The Readium
Open Source Initiative

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Readium Foundation
Background

- Readium began as a proof of concept implementation of EPUB 3 in JavaScript packaged as a Chrome Extension
- While successful, it was clear there was a need for a native-optimized SDK for EPUB 3
- The IDPF and other stakeholders decided to foster an expanded Readium initiative to fill the need
- Readium Foundation was created in March 2013 as an independent nonprofit corporation
- Mission: to develop product-quality open source technology to advance EPUB and the Open Web platform for publishing
- Now over 40 members from around the world
Readium Projects Overview

- **Readium SDK**: A largely native implementation (Obj-C, C++ or Java) with JavaScript where required or appropriate
- **ReadiumJS**: An implementation completely in JavaScript
  - Browser-based and Chrome extension configurations
- **Readium LCP**: Open source lightweight DRM
- **Preflight & accessibility checking software**: In planning stages
Platforms

SDK

- iOS
  - Runtime: v. 6.x +
  - Tooling: XCode 5 +
- OSX
  - Runtime: v. 10.6 +
  - Tooling: XCode 5 +
- Android
  - WebKit: 4.x +
  - Runtime: 4.x +
  - Tooling: Android NDK/ADT 19+
- Windows Desktop
  - Runtime: Windows 7/8
  - Tooling: Visual Studio 13 +

ReadiumJS

- Chrome Extension
  - Available [here](#) (or Google for *readium chrome*)
- Browser Support
  - Google Chrome
  - Safari
  - Firefox
  - Opera
- Platform Support
  - iOS
  - OSX
  - Windows
  - Android
Logistics

- All JS code licensed under BSD-style license
- The Readium SDK core C++ library is made available under a dual license regime:
  - Publicly licensed under the GPL Affero license
  - Commercial-use-friendly Alternative License (which requires making a financial and/or development commitment to the Foundation)
- Source hosted on github (Readium) in multiple repositories
- Documentation and samples on github and Google code
- Website at Readium.org
- Backlog on Trello
- Build system based on Jenkins
- Test framework under development
- Bug reporting based on github Issue tracker and Bugzilla
Development Methodology

• Agile approach
  • Product backlog (Trello)
  • Weekly “stand up” conference calls
• “Grooming” of backlog by consensus of stakeholders
  • Prioritization based on functional dependencies
• Currently operating in 3-week sprints
Lessons and Challenges

- Scheduling is very difficult since resources:
  - Are not known with any certainty
  - Are intermittently available
  - Can’t be coerced - at least not easily
- Key is flexibility and ability to juggle
- No single product owner – prioritization is either arbitrary or by time-consuming consensus
- Key is to mix consensus building where/when feasible and make arbitrary decisions when not. Often heavily constrained by resource availability
- Huge span across globe poses difficulties in Language, Time, and/or Culture
- Key is patience and a LOT of email but sometimes flexible scheduling and more patience – also building a stronger team culture
- End-game problems – developers don’t like fixing bugs. In normal environment they can be coerced, but in open source they often are pulled off for higher priority (internal) projects...
- Key is firm pressure, cajoling and some whining
- A robust platform requires strategic coordination between specification development and implementation
Useful Links

• Technical contact
  • rkwright@readium.org
• EPUB 3
  • http://www.idpf.org/epub/30/spec/epub30-publications.html
• Source on github
  • https://github.com/readium/
• Samples on Google code:
  • http://code.google.com/p/epub-samples/w/list
• EPUB Conformance Suite:
  • https://github.com/mgylling/epub-testsuite
• Trello-hosted backlogs
  • https://trello.com/board/readium-sdk/509aaab662cd81b33e00954d
  • https://trello.com/b/mdx405yR/readiumjs