

HTML5 in Oxygen

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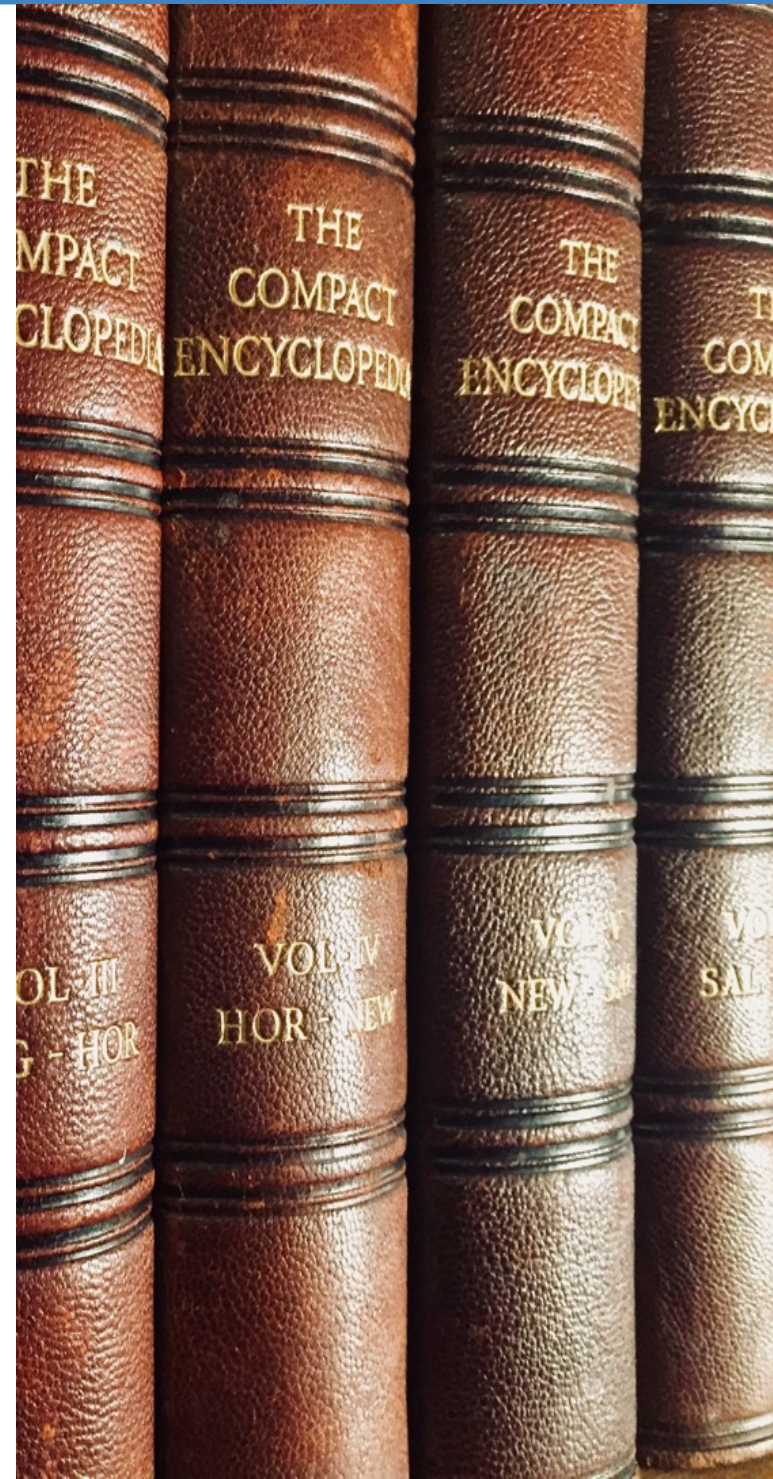
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HTML5

- HTML is the World Wide Web's core markup language
- HTML5 was the fifth and last major version of HTML



Agenda

- Specialized text-based and visual-based editing
- Syntax highlights based on the HTML5 specification
- Content completion based on the HTML5 schema
- Outline view that displays the document structure
- Validation against the W3C validator, including batch validation



