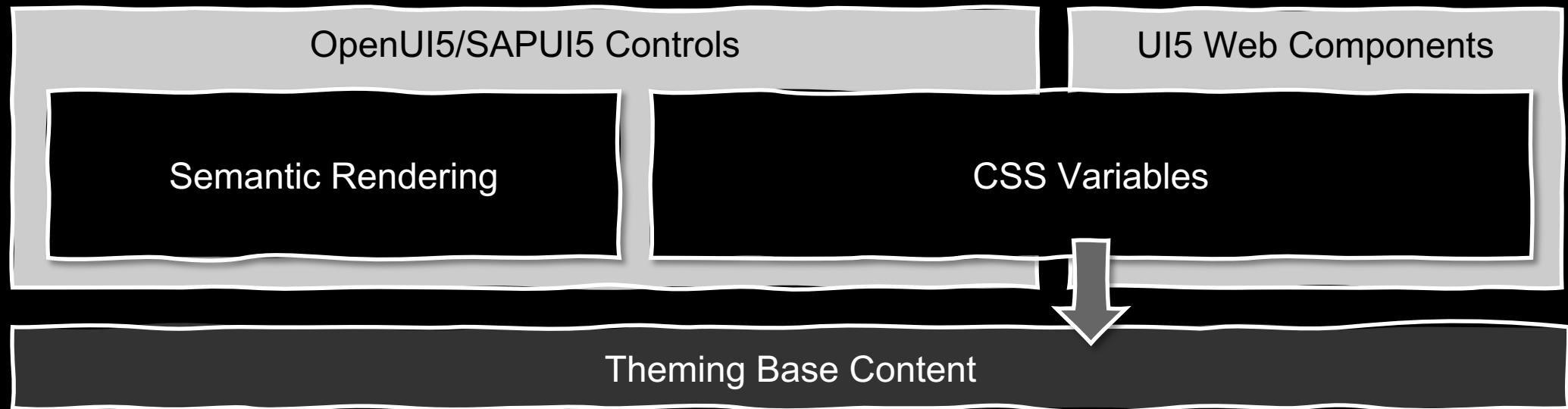


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UI5 Rendering and Controls

--CSS
VARIABLES

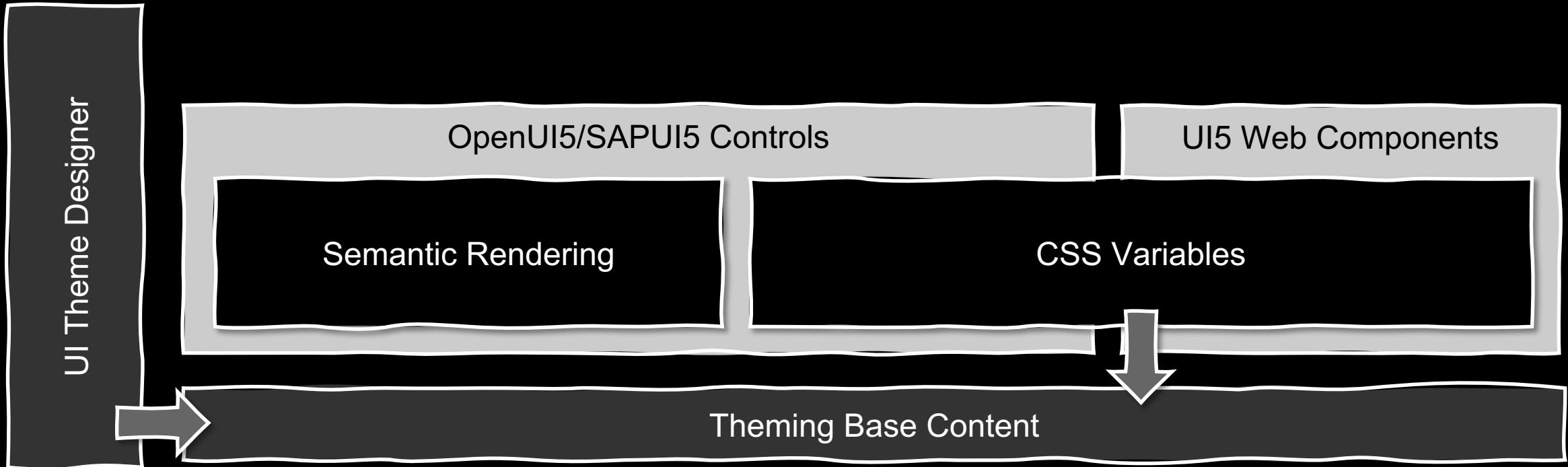


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UI5 Rendering and Controls

--CSS
VARIABLES

