



CKEditor™

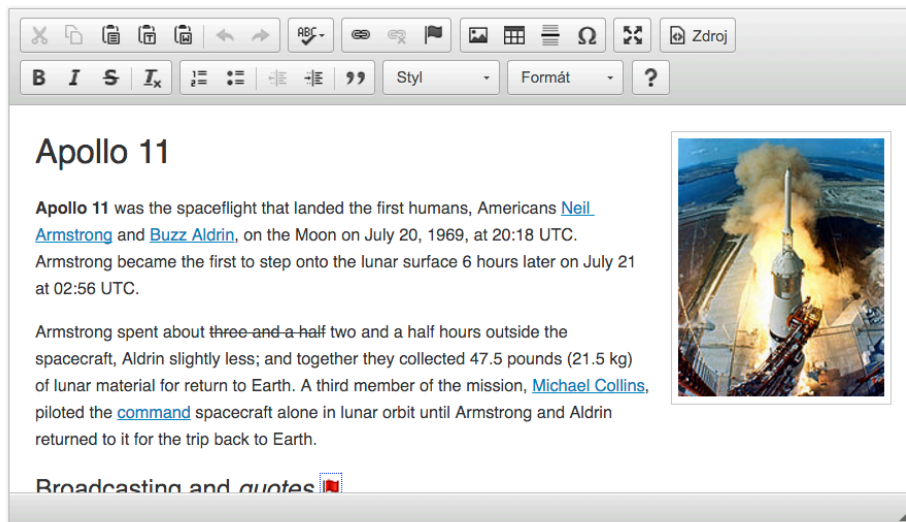
Jakub Chalupa

A4M35OSP

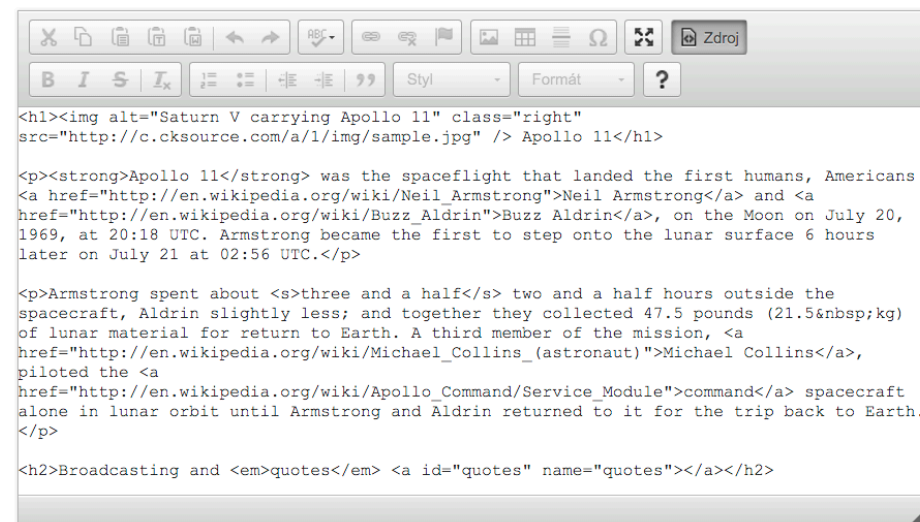
jakub.chalupa@cvut.cz

About CKEditor

- WYSIWYG web editor
- JavaScript core
- Supports all modern browsers since IE8
- GPL, LGPL, MPL licenses



The screenshot shows the CKEditor WYSIWYG interface. The top toolbar includes icons for undo, redo, bold, italic, strikethrough, bulleted list, numbered list, link, unlink, and a 'Zdroj' button. Below the toolbar, the text 'Apollo 11' is displayed in a large font. The main content area contains the following text: 'Apollo 11 was the spaceflight that landed the first humans, Americans [Neil Armstrong](#) and [Buzz Aldrin](#), on the Moon on July 20, 1969, at 20:18 UTC. Armstrong became the first to step onto the lunar surface 6 hours later on July 21 at 02:56 UTC.' To the right of the text is an image of the Saturn V rocket launching. Below the image, the text continues: 'Armstrong spent about ~~three-and-a-half~~ two and a half hours outside the spacecraft, Aldrin slightly less; and together they collected 47.5 pounds (21.5 kg) of lunar material for return to Earth. A third member of the mission, [Michael Collins](#), piloted the [command](#) spacecraft alone in lunar orbit until Armstrong and Aldrin returned to it for the trip back to Earth.'