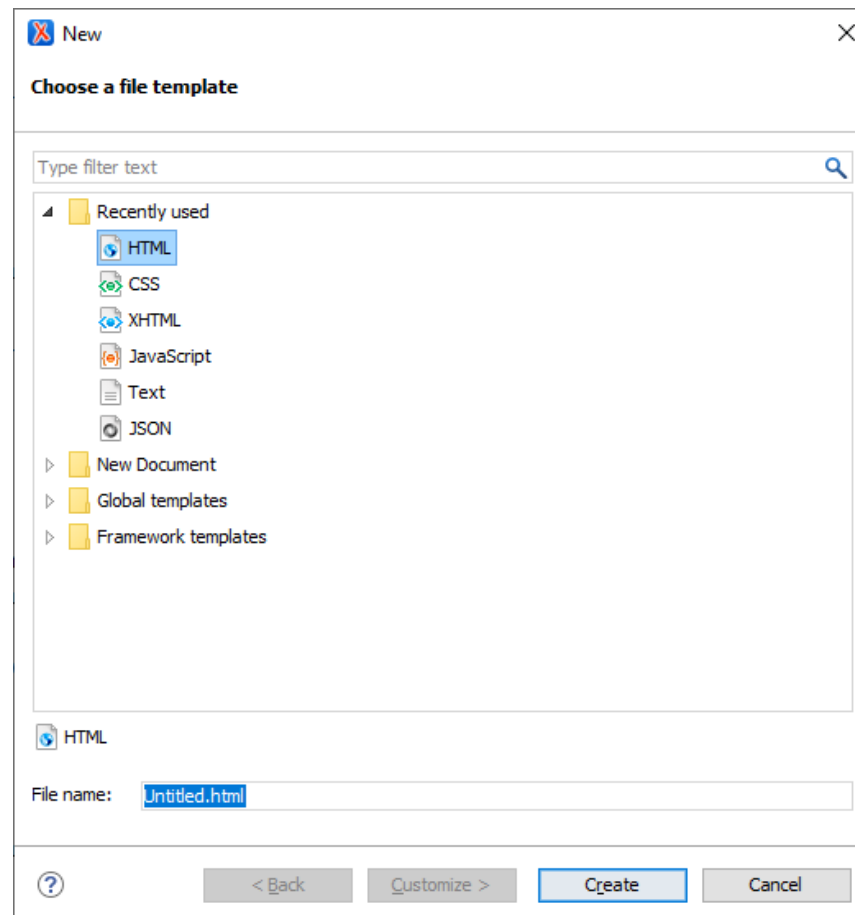
Creating HTML5 Documents

- New document template
- Content completion
- Documentation and link to specification
- Code templates



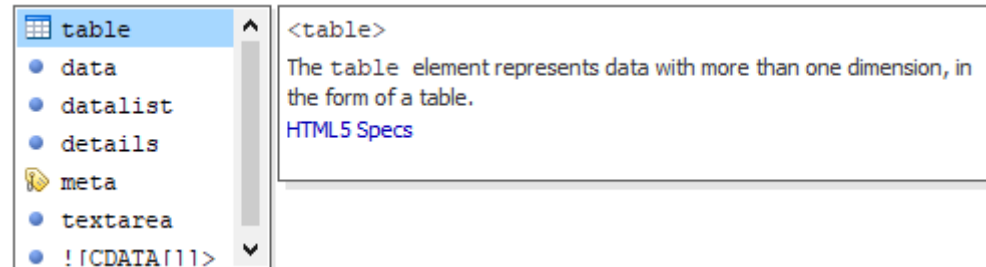
New document template

- New document template helps you get started creating HTML content
- Define your own document templates