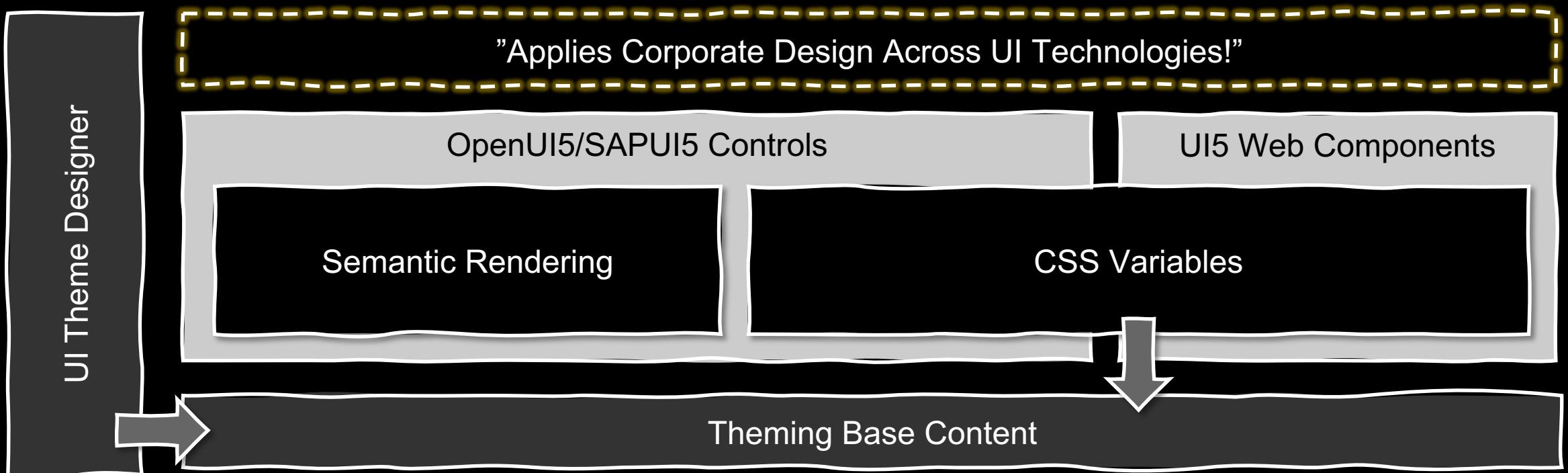


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UI5 Rendering and Controls

--CSS
VARIABLES



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CSS Variables in Action

--CSS
VARIABLES

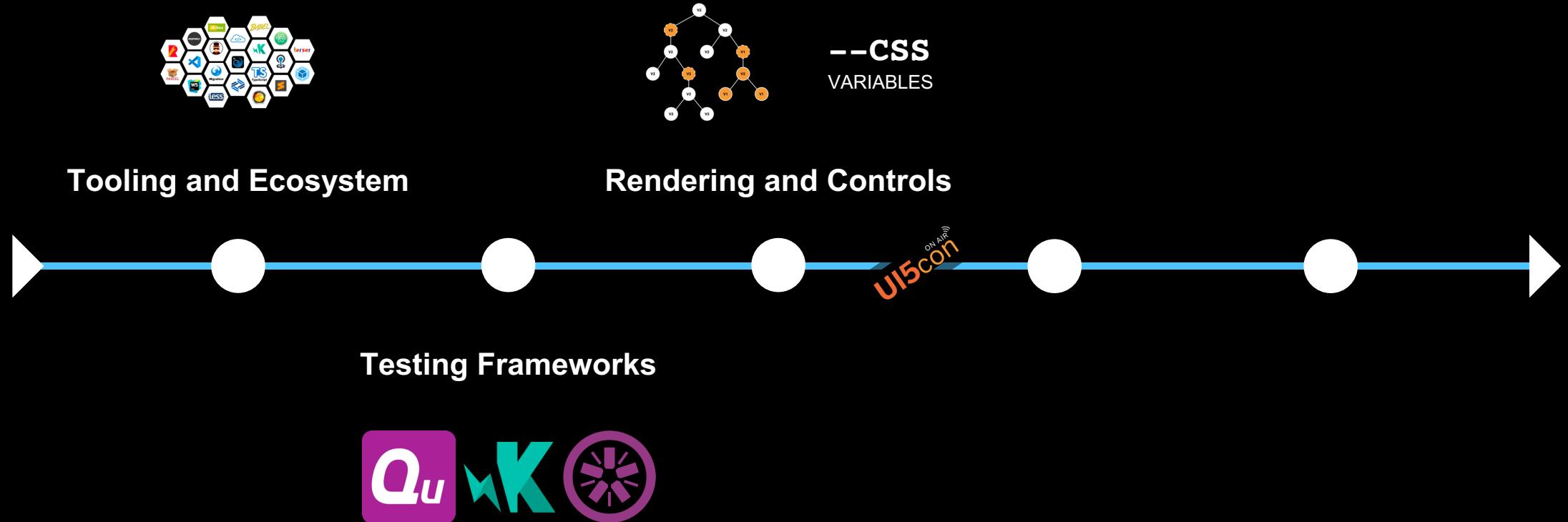


