

Open APIs  
for Open  
Minds

# All the Cool Kids are using JavaScript

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# Splash Screen Plug-In for DITA-OT

● JavaScript 100.0%

Displays a Random Cat/XKCD Comic whilst compiling DITA

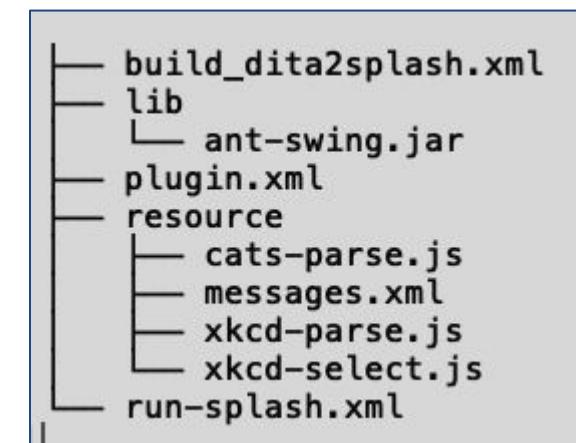
XKCD.com API: <https://xkcd.com/json.html>

CatsAPI <http://thecatapi.com/docs.html>

- **Extension:** depend.preprocess.pre
- **JavaScript:** Simple String Manipulation  
Random Number Generation

```
var input = project.getProperty("xkcd.latest");
var pos = input.indexOf('"num": ');
var len = input.indexOf(",", pos);

project.setProperty(
  "num",
  Math.floor(Math.random() * input.substring(pos + 6, len) + 1)
);
```



# Splash Screen Plug-In for DITA-OT

● JavaScript 100.0%

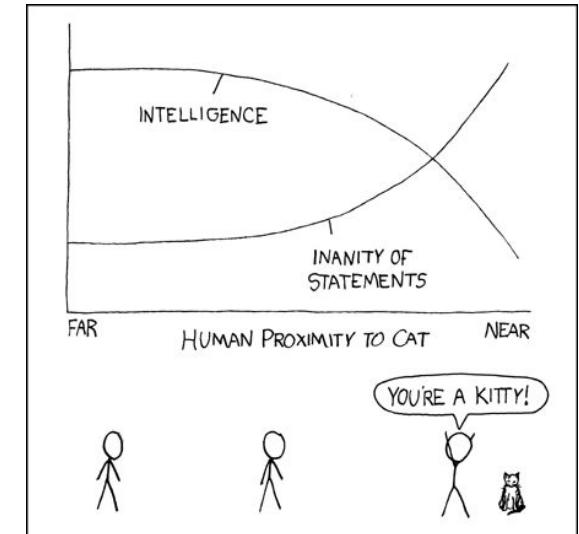
- **Invoke:** Using `<script>` element

```
<script language="javascript" src="${dita.plugin.fox.jason.splash.dir}/resource/xkcd-select.js"/>
```

- Use `<java>` task with Ant Launcher to amend the classpath

```
<java classname="org.apache.tools.ant.launch.Launcher" classpathref="splash.classpath" fork="true" spawn="true">
    <arg value="-buildfile"/>
    <arg value="${dita.plugin.fox.jason.splash.dir}/run-splash.xml"/>
    <arg value="-Dsplash.image=${splash.image.url}"/>
    <arg value="-Dsplash.title=${splash.title}"/>
    <arg value="-Dsplash.duration=20000"/>
</java>
```

- **GitHub:** fox.jason.splash



# ReadTheDocs Plug-In for DITA-OT

● JavaScript 100.0%

Extends the Markdown Plugin to create .yaml file suitable for ReadTheDocs

- **Transform:** build-init plus Markdown plus post-process

```
<target name="readthedocs">
  <create-readthedocs dir="${dita.output.dir}" file="index.md"/>
</target>

<target depends="readthedocs.init, dita2markdown, readthedocs, readthedocs.css"
       name="dita2readthedocs"/>
```