The screenshot shows the CKEditor source code view. The top toolbar is identical to the WYSIWYG view. The main content area displays the HTML source code for the text shown in the WYSIWYG view. The code includes the following elements: a heading tag for 'Apollo 11', an image tag for the Saturn V launch, a paragraph with bold tags for 'Apollo 11' and links for 'Neil Armstrong' and 'Buzz Aldrin', another paragraph with a link for 'Michael Collins' and a link for 'command', and a heading tag for 'Broadcasting and quotes'.




Developers & Community

- Developers center
 - <http://dev.ckeditor.com>
 - developers documentation
 - open tickets (bugs, improvements...)
- Pull requests
 - <https://github.com/ckeditor/ckeditor-dev>

My contribution

- Ticket [#14451](#)
 - Widget crashes if editable region has a numeric ID

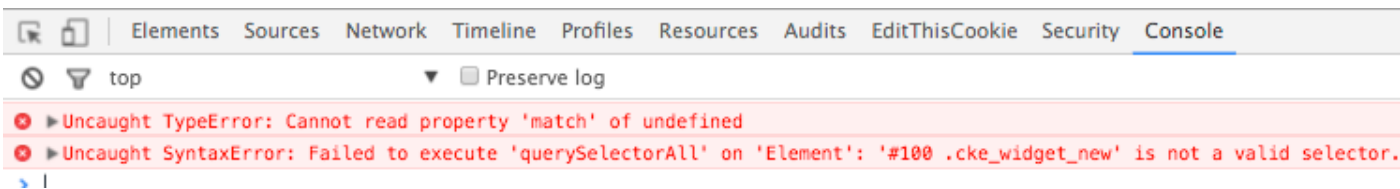


```
Zdroj B I        
```

```
<figure class="image" style="float:right">

<figcaption id="100">Apollo CMS-LM spacecraft</figcaption>

</figure>
```



```
Elements Sources Network Timeline Profiles Resources Audits EditThisCookie Security Console
top [x] Preserve log
Uncaught TypeError: Cannot read property 'match' of undefined
Uncaught SyntaxError: Failed to execute 'querySelectorAll' on 'Element': '#100 .cke_widget_new' is not a valid selector.
```

Solution

- Escaping function created

```
1358 + /**
1359 +  * Returns escaped CSS selector. CSS.escape() is used if defined, leading digit is escaped otherwise.
1360 +  *
1361 +  * @since 4.5.8
1362 +  * @param {String} selector Selector to escape.
1363 +  * @returns {String} Escaped selector.
1364 +  */
1365 + escapeCss: function( selector ) {
1366 +     // Invalid input.
1367 +     if ( typeof selector === 'undefined' || selector === null || selector.length === 0 ) {
1368 +         return '';
1369 +     }
1370 +
1371 +     // CSS.escape() can be used.
1372 +     if ( typeof CSS !== 'undefined' && typeof CSS.escape !== 'undefined' ) {
1373 +         return CSS.escape( selector );
1374 +     }
1375 +
1376 +     // Simple leading digit escape.
1377 +     if ( !isNaN( parseInt( selector.charAt( 0 ), 10 ) ) ) {
1378 +         return '\\3' + selector.charAt( 0 ) + ' ' + selector.substring( 1, selector.length );
1379 +     }
1380 +
1381 +     return selector;
1356 | 1382 |     }
```

Solution

- ... and used when necessary

```
function getContextualizedSelector( element, selector ) {  
-   return '#' + element.$.id + ' ' + selector.split( /,\s*/ ).join( ' ', '#' + element.$.id + ' ' );  
+   return '#' + CKEDITOR.tools.escapeCss( element.$.id ) + ' ' + selector.split( /,\s*/ ).join( ' ', '#' + CKEDITOR.tools.escapeCss( element.$.id  
}
```

- Tests took more effort than solution itself
 - 3 unit tests
 - 1 contextual test
 - total 93 lines

Result

- Solution accepted but slightly refactored
 - [pull request](#) with discussion
 - [ticket](#) with final solution
 - [new branch](#) to merge
- Still awaiting to merge into master branch
 - 2 versions skipped already

Conclusion

- Fast and productive communication with community
- Good advices from project members
- In the end little "fight" about how the code will look like 😊
 - [communication](#)

Thank you!