Stefan Beck



Peter Muessig

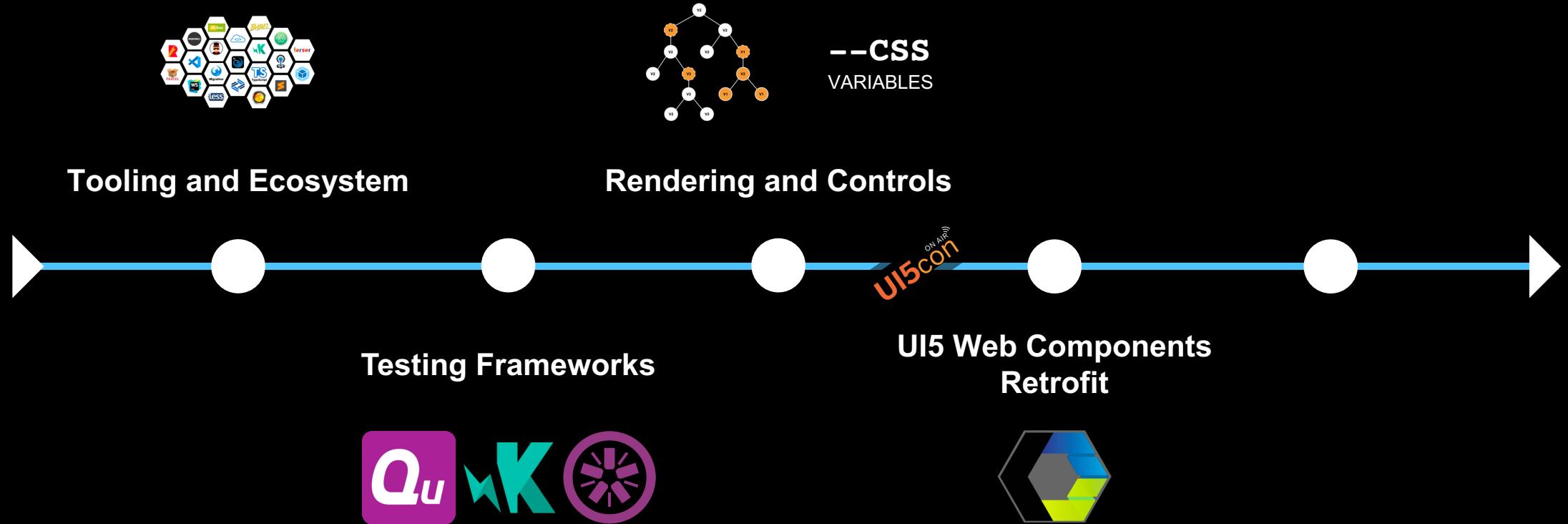
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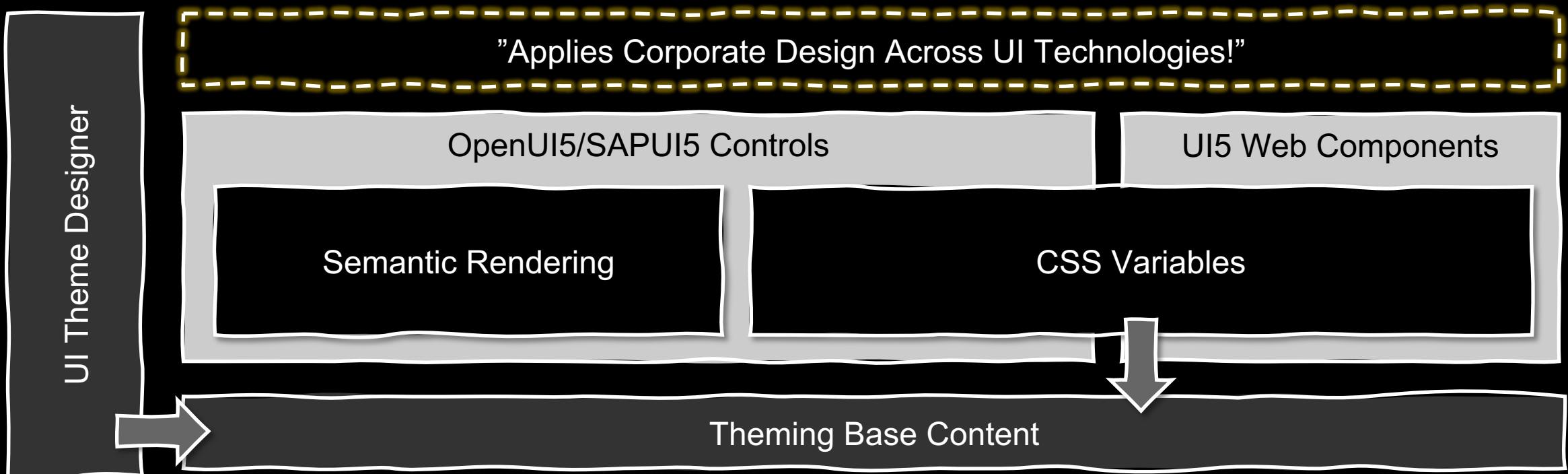
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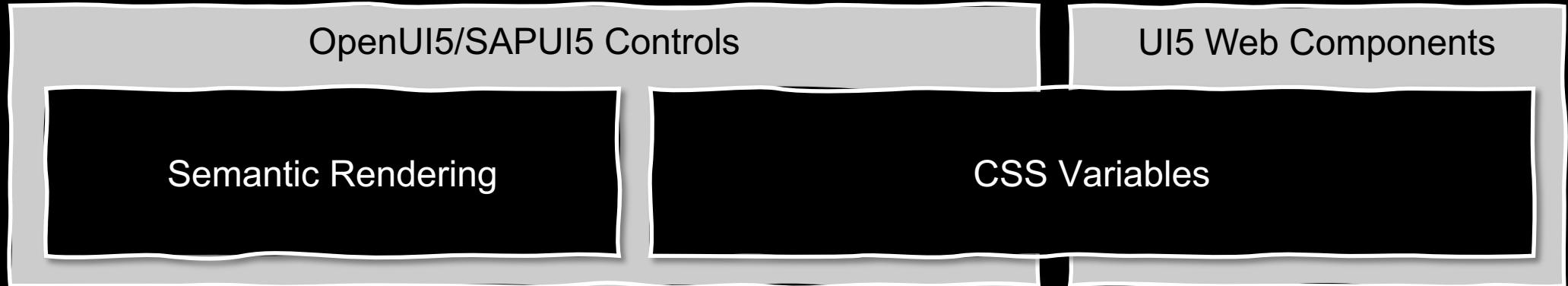
UI5 Web Components Retrofit