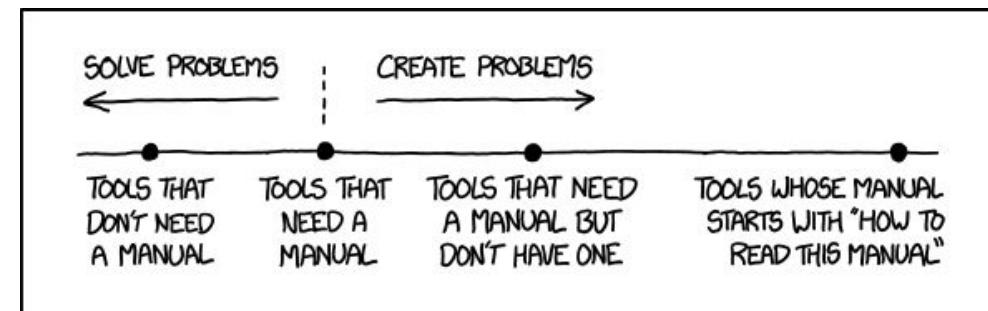
```
└── build_dita2readthedocs.xml
└── plugin.xml
└── resource
    └── antlib.xml
    └── create-ditamap.js
    └── create-readthedocs.js
```

- Use an Init Target to includes AntLib

```
<typedef file="${dita.plugin.fox.json.readthedocs.dir}/resource/antlib.xml"/>
```

- Define Macro using **<scriptdef>** element

```
<scriptdef language="javascript" name="create-readthedocs" src=
${dita.plugin.fox.json.readthedocs.dir}/resource/create-readthedocs.js">
  <attribute name="file"/>
  <attribute name="dir"/>
</scriptdef>
```



# ReadTheDocs Plug-In for DITA-OT

● JavaScript 100.0%

- **JavaScript** : File Manipulation

```
var file = attributes.get("file");
var dir = attributes.get("dir");

function rewriteAsYAML(filename) {
    var indexFile = org.apache.tools.ant.util.FileUtils.readFully(
        new java.io.FileReader(dir + '/' + filename));
    ...etc

    var task = project.createTask('echo');
    task.setFile(new java.io.File(dir + '/mkdocs.yml'));
    task.setMessage(output.join('\n'));
    task.setForce(true);
    task.perform();
}

rewriteAsYAML(file);
```

HELLO, 9!!? I JUST TRIED TO TOAST  
SOME BREAD, AND THE TOASTER GREW  
AN ARM AND STABBED ME IN THE FACE!

DID YOU READ THE  
TOASTER'S MAN PAGE FIRST?

WELL, NO, BUT ALL  
I WANTED WAS-



- **GitHub**: fox.jason.readthedocs

# DITA Prettier Plug-In for DITA-OT

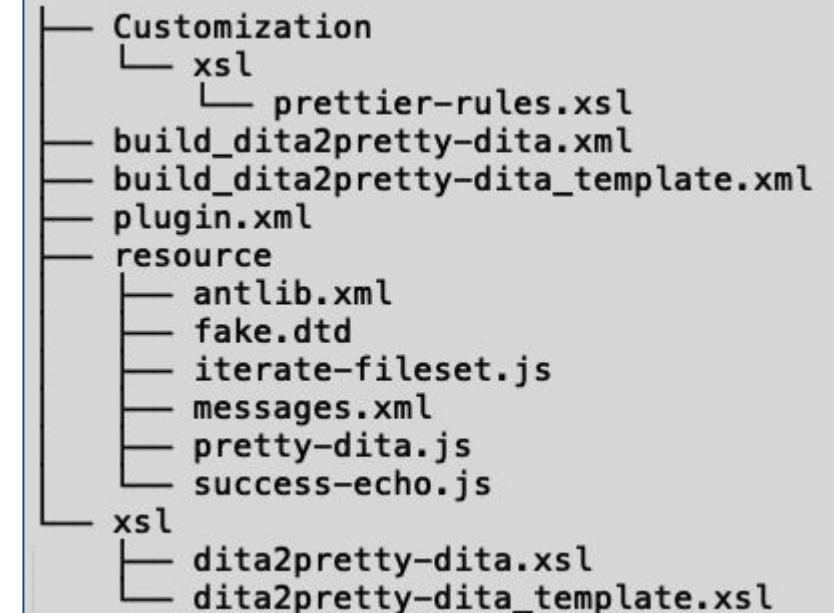
● JavaScript 51.1%

● XSLT 48.9%

Tidies Whitespace and standardizes line length  
of DITA files

- **Transform:** Full custom XSL Transform
- When processing raw DITA use a fake DTD

