

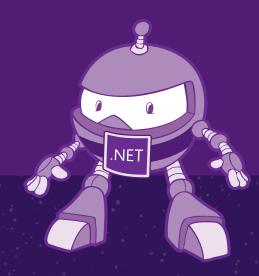




AngleSharp - .NET Headless Browsing

Florian Rappl Solution Architect @ smapiot





About Florian Rappl

- Microsoft MVP for Developer Technologies
- Contributor for multiple open-source projects
- Enthusiastic article writer and speaker
- Solution Architect for distributed web applications

smapiot



Agenda

- What is AngleSharp?
- HTML5 By Example
- Extensions
- Outlook



What is AngleSharp?

In a Nutshell

- A library for parsing HTML
- The core of a browser engine
- Includes full stream processing
- Collection of web utilities
- Can handle HTML, CSS, simple JS, ...
- Easy to extend and customize

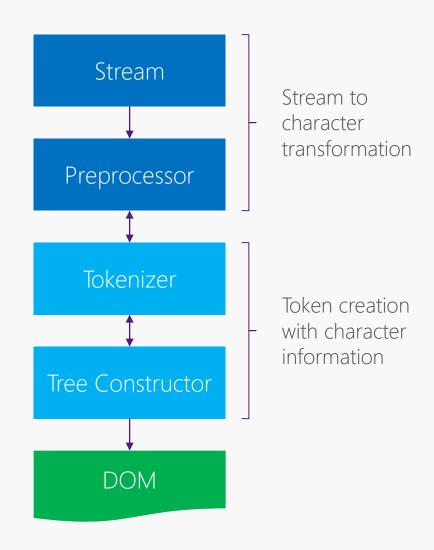


History of the Project

20 **Initial Release** One article on CodeProject to The first version is 13 explain the project, its roots and put on GitHub. Initial vision. reactions exceed expectations. 20 **Extensibility** The major implementation of the 15 Extensions are standard DOM API is done. introduced. Scripting Scripting is essentially working. is demonstrated. 20 v0.10 Major breaking changes, especially to The ecosystem is 19 the way how plugins are written. CSS polished and v1 is in is extracted. preparation.

AngleSharp

Parsing Stages of HTML



HTML5 — By Example

Automatic Scaffolding

```
<!DOCTYPE html>
<meta charset=utf-8>
<title>Sample Document</title>
<style>/* ... */</style>
<div id=app>Hello World!</div>
<script src="app.js"></script>
```

Element Completion and Insertion

```
<!DOCTYPE html>
<l
First item
Second item
Third item
I can just write paragraphs ...
...without ending them?!
```

Table Craziness

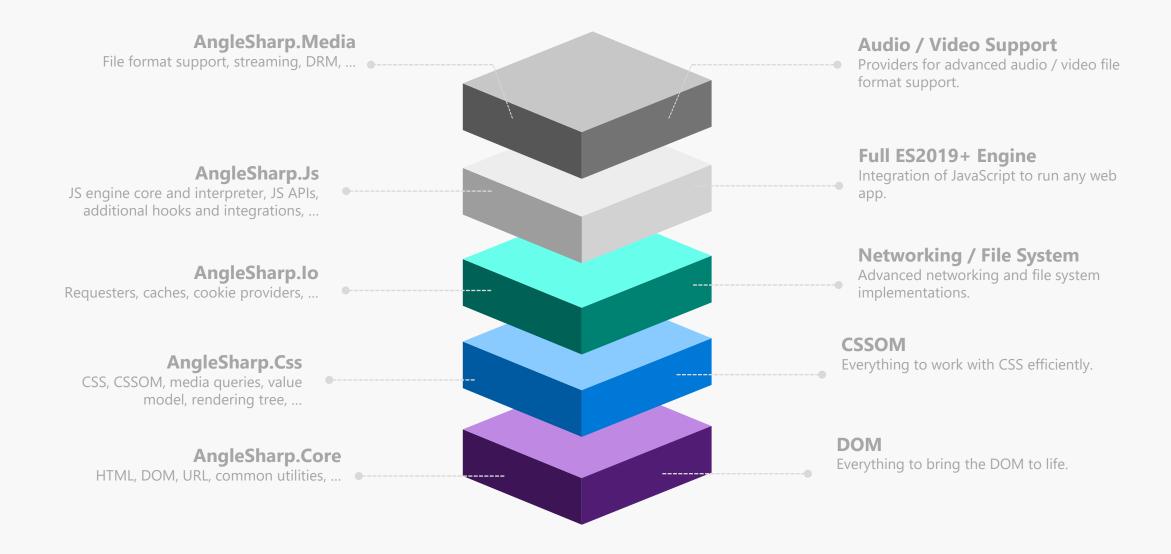
```
<!DOCTYPE html>
<finvalid-tag></r/>
  One
  Two
 <iframe></iframe>
</div></div>
```