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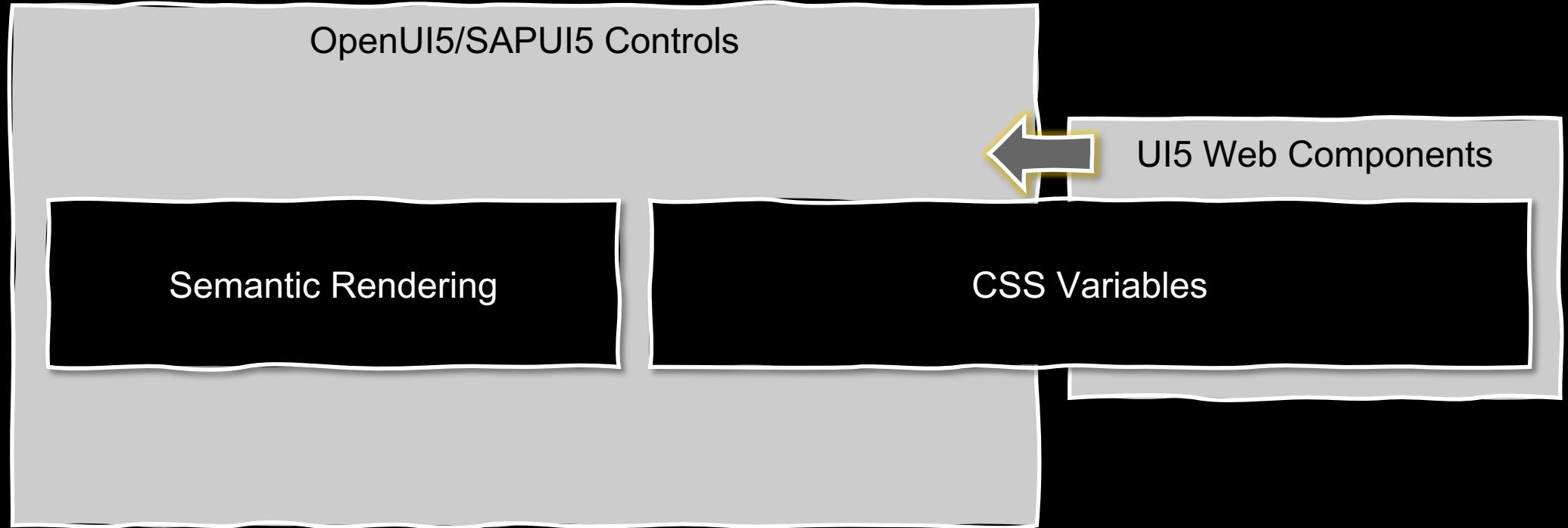
UI5 Web Components Retrofit



“Connecting Innovations!”

