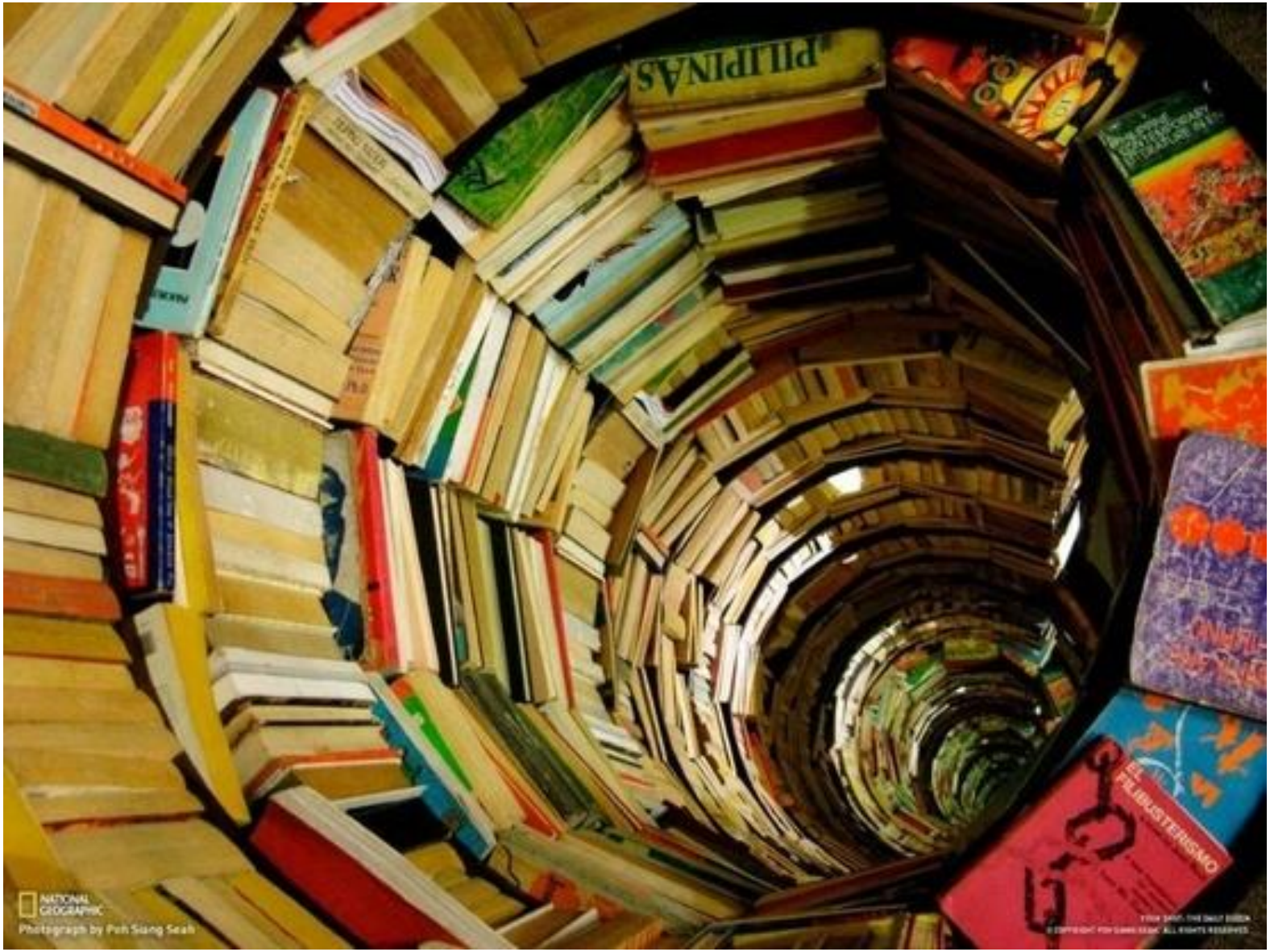
Metadata in EPUB: The Rabbit Hole is Deeper Than You Think