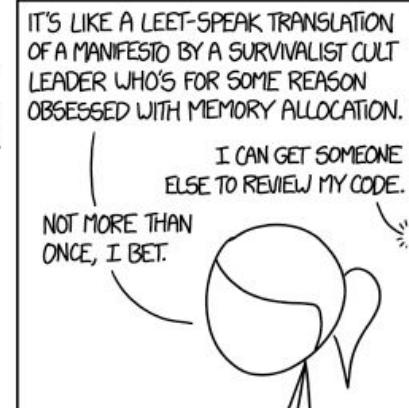
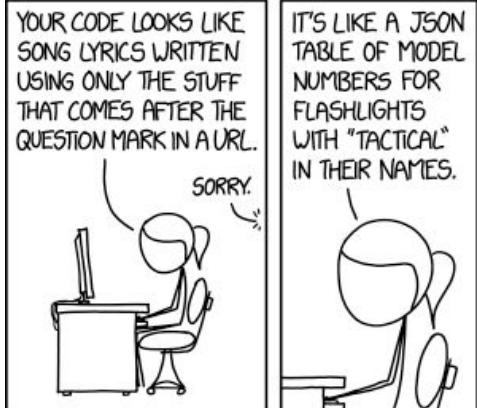
```
<xslt unless:set="prettier.ignore" force="true"
    in="@{dir}/@{src}" out="${copy.file}" style=
    ${dita.plugin.fox.jason.pretty-dita.dir}/xsl/dita2pretty-dita.xsl">
    <xmlcatalog refid="fake.dita.catalog"/>
    <param if="args.indent" expression="${args.indent}"
        name="INDENT" type="INT"/>
    <param if="args.style" expression="${args.style}"
        name="STYLE"/>
</xslt>
<tidy-whitespace unless:set="prettier.ignore" file="${copy.file}"
    pragma="${prettier.hasPragma}"/>
```



# DITA Prettier Plug-In for DITA-OT

● JavaScript 51.1%

- **JavaScript:**
  - String Manipulation
  - File Manipulation
  - File Iteration
- Macros can call Macros



● XSLT 48.9%

```
var dir = attributes.get("dir");
var toDir = attributes.get("todir");
var filesets = elements.get("fileset");
var macro = attributes.get("macro");

for (var i = 0; i < filesets.size(); ++i) {
    var fileset = filesets.get(i);
    var scanner = fileset.getDirectoryScanner(project);
    scanner.scan();
    var files = scanner.getIncludedFiles();
    for (var j = 0; j < files.length; j++) {
        var task = project.createTask(macro);
        if (files[i] !== "") {
            try {
                task.setDynamicAttribute("src", files[j]);
                task.setDynamicAttribute("dir", dir);
                task.setDynamicAttribute("toDir", toDir);
                task.execute();
            } catch (err) {
                task.log("Execution error: " + err.message);
            }
        }
    }
}
```