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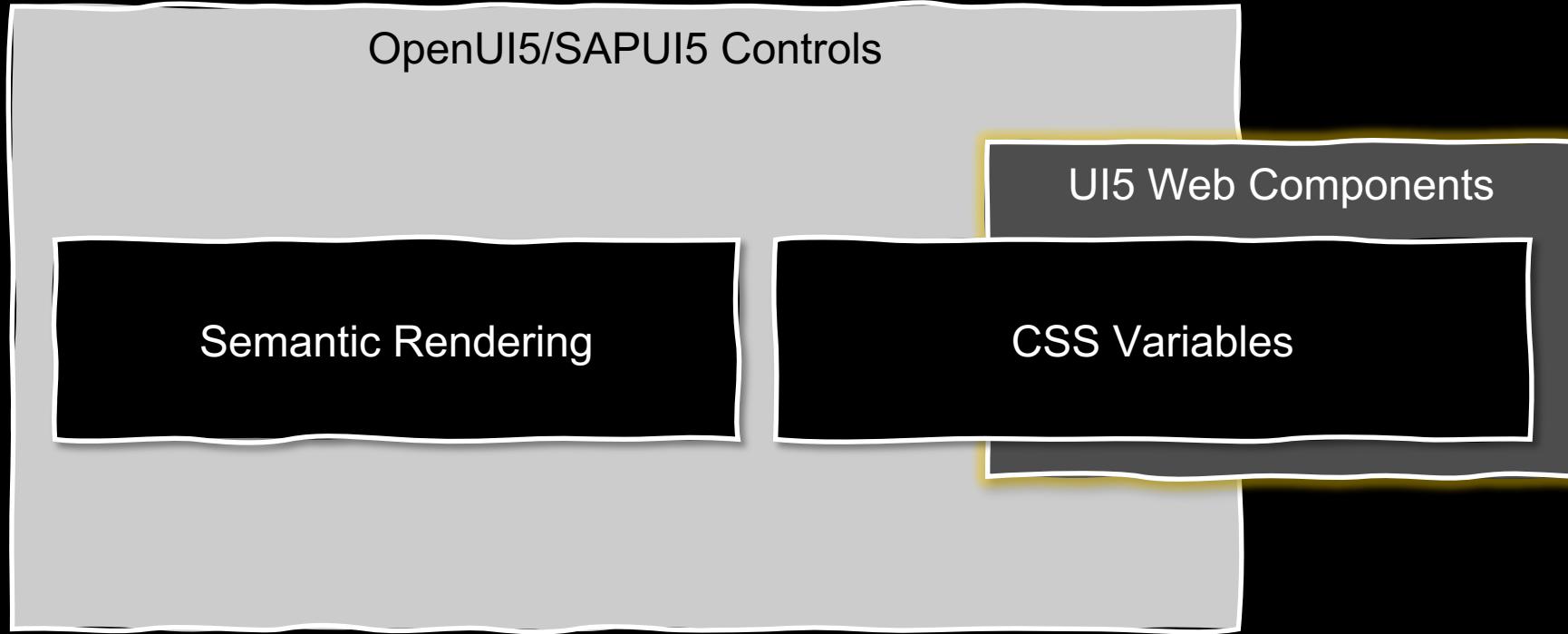
UI5 Web Components Retrofit



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UI5con
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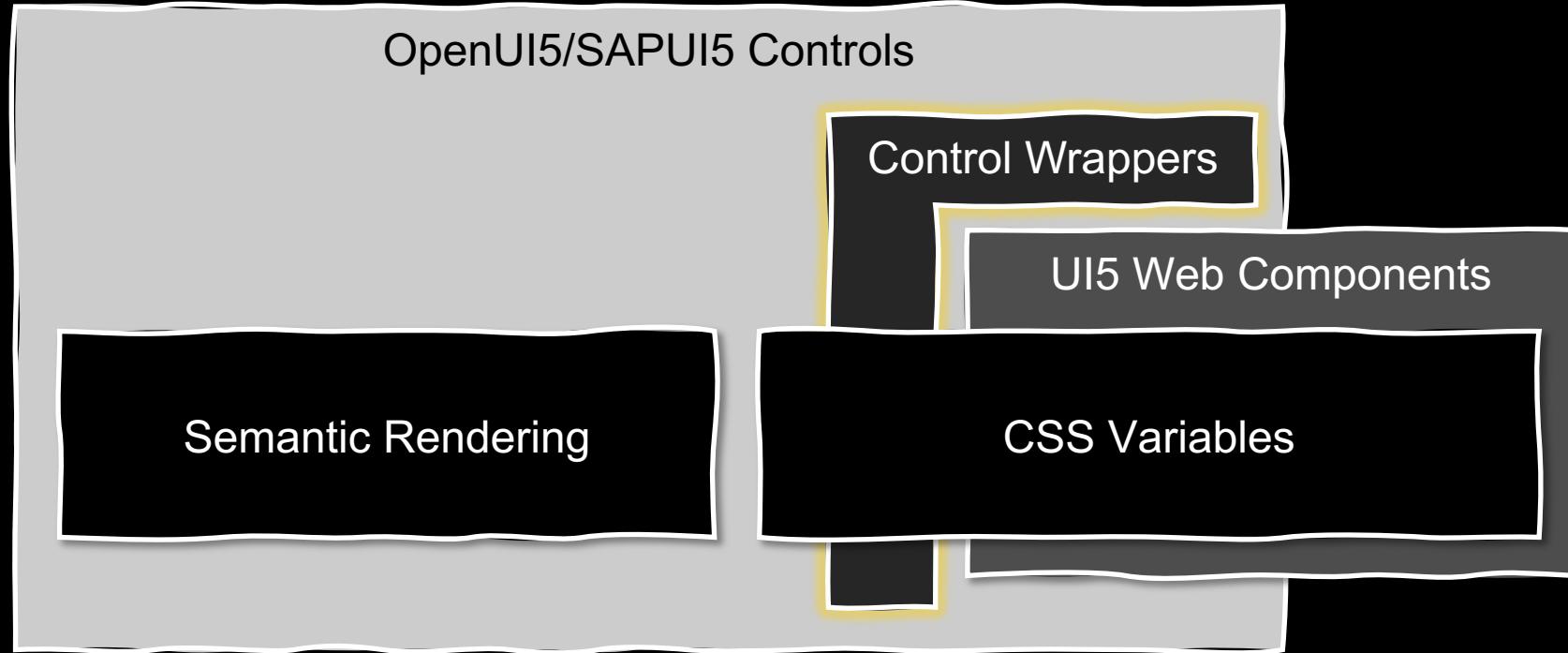
UI5 Web Components Retrofit