@jtallent @firebrandtech

© 2016 Firebrand Technologies



© 2016 Firebrand Technologies

ONIX for eBooks

© 2016 Firebrand Technologies

```
<ProductForm>EA</ProductForm>
<ProductFormDetail>E101</Product
  FormDetail>
<ProductFormDescription>EPUB</Pr
  oductFormDescription>
```


© 2016 Firebrand Technologies

<ProductForm>

EA = Digital content delivered electronically (delivery method unspecified)

EB = Digital content available both by download and by online access

EC = Digital content accessed online only

ED = Digital content delivered by download only

© 2016 Firebrand Technologies

<ProductFormDetail>

E101 = EPUB

E116 = Amazon Kindle

E141 = iBook

E142 = ePIB

E145 = B&N Page Perfect

© 2016 Firebrand Technologies

<ProductFormDetail>

E200 = Reflowable

E201 = Fixed format

E202 = Readable offline

E203 = Requires network connection

E204 = Content removed

© 2016 Firebrand Technologies

<ProductFormDetail>

E210 = Fixed-format Landscape

E211 = Fixed-format Portrait

E222 = 4:3 aspect ratio

E223 = 3:2 aspect ratio

E224 = 16:10 aspect ratio

E225 = 16:9 aspect ratio

© 2016 Firebrand Technologies

<ProductFormFeature>

Format version

Validators used

Accessibility features

© 2016 Firebrand Technologies

```
<ProductFormFeature>
<ProductFormFeatureType>10
  </ProductFormFeatureType>
<ProductFormFeatureValue>101B
  </ProductFormFeatureValue>
</ProductFormFeature>
```

101A = EPUB 2.0.1

101B = EPUB 3.0

101C = EPUB 3.0.1

116B = Kindle KF8

© 2016 Firebrand Technologies

```
<ProductFormFeature>
<ProductFormFeatureType>16
  </ProductFormFeatureType>
<ProductFormFeatureDescription>
  EPUBCheck</ProductFormFeatureDe
  scription>
<ProductFormFeatureValue>4.0.1
  </ProductFormFeatureValue>
</ProductFormFeature>
```

© 2016 Firebrand Technologies

```
<ProductFormFeature>
<ProductFormFeatureType>09
  </ProductFormFeatureType>
<ProductFormFeatureValue>11
  </ProductFormFeatureValue>
</ProductFormFeature>
```


© 2016 Firebrand Technologies

11 = Table of contents navigation
12 = Index navigation
13 = Reading order
14 = Short alternative descriptions (alt text)
15 = Full alternative descriptions (ARIA)
16 = Visualised data also available as non-graphical (often tabular) data
17 = Accessible math content (MathML)
19 = Print-equivalent page numbering
20 = Synchronised pre-recorded audio (SMIL)
22 = Language tagging provided
96 = Publisher's web page for detailed accessibility information (in ProductFormFeatureDescription)
97 = Compatibility testing description (in ProductFormFeatureDescription)
99 = Publisher contact for further accessibility information (in ProductFormFeatureDescription)

© 2016 Firebrand Technologies

11 = Table of contents navigation

13 = Reading order

14 = Short alternative descriptions (alt text)

15 = Full alternative descriptions (ARIA)

19 = Print-equivalent page numbering

22 = Language tagging provided

© 2016 Firebrand Technologies

96 = Publisher's web page for detailed accessibility information (in ProductFormFeatureDescription)

97 = Compatibility testing description (in ProductFormFeatureDescription)

99 = Publisher contact for further accessibility information (in ProductFormFeatureDescription)