- **GitHub:** fox.jason.pretty-dita

# Code Highlighting Plug-Ins for DITA-OT

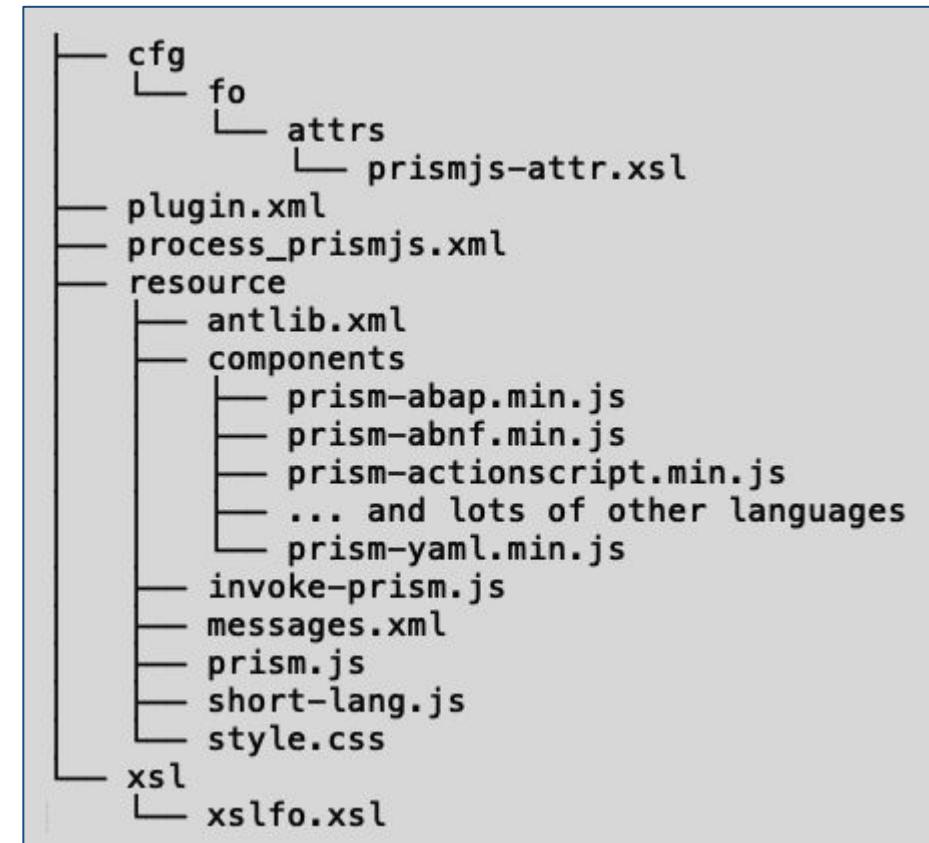
● XSLT 64.2%

● JavaScript 19.4%

● CSS 16.4%

An integration of **Prism-JS JavaScript Library** into the DITA Open Toolkit engine, enabling static HTML and PDF syntax highlighting.

- **Extensions:**
  - depend.preprocess.post
  - extend.css.process to inject CSS
- Use **<XMLTask>** to manipulate DITA
- **GitHub:**
  - fox.jason.prismjs
  - fox.jason.prismjs.dark-theme



# Code Highlighting Plug-Ins for DITA-OT

● XSLT 64.2%

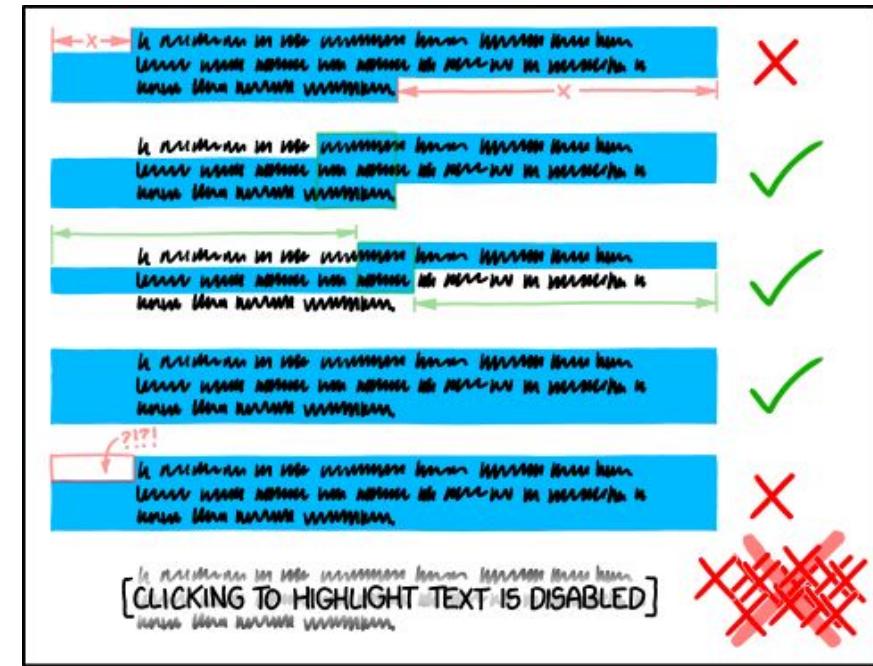
● JavaScript 19.4%

● CSS 16.4%

- **JavaScript:**
  - String Manipulation
  - Dynamic Library Loading

```
eval(  
  "" +  
    org.apache.tools.ant.util.FileUtils.readFully(  
      new java.io.FileReader(project.getProperty("prismjs.temp.file"))  
    )  
);
```

Dynamic loading is slow, avoid if unnecessary.  
Can update the list of loaded languages on the fly



I ABSENTMINDEDLY SELECT RANDOM BLOCKS OF TEXT AS I READ,  
AND FEEL SUBCONSCIOUSLY SATISFIED WHEN THE HIGHLIGHTED AREA  
MAKES A SYMMETRICAL SHAPE.

Thank you!

<http://fiware.org>  
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