HTML5 Error Correction

https://github.com/AngleSharp/AngleSharp.Demos.DotnetConf

Extensions

AngleSharp Plugins



Persistent Cookies

https://github.com/AngleSharp/AngleSharp.Demos.DotnetConf

How about JavaScript?

```
var config = Configuration.Default.WithJs();
var context = BrowsingContext.New(config);
var source = @"<!DOCTYPE html>
<title>Sample</title>
<script>
document.title = 'Simple manipulation...';
document.write('<span class=greeting>Hello World!</span>');
</script>";
var document = await context.OpenAsync(m => m.Content(source));
Console.WriteLine(document.ToHtml());
```

Scripting

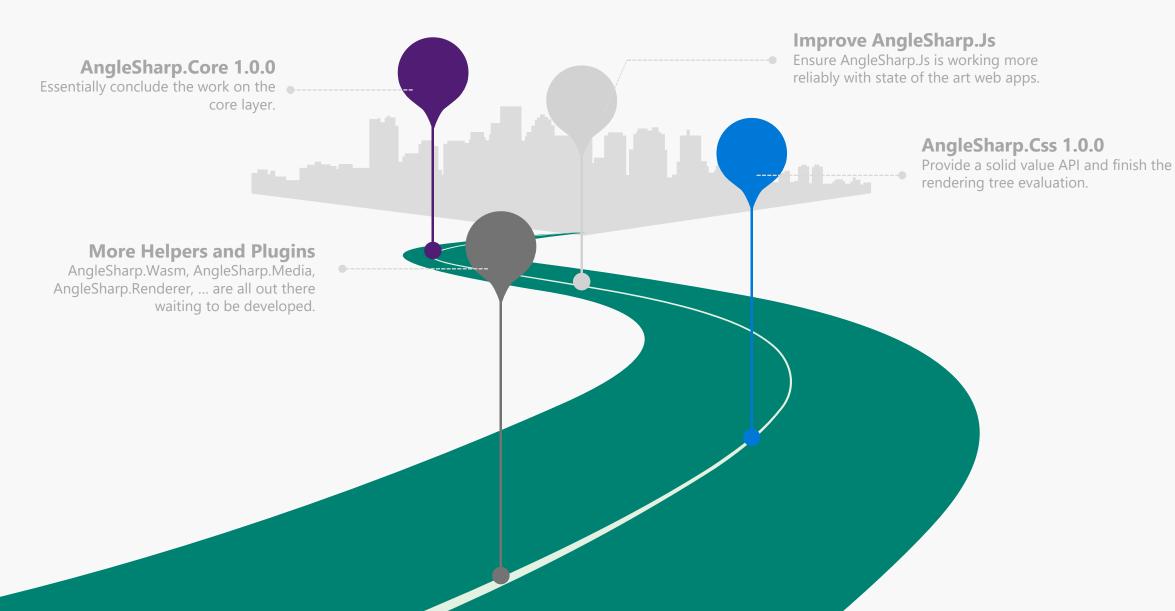


https://github.com/AngleSharp/AngleSharp.Demos.DotnetConf

Outlook



Next Steps



Thank you!

anglesharp.github.io @FlorianRappl github.com/FlorianRappl