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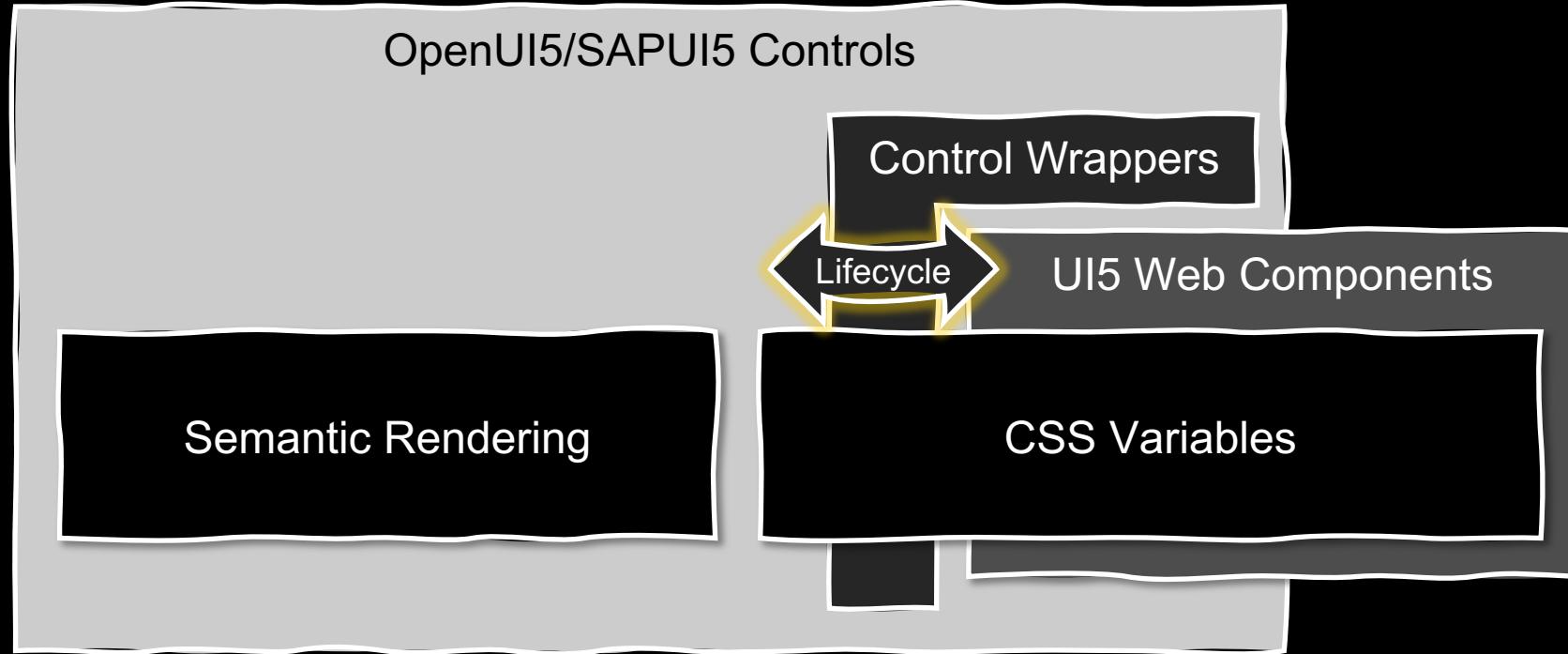
UI5 Web Components Retrofit



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UI5 Web Components Retrofit



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UI5 Web Components Retrofit – POC