© 2016 Firebrand Technologies

OPF Metadata

© 2016 Firebrand Technologies

```
<dc:title id="en_title" xml:lang="en-us">The Book of Texas</dc:title>
    <meta refines="#en_title" property="title-type">main</meta>
    <meta refines="#en_title" property="file-as">Book of Texas, The</meta>
<dc:identifier id="uid">9783141592658</dc:identifier>
    <meta refines="#uid" property="identifier-type"
    scheme="xsd:string">isbn</meta>
    <meta property="dcterms:modified">2016-04-01T10:02:00Z</meta>
<dc:language>en-us</dc:language>
<dc:date>2016-03-20T15:18:00Z</dc:date>
<dc:creator id="aut">John A. Lomax</dc:creator>
    <meta refines="#aut" property="role" scheme="marc:relators">aut</meta>
    <meta refines="#aut" property="file-as">Lomax, John A.</meta>
<dc:rights xml:lang="en-us">Copyright 2016 John A. Lomax</dc:rights>
<dc:publisher xml:lang="en-us">Flashpoint Books</dc:publisher>
<meta property="rendition:spread">auto</meta>
<meta property="ibooks:specified-fonts">true</meta>
<meta property="ibooks:version">1.1</meta>
<meta property="schema:accessibilityFeature">alternativeText</meta>
<meta property="schema:accessibilityFeature">readingOrder</meta>
<meta property="schema:accessibilityFeature">structuralNavigation</meta>
<meta property="schema:accessibilityFeature">tableOfContents</meta>
<meta property="schema:accessibilityFeature">unlocked</meta>
<meta property="schema:accessibilityHazard">noFlashingHazard</meta>
<meta property="schema:accessibilityHazard">noSoundHazard</meta>
<meta name="cover" content="coverimage" />
<link rel="onix-record" href="/metadata/9783141592658.xml"/>
```


© 2016 Firebrand Technologies

```
<dc:title id="en_title"
  xml:lang="en-us">The Book of
  Texas</dc:title>
<dc:identifier
  id="uid">9783141592658</dc:iden
  tifier>
<dc:language>en-us</dc:language>
```


© 2016 Firebrand Technologies

```
<dc:title id="en_title" xml:lang="en-
  us">The Book of Texas</dc:title>
  <meta refines="#en_title"
  property="title-type">main</meta>
  <meta refines="#en_title"
  property="file-as">Book of Texas,
  The</meta>
<dc:identifier
  id="uid">9783141592658</dc:identifier>
  <meta refines="#uid"
  property="identifier-type"
  scheme="xsd:string">isbn</meta>
  <meta property="dcterms:modified">2016-
  04-01T10:02:00Z</meta>
<dc:language>en-us</dc:language>
```

© 2016 Firebrand Technologies

```
<package version="3.0"
  xmlns="http://www.idpf.org/2007
  /opf" unique-identifier=
  "bookid">
<metadata ...>
<dc:identifier id="bookid">
  urn:uuid:390876DF-0369-47FA-
  93B9-06317FD92423
  </dc:identifier>
<dc:identifier>9783141592658
  </dc:identifier>
```

© 2016 Firebrand Technologies

```
<package version="3.0"
  xmlns="http://www.idpf.org/2007
  /opf" unique-identifier=
  "bookid">
<metadata ...>
<dc:identifier id="bookid">
  9783141592658</dc:identifier>
<meta refines="#bookid"
  property="identifier-type"
  scheme="xsd:string">isbn</meta>
```

© 2016 Firebrand Technologies

```
<dc:date>2016-03-
  20T15:18:00Z</dc:date>
<dc:creator id="aut">John A.
  Lomax</dc:creator>
  <meta refines="#aut" property="role"
  scheme="marc:relators">aut</meta>
  <meta refines="#aut" property="file-
  as">Lomax, John A.</meta>
<dc:rights xml:lang="en-us">Copyright
  2016 John A. Lomax</dc:rights>
<dc:publisher xml:lang="en-
  us">Flashpoint Books</dc:publisher>
<dc:description xml:lang="en-us">Lorem
  ipsum...</dc:publisher>
```

Firebrand TECHNOLOGIES
© 2016 Firebrand Technologies

```
<meta
  property="rendition:spread">aut
  o</meta>
<meta
  property="ibooks:specified-
  fonts">true</meta>
<meta
  property="ibooks:version">1.1</
  meta>
<meta name="cover"
  content="coverimage" />
```