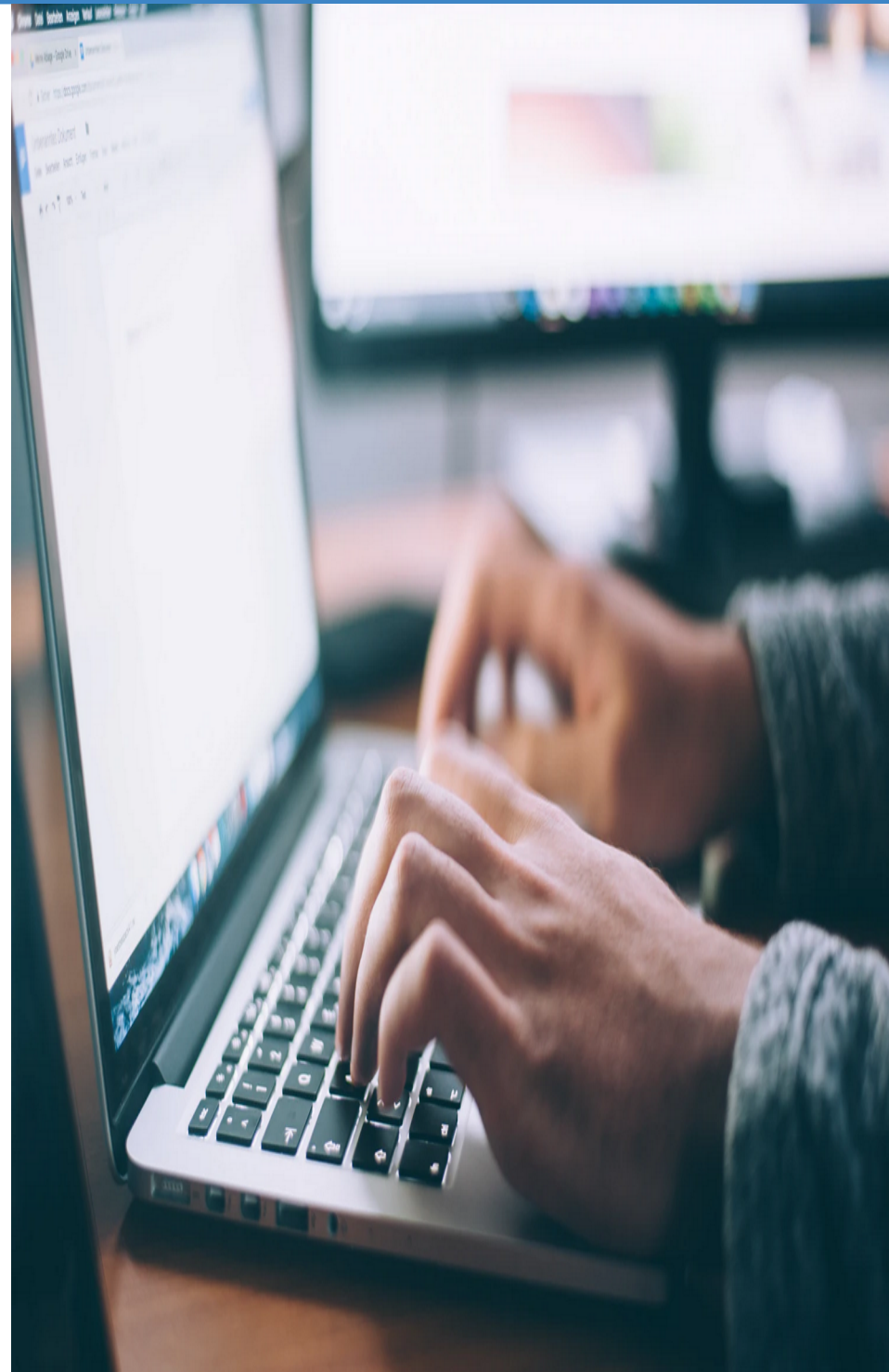
Content Completion

- Context-Sensitive
- Valid Proposals
- Documentation from Schema
- Code Templates



Editing HTML5

- Support to edit HTML5 documents (not XML wellformed)
- HTML5 syntax highlight
- HTML5 Outline View
- Format an Indent
- Folding
- Embedded CSS an JavaScript support



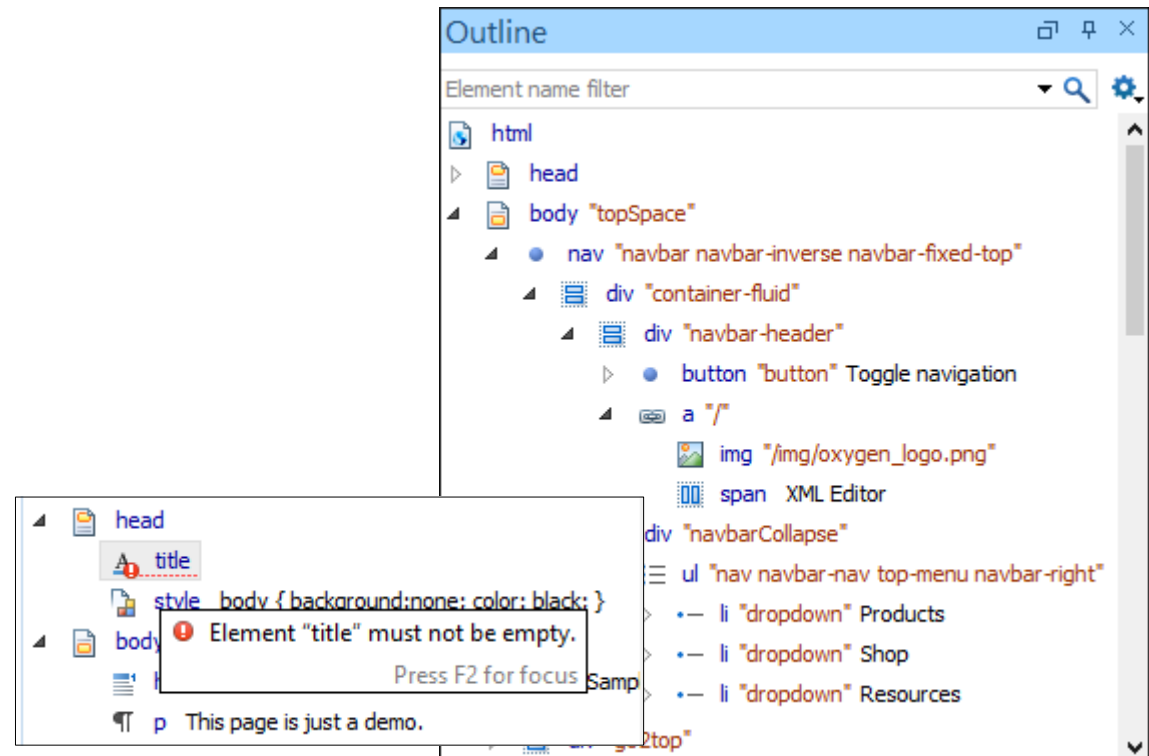
Syntax Highlighting

- Syntax highlighting for HTML5 handles attributes without quotes, unclosed or void elements
- Highlighting for embedded CSS or JavaScript content
- Customize colors

```
<!DOCTYPE html>
<html>
  <head>
    <title>Sample styled page</title>
    <style> body { background:none; color: black; }</style>
  </head>
  <body>
    <h1 onmouseover="bgChange(this.style.backgroundColor)">Sample styled page</h1>
    <p>This page is just a demo.
    <table>
      <tr><th rowspan=2>Grade. <th rowspan=2>Yield Point. <th colspan=2>Ultimate tensile strength
        <th rowspan=2>Per cent elong. 50.8mm or 2 in.
        <th rowspan=2>Per cent reduct. area.
```