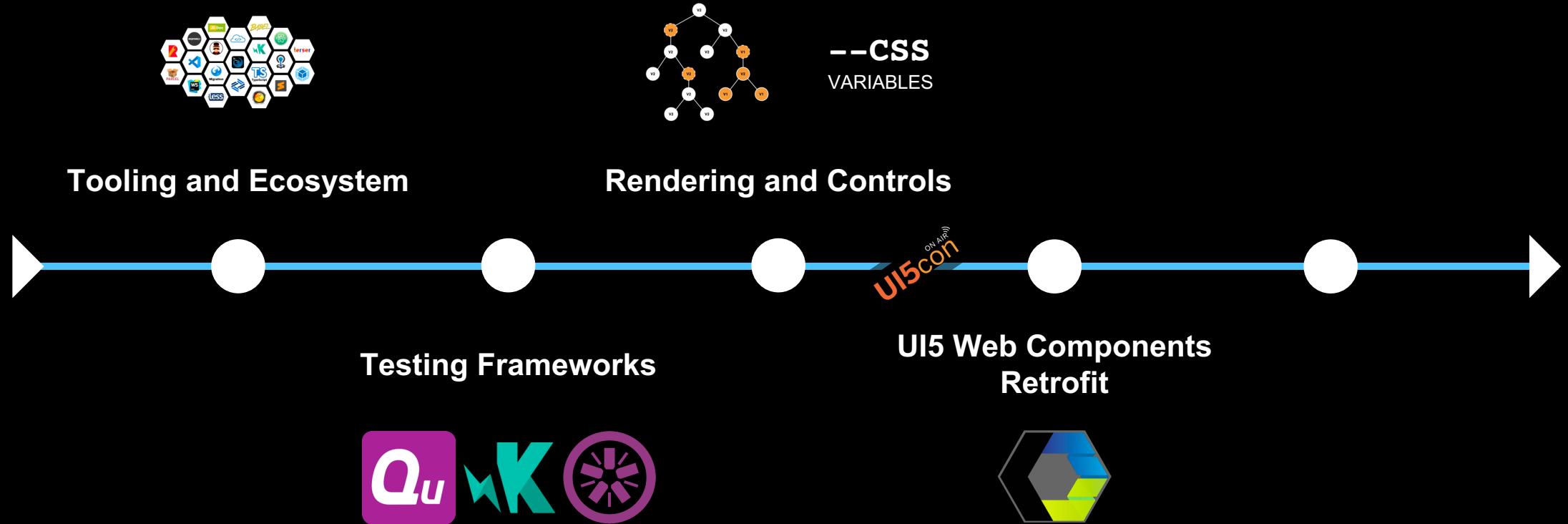


Stefan Beck



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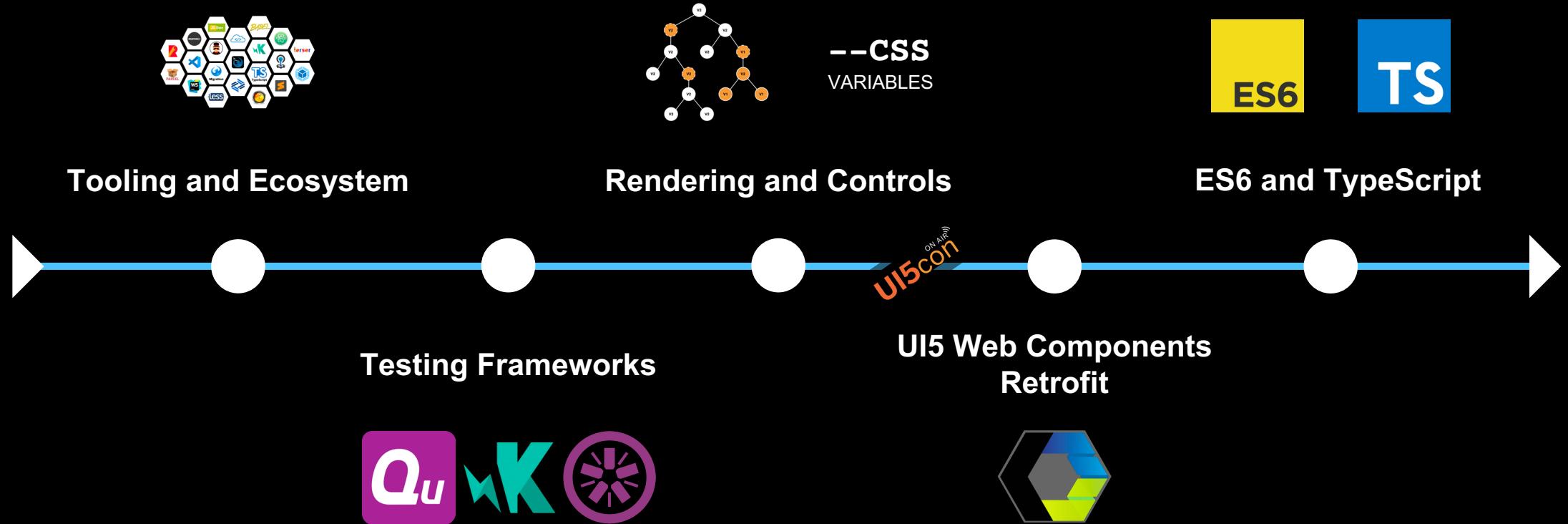
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UI5 Evolution – The UI5 Technology Innovation



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ES6 and TypeScript Enablement

The logo consists of two squares side-by-side. The left square is yellow and contains the text "ES6". The right square is blue and contains the text "TS".



