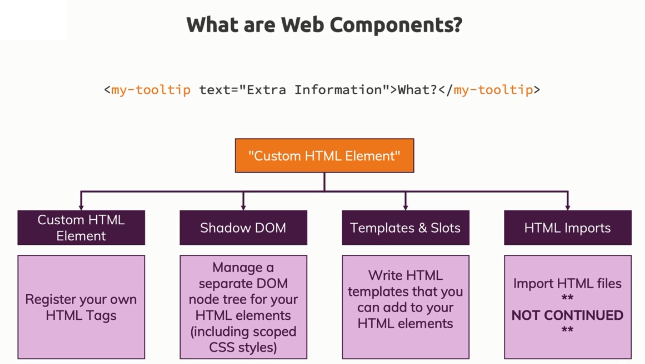
**Web Components & Stencil.js**

**Build Custom HTML Elements**

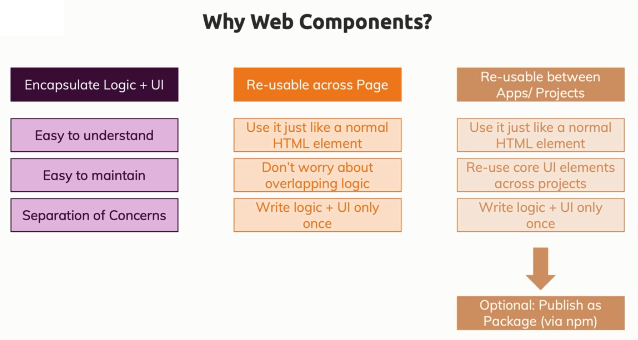
# Introduction

## What are Web Components

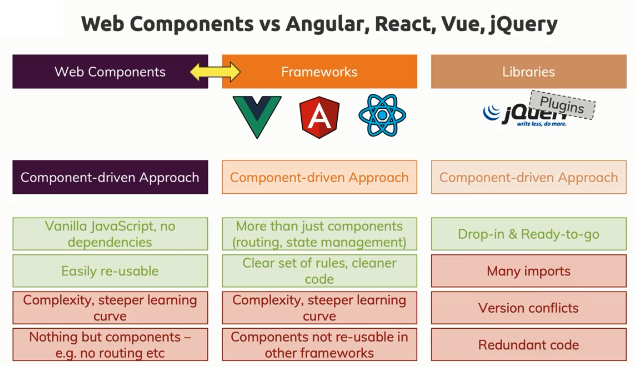


* Web components really are just your own custom HTML elements.
* Web components is a set of specifications
* The **shadow DOM** is all about having a separate DOM, a tree of DOM nodes behind your custom element that is separated from the normal DOM. This helps you for example with scoping your styles to your custom element, so that styling you set up for your custom element doesn't interfere with other parts of your application.
* Your custom element will in the end just be a combination of default HTML elements because in the end, the browser only knows how to handle these but you can compose them and add styling and add Javascript logic to create more powerful widgets.
* **Templates and slots** are another important specification because here you define this core structure behind your element, so you basically define the **template** which is then rendered as a shadow DOM and **slots** are helpful for exposing certain entry points, e.g. title of your modal. Slot allows us to pass dynamic content into our web component so that developers using our web components can use them and the set of features that are baked in. And still if our components wants that, pass extra content into the component.
* The HTML imports specification – That was meant to be a feature which allows you to import HTML files into HTML files, so that you can define these templates for your components in HTML files that are then imported dynamically. But this is discontinued now because the industry moved in a direction where we use Javascript for all of that and where we use modern build tools and Javascript modules to import and export inside of our Javascript files and import the HTML templates as strings there as well.

## Why Do We Use Web Components?



## Comparing Web Components & Frameworks (Angular, React, Vue, jQuery)



# Tips and Tricks

* The term Web component and Custom Element are used interchangeably.