HTML5 Outline View

- Document Overview
- Synchronization with Editor
- Filtering
- Error Markers



Format an Indent

- Format HTML5
- Format Embedded CSS an JavaScript

```
<table>
  <caption>Specification values: <b>Steel</b>, <b>Castings</b>, Ann. A.S.T.M. A27-16,
    Class B;* P max. 0.06; S max. 0.05.</caption>
  <tr>
    <th rowspan=2>Grade.
    <th rowspan=2>Yield Point.
    <th colspan=2>Ultimate tensile strength
    <th rowspan=2>Per cent elong. 50.8mm or 2 in.
    <th rowspan=2>Per cent reduct. area.
  <tr>
    <th>kg/mm<sup>2</sup>
    <th>lb/in<sup>2</sup>
  <tr>
```


Folding

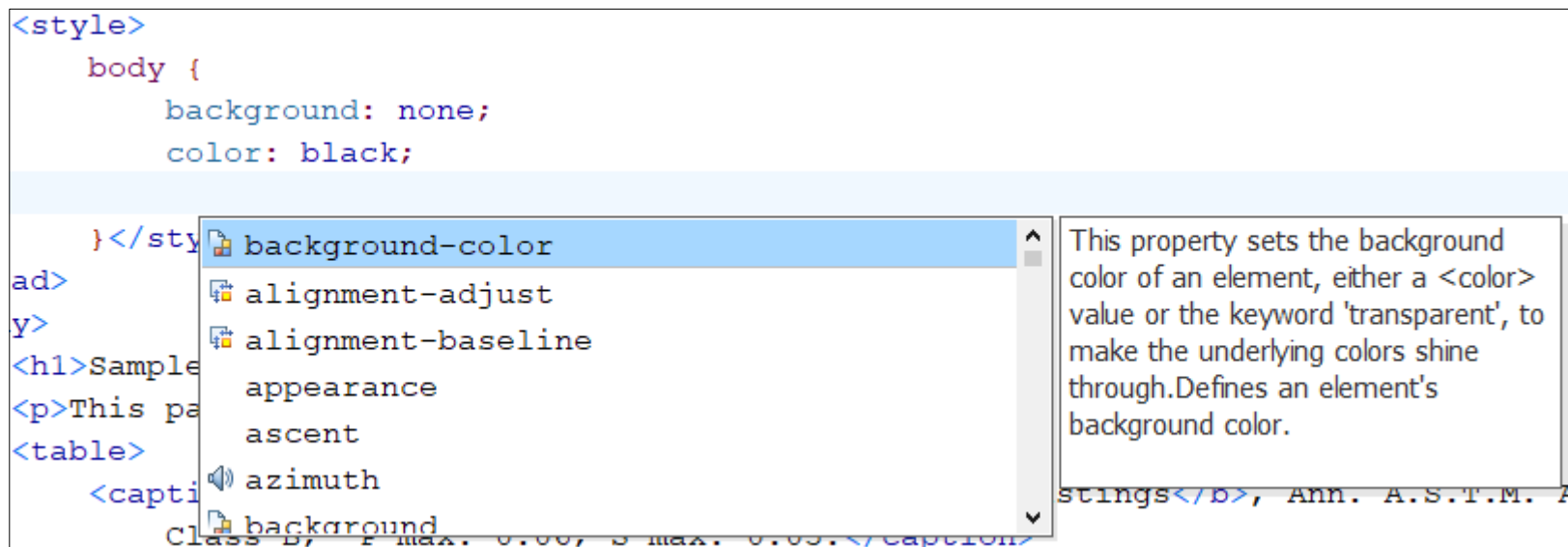
- In a large HTML document, elements can be collapsed so that only the needed data remains in focus

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Sample styled page</title>
5     <style> [4 lines]
10  </head>
11  <body>
12    <h1>Sample styled page</h1>
13    <p>This page is just a demo.
14    <table> [33 lines]
48  <script> [10 lines]
59  </body>
60 </html>
```

Embedded CSS and JavaScript Support

- Content completion and documentation for embedded CSS and JavaScript