© 2016 Firebrand Technologies

```
<meta property="schema:accessibilityFeature">
  alternativeText</meta>
<meta property="schema:accessibilityFeature">
  readingOrder</meta>
<meta property="schema:accessibilityFeature">
  structuralNavigation</meta>
<meta property="schema:accessibilityFeature">
  tableOfContents</meta>
<meta property="schema:accessibilityFeature">
  unlocked</meta>
<meta property="schema:accessibilityHazard">
  noFlashingHazard</meta>
<meta property="schema:accessibilityHazard">
  noSoundHazard</meta>
```


© 2016 Firebrand Technologies

alternativeText

audioDescription

braille

captions

ChemML

displayTransformability

enhancedAudio

highContrast

largePrint

latex

longDescription

MathML

resizeText

signLanguage

structuralNavigation

tactileGraphic

tactileObject

transcript

© 2016 Firebrand Technologies

```
<link rel="onix-record"
  href="/metadata/9783141592658.x
  ml"/>

<link rel="onix-record"
  href="http://flashpointpub.com/
  metadata/9783141592658.xml"/>
```

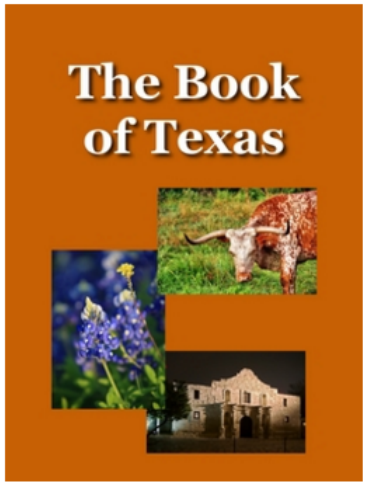
© 2016 Firebrand Technologies

joshua@firebrandtech.com | Log out

FlightDeck

Files Handbook FAQ Pricing

Home » Files » The Book of Texas



Delete Download

Stats
Metadata
Validation
Best Practices
Retailer Grid

Re-Upload File

The Book of Texas

File: BookOfTexas_EPUB3_backwards_v2.0.3.epub

Author: John A. Lomax; Joshua Tallent

Format: EPUB 3 Reflowable

Title Information

Title: The Book of Texas

File as: Book of Texas, The

Subtitle:

Identifier: 9783141592658 ID Type: isbn + Add

Publication Date: 2014-04-23 Date Modified: 2015-02-26T11:36:00Z

Publisher: eBook Architects

Language: English (US) + Add

Creators

Role:	Name:	File as:	
Author	John A. Lomax	Lomax, John A.	
Book designer	Joshua Tallent	Tallent, Joshua	+ Add

Contributors

Contributors whose contributions are secondary to those listed in creator elements should be named in contributor elements. The specifications have more information for both EPUB 2 and EPUB 3.

Role:	Name:	File as:	
		Lastname, Firstna	+ Add

Firebrand TECHNOLOGIES

© 2016 Firebrand Technologies

Semantic Markup

© 2016 Firebrand Technologies

<cite>

© 2016 Firebrand Technologies

<section>

<article>

<figure>

© 2016 Firebrand Technologies

```
<figure>
<img aria-describedby="capt_image01"
  src="images/alamo.jpg" alt="The
  Alamo, San Antonio"/>
<figcaption>The Alamo, San Antonio
<aside class="hidden"
  id="capt_image01">The picture shows
  the Alamo as seen in the early 20th
  century. It is seen in grayscale with
  a wrought iron fence in the
  forefront.</aside>
</figcaption>
</figure>
```


