

# Hands on with EPUBs: Mini Workshop



ePUB

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# Introduction

— [ Scott Prentice, President of Leximation, Inc.

— [ Specializing in FrameMaker plugin development as well as structured FrameMaker conversions, consulting, and development. FrameMaker user/developer since 1991.

— [ Developed DITA-FMx, a FrameMaker plugin for efficient DITA authoring and publishing.

— [ Developer of custom Help systems and creative/functional web applications.

# EPUB basics

- [ EPUB (not ePub or ePUB) is an ebook file format that can be read on almost every device and platform
- [ Requires a “reader” application or dedicated reader device
- [ A collection of XHTML, XML, CSS, and media files wrapped up in a “zip” archive
- [ Best way to learn about the EPUB format is to open your EPUB and review the contents

# Popular reader applications

— [ iBooks on iPad/iPhone/iPod

— [ Aldiko on Android devices

— [ EPUBReader plugin for Firefox

— [ Adobe Digital Editions on Windows or Mac OS

— [ Kindle and Nook desktop and mobile apps

# Dedicated reader devices

— [ Amazon Kindle

— [ Barnes & Noble Nook

— [ Kobo eReaders

— [ Sony eReaders

— [ Also .. Asus, Azbooka, Bookeen, Egriver, enTourage, Fujitsu, HanLin, Hanvon, iRiver, NUUTBook, Onyx, PAGEone, Pixelar, Pocketbook, Sagem, Spring Design, Viewsonic, WISEreader, ...

# Creating an EPUB

- [ Create content in an authoring tool then export to EPUB
- [ Convert to EPUB from existing content (PDF, HTML, DITA, etc.)
- [ People in techcomm will likely convert from existing content
- [ Each tool has its methods for authoring/conversion
- [ If possible, use named styles since these will typically map to CSS selectors in the XHTML

# EPUB2 or EPUB3?

— [ IDPF (International Digital Publishing Forum) released EPUB3 in October 2011; replaces 2.0.1

— [ EPUB3 adds support for HTML5, SVG, MathML, and more

— [ Tool/reader support for EPUB3 is lacking

— [ For now use EPUB2 unless you know that your target device/application supports EPUB3

# Opening an EPUB

- [ After creating an EPUB, you'll likely need to open and "fix"

- [ Change extension to ".zip" and use archive extraction tool, but it's tricky to put it back together

- [ Use an editor that can open EPUBs

- oXygen XML Editor

- Sigil

- eCub or Jutoh



# Structure of an EPUB file

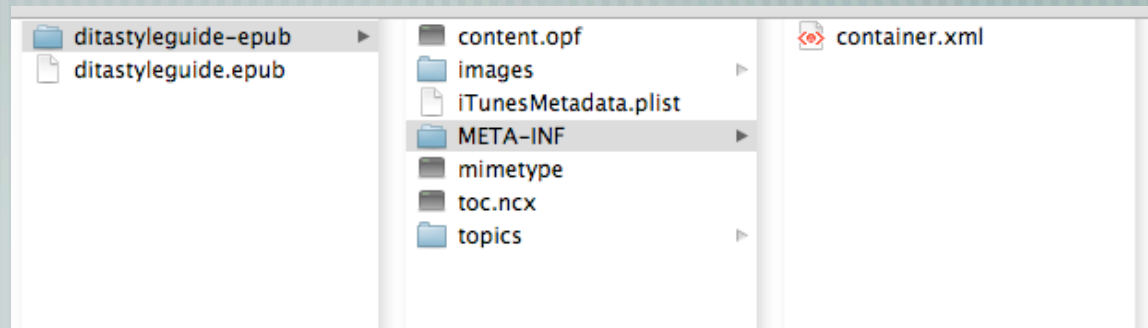
mimetype file (at root) contains "application/epub+zip"

META-INF/container.xml points to the OPF file

OPF file contains metadata, manifest, and spine; points to an NCX file

NCX file is the "TOC"

XHTML, CSS, and media files are referenced by the OPF file



# DEMO: Open and review EPUB

— [ Using oXygen XML Editor, open EPUBs and review

— [ Note the file names and folder structure

— [ File and folder names will vary

— [ Locate files by following references, start with container.xml

— [ Note metadata usage in NCX and OPF files

— [ Review structure and syntax of NCX and OPF files

# DEMO: Review content files

— [ Locate various types of content inside the EPUB, note references to each file in the OPF file

— [ Identify “chapter” HTML files in EPUB, note that each starts on a new “page” in EBUP reader

— [ Open HTML (XHTML) files and review coding styles

# DEMO: Edit HTML

— [ Make a copy of an EPUB

— [ Open the EPUB and open an HTML file

— [ Make some edits, then save, review changes in EPUB reader

— [ Make more edits but intentionally make invalid, save, and validate .. in oXygen you'll see a nice debugging screen that links to the errors

# Packaging the EPUB

— [ Once all of the files “look” good, you’ll need to package (zip) and validate the EPUB

— [ If you’re using oXygen or Sigil, this will be done for you, otherwise you’ll need to do the packaging

— [ mimetype file must be first in the package and be uncompressed, remaining files follow

# Packaging the EPUB (2)

— [ On Mac or other UNIX systems, use the following commands  
(run from within EPUB project folder)

```
$ zip -0Xq thegreatstory.epub mimetype
```

```
$ zip -Xr9Dq thegreatstory.epub *
```

— [ On Windows systems, use the ePubPack utility  
[sourceforge.net/projects/epubpack/](http://sourceforge.net/projects/epubpack/)

# Validate your EPUB

— [ To ensure the EPUB meets the EPUB specification, use the EpubCheck utility - [code.google.com/p/epubcheck/](http://code.google.com/p/epubcheck/)

— [ Requires Java JRE 1.5 or later

```
$ java -jar /path/to/epubcheck.jar thegreatstory.epub
```

— [ Reports any violations

# Create Kindle MOBI file

— [ The Amazon Kindle doesn't read the standard EPUB file, there are a number of converters available, but it's best to use the official tool from Amazon

— [ Link on Resources page on [www.epubtest.com](http://www.epubtest.com)

```
$ /path/kindlegen thegreatstory.epub
```

— [ Creates a MOBI file from the EPUB



# Resources / questions

— [ IDPF EPUB 2 and 3 specifications - [www.idpf.org](http://www.idpf.org)

— [ Follow #eprdctn on Twitter

— [ Resources - [www.epubtest.com/resources.php](http://www.epubtest.com/resources.php)

— [ Questions?

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