```
<style>
  body {
    background: none;
    color: black;
  }</style>
</ad>
</y>
<h1>Sample
<p>This pa
<table>
  <capti
    Class B7, F max. 0.00, S max. 0.00.</caption>
```



The screenshot shows an IDE window with a code editor. The code editor contains HTML and CSS code. A dropdown menu is open over the code, listing CSS properties. The property 'background-color' is selected and highlighted in blue. To the right of the dropdown menu, a tooltip is displayed, providing documentation for the 'background-color' property. The tooltip text reads: 'This property sets the background color of an element, either a <color> value or the keyword 'transparent', to make the underlying colors shine through. Defines an element's background color.'

HTML5 Visual Editing

- HTML5 framework
- Specific actions
- Content completion



HTML5 Author Page

The screenshot shows an HTML5 authoring tool interface. At the top is a toolbar with various icons for text formatting (bold, italic, underline), linking, inserting images and videos, and table manipulation (insert, delete, join, split). Below the toolbar is a breadcrumb trail: `html > body > table > tr > td`. The main content area displays a sample page with the following elements:

Sample styled page

This page is just a demo.

Specification values: [Steel](#), [Castings](#), **Ann. A.S.T.M. A27-16, Class B;* P max. 0.06; S max. 0.05.**

Grade.	Yield Point.	Ultimate tensile strength		Per cent elong. 50.8mm or 2 in.	Per cent reduct. area.
		kg/mm ²	lb/in ²		
Hard	0.45 ultimate	56.2	80,000	15	20
Medium	0.45 ultimate	49.2	70,000	18	25
Soft	0.45 ultimate	42.2	60,000	22	30

HTML5 Validation

- Validation using W3C “Nu Html Checker”
- Validate HTML5 project
- Validation as-you-type



Batch Validate HTML5 Project

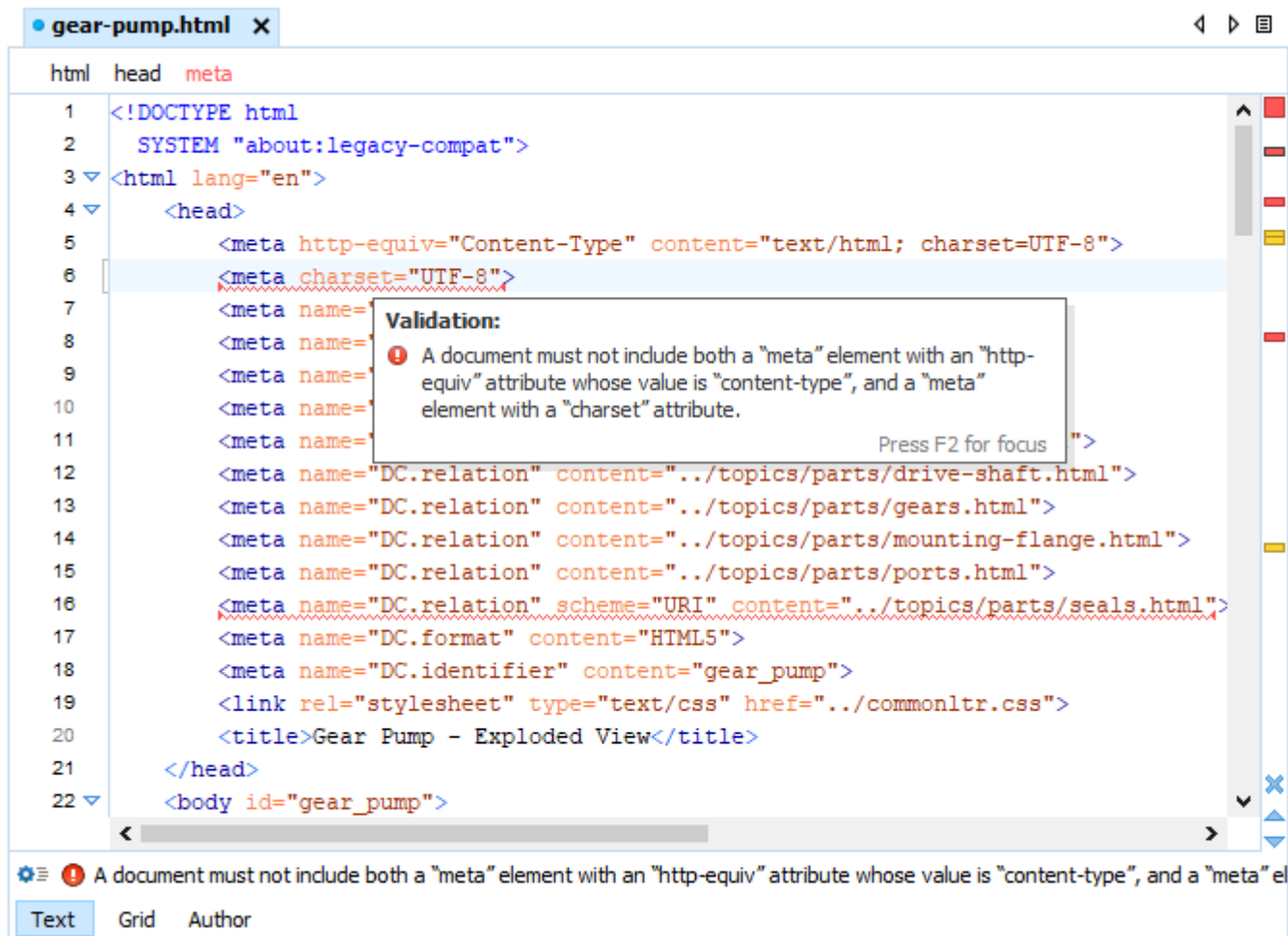
- Validate entire project
- Validate HTML5, CSS, and JavaScript

The screenshot displays the 'Problems' view in Oxygen XML Editor, titled 'Batch validation problems'. It lists validation errors and warnings for various files in a project. The table below summarizes the content shown in the screenshot.

File	Severity	Message	Resource
commonltr.css (1 item)			
commonltr.css	Error (E)	[W3C CSS Validator (CSS3)] Context : .align-char in property : text-align "char" is not a "text-align" value : char	commonltr.css
commonrtl.css (1 item)			
commonrtl.css	Error (E)	[W3C CSS Validator (CSS3)] Context : .align-char in property : text-align "char" is not a "text-align" value : char	commonrtl.css
copyright.html , scenario "HTML", document type "HTML" (3 items)			
copyright.html	Error (E)	[W3C HTML Validator] A document must not include both a "meta" element with an "http-equiv" attribute whose value is "content-type", and a "meta" ele...	copyright.html
copyright.html	Warning (W)	[W3C HTML Validator] The "main" role is unnecessary for element "main".	copyright.html
copyright.html	Warning (W)	[W3C HTML Validator] The "article" role is unnecessary for element "article".	copyright.html
gear-pump.html , scenario "HTML", document type "HTML" (6 items)			
gear-pump.html	Error (E)	[W3C HTML Validator] A document must not include both a "meta" element with an "http-equiv" attribute whose value is "content-type", and a "meta" ele...	gear-pump.html
gear-pump.html	Error (E)	[W3C HTML Validator] The "scheme" attribute on the "meta" element is obsolete. Use only one scheme per field, or make the scheme declaration part of t...	gear-pump.html
gear-pump.html	Warning (W)	[W3C HTML Validator] The "main" role is unnecessary for element "main".	gear-pump.html
gear-pump.html	Warning (W)	[W3C HTML Validator] The "article" role is unnecessary for element "article".	gear-pump.html
gear-pump.html	Error (E)	[W3C HTML Validator] Bad value "172, 265, 14" for attribute "coords" on element "area": Expected a minus sign or a digit but saw " " instead.	gear-pump.html
gear-pump.html	Warning (W)	[W3C HTML Validator] The "navigation" role is unnecessary for element "nav".	gear-pump.html
introduction.html , scenario "HTML", document type "HTML" (3 items)			

Validate HTML5 Document

- Validation highlights
- Tooltip with information about the problem



The screenshot shows the Oxygen XML Editor interface with a file named "gear-pump.html" open. The editor displays the HTML5 document structure, including the DOCTYPE declaration, the `<html>` root element, and the `<head>` section. The `<meta charset="UTF-8">` element on line 6 is highlighted in blue, indicating a validation error. A tooltip is displayed over this element, providing the following information:

Validation:
❗ A document must not include both a "meta" element with an "http-equiv" attribute whose value is "content-type", and a "meta" element with a "charset" attribute.
Press F2 for focus

The error message is also visible in the status bar at the bottom of the editor. The document content is as follows:

```
1 <!DOCTYPE html
2   SYSTEM "about:legacy-compat">
3 <html lang="en">
4   <head>
5     <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
6     <meta charset="UTF-8">
7     <meta name=
8     <meta name=
9     <meta name=
10    <meta name=
11    <meta name=
12    <meta name="DC.relation" content="../topics/parts/drive-shaft.html">
13    <meta name="DC.relation" content="../topics/parts/gears.html">
14    <meta name="DC.relation" content="../topics/parts/mounting-flange.html">
15    <meta name="DC.relation" content="../topics/parts/ports.html">
16    <meta name="DC.relation" scheme="URI" content="../topics/parts/seals.html">
17    <meta name="DC.format" content="HTML5">
18    <meta name="DC.identifier" content="gear_pump">
19    <link rel="stylesheet" type="text/css" href="../commonltr.css">
20    <title>Gear Pump - Exploded View</title>
21  </head>
22  <body id="gear_pump">
```

Validating HTML5 with Schematron

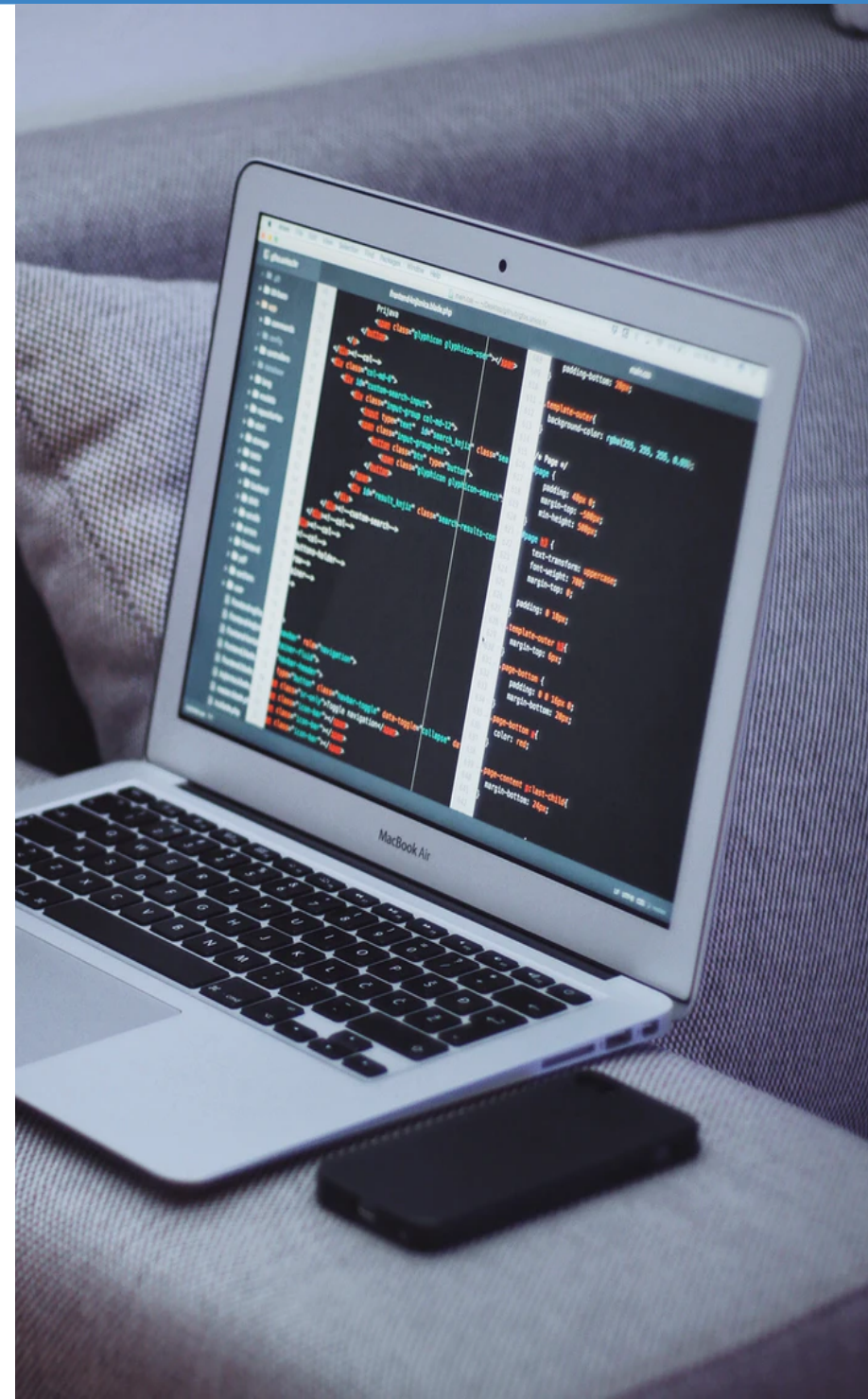


Coming Next!



Querying HTML5

- Query using XPath
- Run XPath on multiple HTML5 documents



XPath

- XPath Toolbar
- XPath Builder View
- Content Completion
- XPath Over Multiple Files

XPath 3.1

bushings.html x

html body main article div section p dfn