© 2016 Firebrand Technologies

epub:type

© 2016 Firebrand Technologies

~~epub:type~~

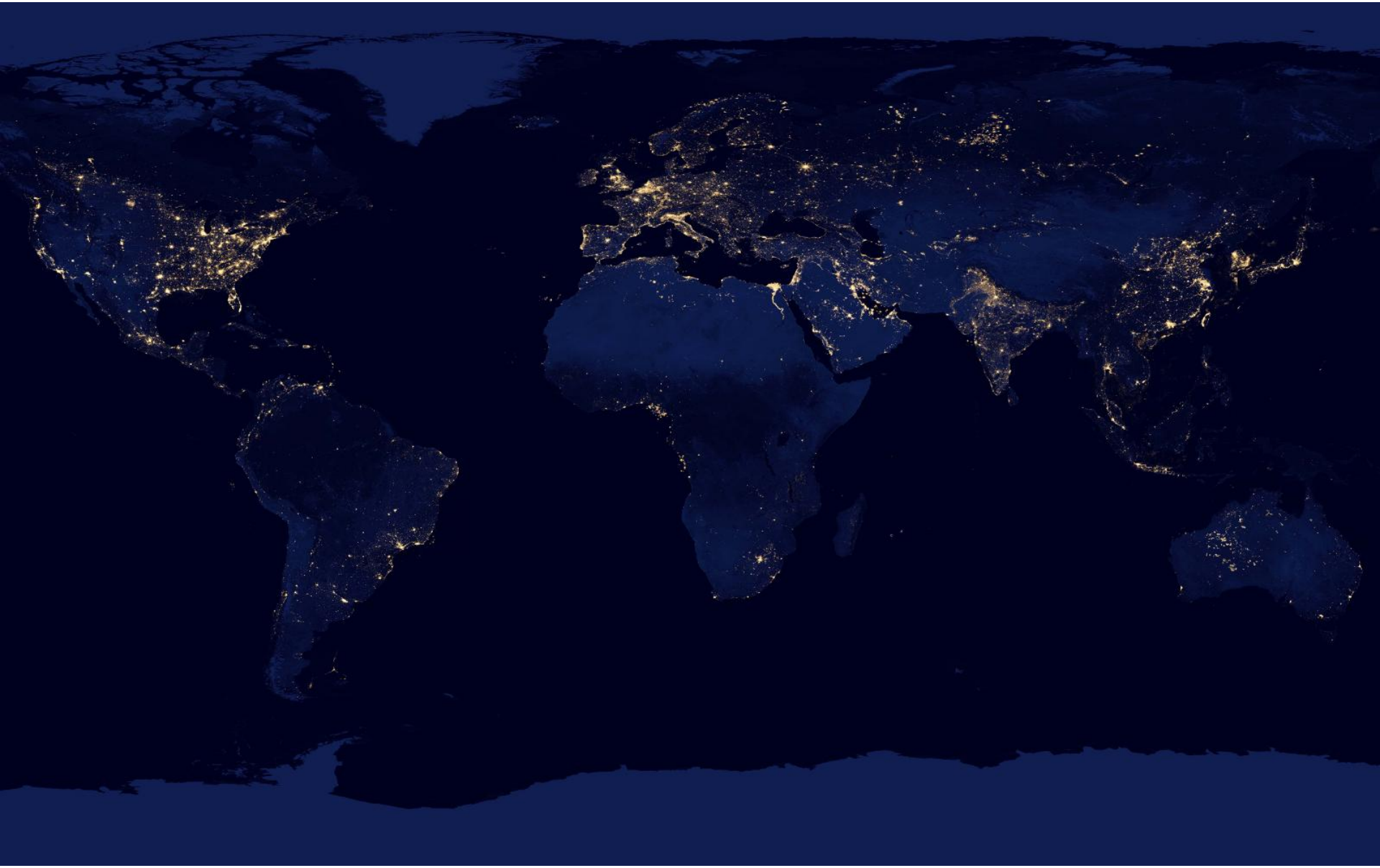
role

© 2016 Firebrand Technologies

Microdata

RDFa 1.1

© 2016 Firebrand Technologies



© 2016 Firebrand Technologies

Schema.org Accessibility for OPF Files

ONIX Accessibility

Wiley Accessibility Information Page

ARIA Document Structure Roles

EPUB Structural Semantics Vocabulary

HTML Microdata

RDF 1.1 Primer

RDFa 1.1 + HTML

© 2016 Firebrand Technologies

Joshua Tallent

Director of Outreach and Education

joshua@firebrandtech.com

www.firebrandtech.com

@jtallent @firebrandtech

https://github.com/jstallent/misc-files