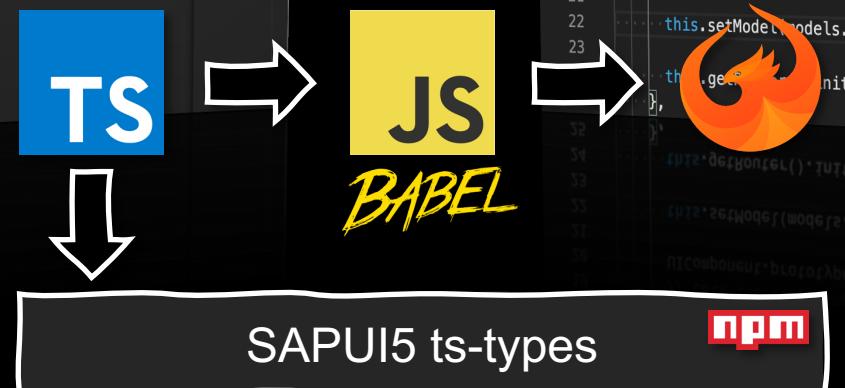
SAPUI5 ts-types



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ES6 and TypeScript Enablement

The footer features two large, bold, sans-serif logos. On the left is the 'ES6' logo, which consists of the letters 'E', 'S', and '6' stacked vertically. On the right is the 'TS' logo, which consists of the letters 'T' and 'S' stacked vertically. Both logos are rendered in white against a dark background.



SAPUI5 ts-types



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ES6 and TypeScript Enablement

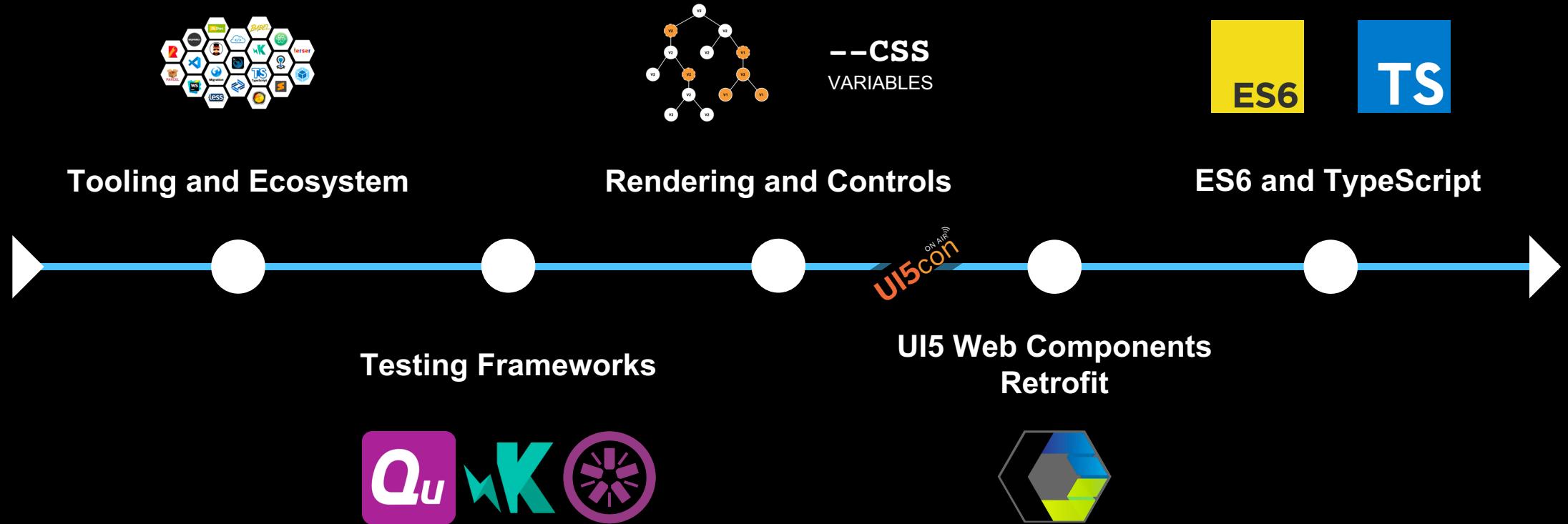


Stefan Beck



Peter Muessig

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Again, it's your turn to...

**...contribute to the
UI5 Ecosystem!**

**...keep pace with
our innovations!**

Again, it's your turn to...

**...help us to shape
UI5 together!**

...enjoy UI5con!

Thank you.

Stefan Beck

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