```

1 TYPE html
2 TEM "about:legacy-compat">
3 lang="en"><head><meta http-equiv="Content-Type" content="text/html; charset=UTF-8"><meta
4 class="title topictitle1" id="ariaid-title1">Bushings</h1>
5 class="body">
6 ction class="section" id="bushings_topic__bushings"><h2 class="title sectiontitle">Bushings
7
8 class="p">A <dfn class="term">bushing</dfn>, also known as a <dfn class="term">bush</dfn>
9 hat is inserted into a housing to provide a bearing surface for rotary applications. The
10 ushings in the <strong class="ph b">gear pump</strong> provide a bearing surface for the <
11 ection>
12

```

Text Grid Author

Description - 12 items	XPath location	Resource
pumps	/html[1]/body[1]/main[1]/article[1]/div[1]/p[2]/dfn[1]	gear-pump.html
Gear pumps	/html[1]/body[1]/main[1]/article[1]/div[1]/p[2]/dfn[2]	gear-pump.html
bushing	/html[1]/body[1]/main[1]/article[1]/div[1]/section[1]/p[1]/dfn[1]	bushings.html
bush	/html[1]/body[1]/main[1]/article[1]/div[1]/section[1]/p[1]/dfn[2]	bushings.html
drive shaft	/html[1]/body[1]/main[1]/article[1]/div[1]/section[1]/p[1]/dfn[1]	drive-shaft.html
bushings	/html[1]/body[1]/main[1]/article[1]/div[1]/p[1]/a[1]/dfn[1]	gears.html

XPath - Project x

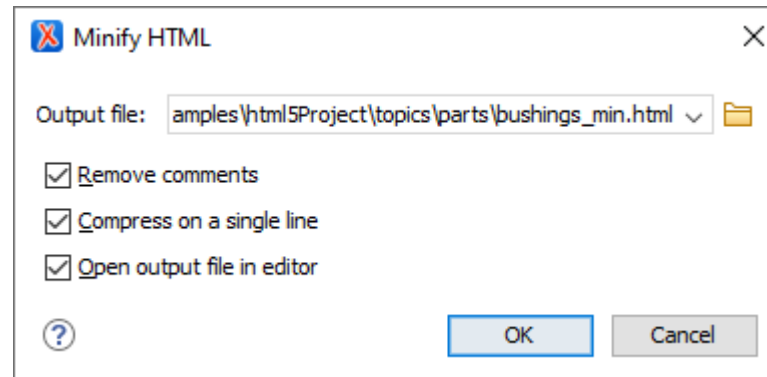
Minification/Compression

- Reduce the size of the HTML documents
- Available for HTML and CSS files



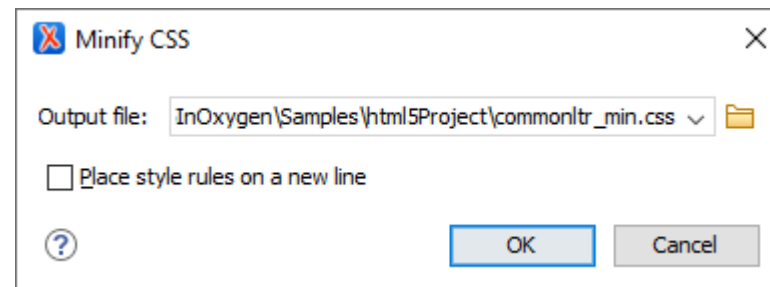
Minifying HTML5 Documents

- Remove unnecessary white spaces
- Remove comments
- Compress on a single line



Minifying CSS Stylesheets

- Removing unnecessary code without affecting the functionality
- Place each style rule on a new line



Emmet Plugin

- Oxygen supports Emmet snippets
- Toolkit for high-speed HTML coding and editing
- Type abbreviations, similar to CSS selectors, and expand them into full-fledged HTML code

