Microsoft

EPUB in the Browser

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Warm up: how many people...

- Build "EPUB Reading Systems"?

- Work for a publisher?

- Develop EPUB production tools?

- Are experts in HTML and CSS?

- Think building an EPUB reader in a browser is crazy?

Agenda

- Blah, blah, Microsoft, books, Edge, blah

- Blah, EPUB, browsers, div, span, blah, blah

- Blah, blah, reading features in the browser, affordances?

- Technology, foo, bar, foobar, toto, tata

- Questions – ask me anything (10 minutes)

Microsoft

Books on Windows 10

Windows 10 Creators Update (April' 17)

- Buy EPUB books in the Microsoft Store and read them in Edge (US only)

- Open DRM-free reflowable and fixed layout EPUB files in your browser

Fall Creators Update (October' 17)

- PDF Books

- Annotations and Ink for EPUB and PDF Books

Microsoft

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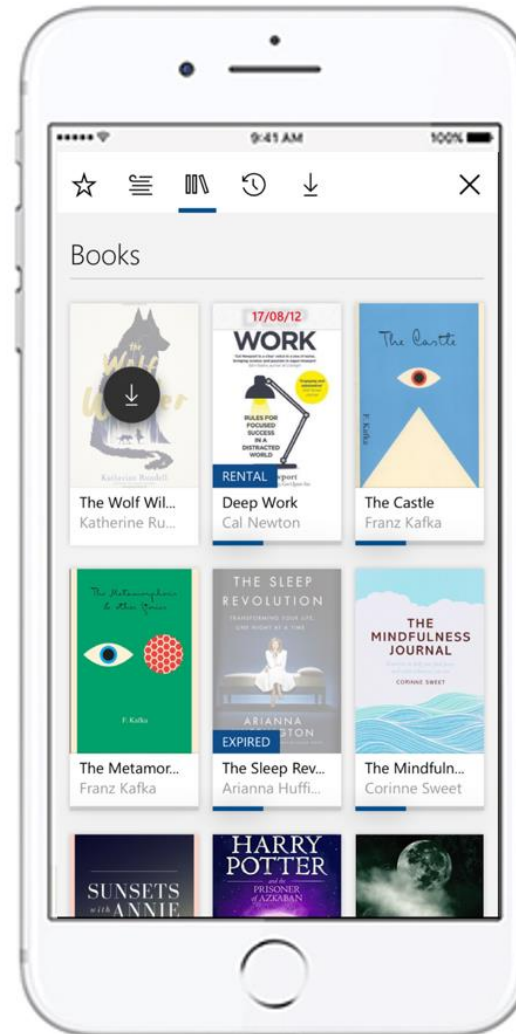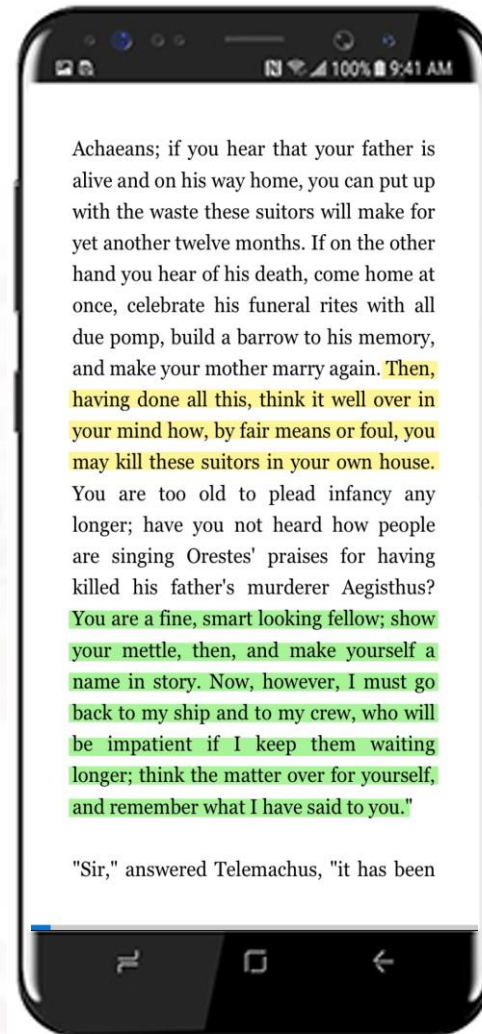- Open DRM-free reflowable and fixed layout EPUB files in your browser

Fall Creators Update (October' 17)

- PDF Books
- Annotations and Ink for EPUB and PDF Books

Spring Creators Update (April '18)

- Media overlays
- UX update (Microsoft Fluent Design)
- Page numbers and go to page
- Grammar tools
- Notes panel
- Fixed layout improvements
- Share my page

Microsoft

Coming (very) soon

But enough about Edge…

How to read the next slides

☺ This works great in the browser
☺ This might be good or bad, depending on how you look at it
☹ This is not so good in the browser

Microsoft

EPUB "in the Browser"?

Several options to integrate an EPUB reader into a browser ☺

- Extensions

- Web sites and "web readers"

- Progressive Web Apps

- Browsers themselves (Microsoft Edge, Yandex Browser)

Microsoft

Where do I find my books?

Books you've purchased appear in the Hub in Edge

- It's just like reading list and bookmarks, only different 😐

- Users don't open web browsers while offline ☹

An offline library in an online app

- Downloading books ≠ downloading web content 😐

Microsoft

No time to import

- Users expect amazing performance in a browser—the race is on to show the first page of content ☺

- EPUB (+ZIP) isn't designed for [streaming](#) ☹

Tradeoffs to enable fast load 😐

- Reduced seek accuracy or disabled seek bar

- Delayed feature detection for EPUB2

Microsoft

Navigation

- Works like any web page ☺

- Organize books in tabs next to web pages and PDF documents ☺

- Use multiple windows to see different chapters side by side ☺

- You can read offline* 😐

*Sometimes. If you open a local file or if your cache headers permit it, you can get back to your book offline.

However, it's tough to get users to launch a web browser without an internet connection. See PWAs.

Reminder: you can already read in the browser

Familiar ways to read ☺

- Fixed layout content: [EPUB](#) and [PDF](#)

- Reflowable content: [EPUB](#) and [reading view](#)

It's not obvious how EPUB readers should interact with some browser features ☹

- Address bar, back, forward and refresh

- Bookmarks vs. bookmarks

- Extensions

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F12 and you ☺

- No setting to enable debugging tools—just press F12

- Tweak your content or styles and see layout updates in real-time

- Inspect the accessibility tree of the EPUB Reader and your book

Microsoft

Let's wrap things up

Microsoft

Recap: EPUB in the Browser is awkward!

- Online vs. offline is not obvious...how do I get back to my books?

- EPUB isn't designed for streaming

- Bookmarks vs. bookmarks

- Reading lists, reading view, reading books, reading confusion

Microsoft

Recap: EPUB in the Browser is awesome!

- Reading books from the web works great—no download step required

- Organize books in tabs like any web page or PDF document

- Build on the latest browser innovation

- No-hassle content debugging

Microsoft

Technology quick fire

The EPUB reader in Microsoft Edge is built with

- HTML5, TypeScript -> ECMAScript 2017, SASS -> CSS

- Visual Studio 2017 and Visual Studio Code

- C++ EPUB parser and content streaming

- Native (XAML) User Experience

- CSS Regions to layout reflowable pages

- CFI as an internal location identifier

Microsoft

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Questions?

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