```
ul>li*5
```



docs.emmet.io

oxygenxml.com/doc/ug-editor/topics/emmet-addon.html

CSS-like Editing

- **Expand abbreviation** - expands abbreviations into code snippets
- **Wrap with abbreviation** - expands it and places currently selected content in the last element of generated snippet
- Available for HTML and XML editors
- Specific abbreviations for XSLT

docs.emmet.io/cheat-sheet/

Expand Abbreviation

`ul>li*5`



```
<ul>
  <li></li>
  <li></li>
  <li></li>
  <li></li>
  <li></li>
</ul>
```

`#page>div.logo+ul#navigation>li*5>a{Item $}`



```
<div id="page">
  <div class="logo"></div>
  <ul id="navigation">
    <li><a href="">Item 1</a></li>
    <li><a href="">Item 2</a></li>
    <li><a href="">Item 3</a></li>
    <li><a href="">Item 4</a></li>
    <li><a href="">Item 5</a></li>
  </ul>
</div>
```


Wrap With Abbreviation

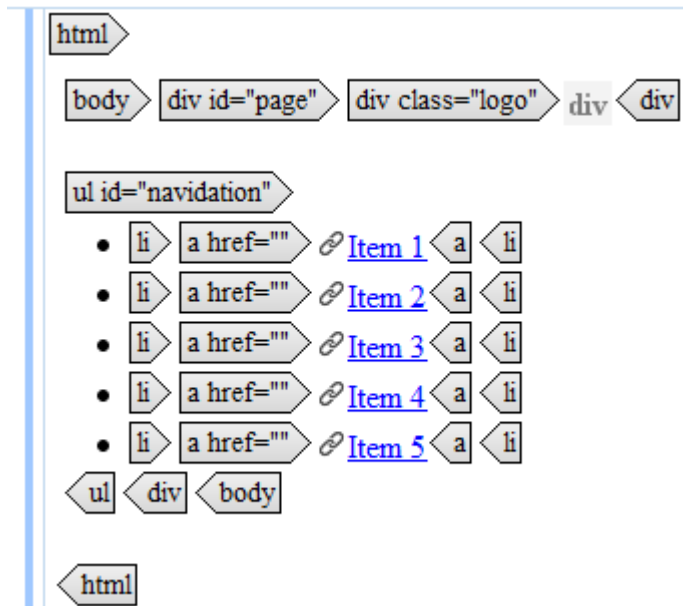
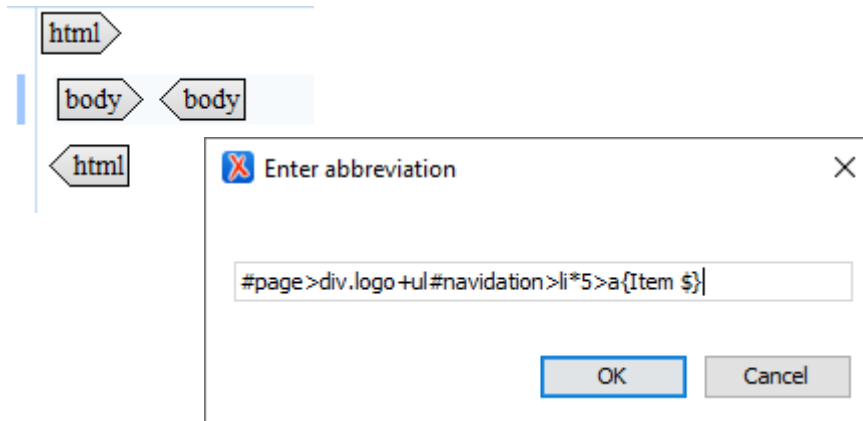
```
ul>li[title=$#]*>{$#}+img[alt=$#]
```

About
News
Products
Contacts



```
<ul>  
  <li title="About">About<img src="" alt="About" class=""></li>  
  <li title="News">News<img src="" alt="News" class=""></li>  
  <li title="Products">Products<img src="" alt="Products" class=""></li>  
  <li title="Contacts">Contacts<img src="" alt="Contacts" class=""></li>  
</ul>
```

Emmet Abbreviations Author



Conclusion

- HTML5 editing support
- Validation of HTML5 documents
- Query using XPath
- Compress HTML5 and CSS documents
- Emmet snippets



A long-exposure photograph of a highway at night, showing vibrant light trails from cars in shades of white, yellow, and red. The road curves into the distance under a dark blue sky with some distant lights.

Questions?

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