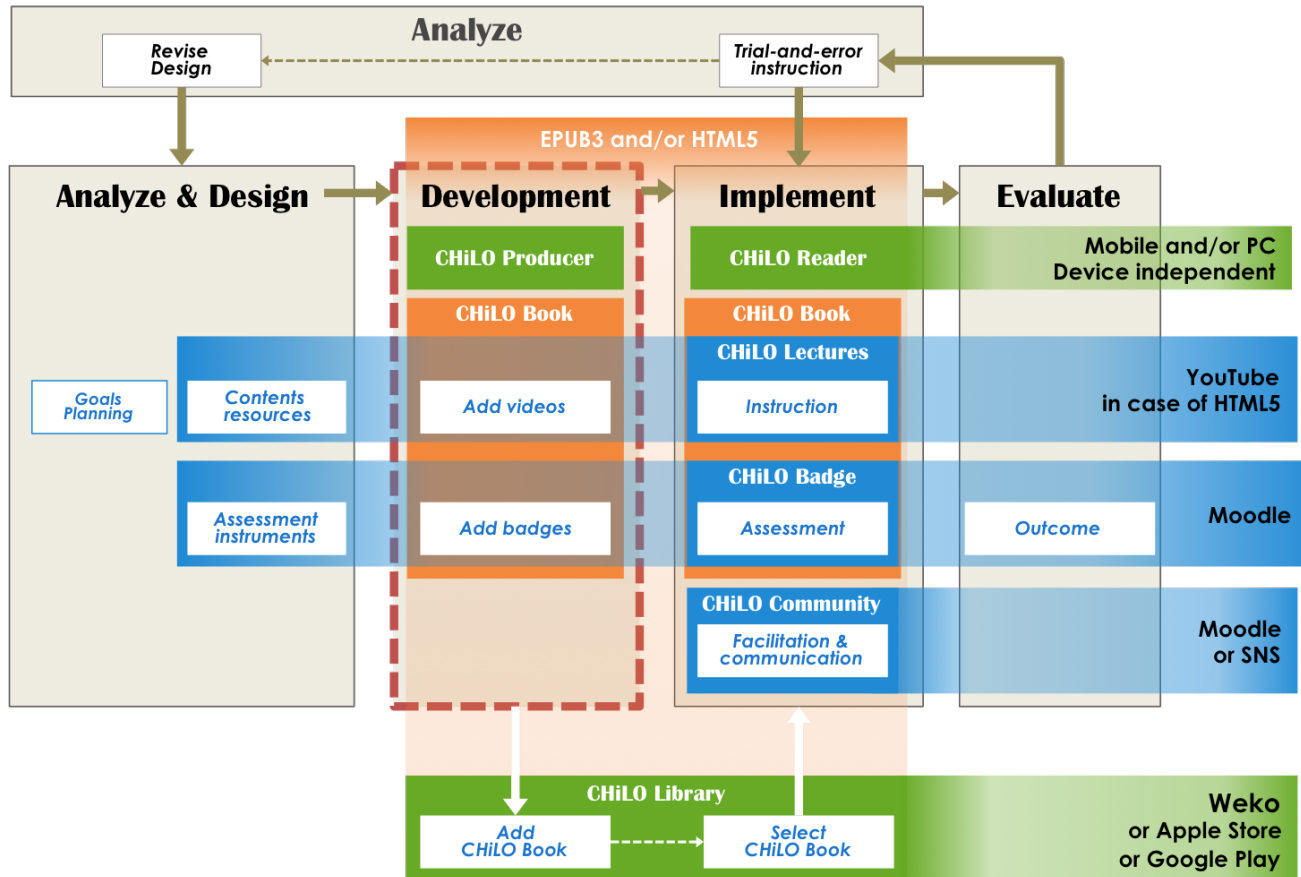


# Development -How to Create CHiLO Book-

(⇒日本語)



- 1. Add badges
- 2. Create CHiLO Books
  - 2-1. Creating work folder
  - 2-2. Save and/or upload CHiLO Lecture
  - 2-3. Save the cover image
  - 2-4. Create structure-books.xlsx
  - 2-5. Author information
  - 2-6. Output CHiLO Book
- 3. Check the output CHiLO Book

Demonstration video: How to create CHiLO Book

## 1. Add badges

You can assess the status of the learning outcomes of CHiLO Books from the Moodle digital badges.

The badge issued for each CHiLO Book is called a "small badge", and the badge issued after earning all the badges of the series or badges of specified CHiLO Books is called a "big badge".

### 1) Decide the way of assessment.

Moodle badges will be issued when the activity module is completed, which means; achieving passing scores in the Quiz activity module, handing in reports in the Assignment activity module, or posting messages in the Forum activity module. To activate the activity module, there is a need to set the Completion tracking to "ON" on each activity module. But first of all, decide the activity module that best fits the CHILO Book you are creating.

 learn more... [https://docs.moodle.org/23/en/Activity\\_completion\\_settings](https://docs.moodle.org/23/en/Activity_completion_settings)

## 2) Add activity module

After deciding the activity module, create a course in Moodle, then add the activity module. You can specify the conditions for issuing the badge by adding multiple activity modules but it is only valid for one CHILO Book for one Moodle course is equivalent to one CHILO Book.

## 3) Setting of badge issuing

The small badge is equivalent to the course badge issued in Moodle. As for the big badge, equivalent to the site badge of Moodle.

To learn more about Moodle course badge, and site badge, click the following URL:

 learn more... [https://docs.moodle.org/29/en/Using\\_badges#Adding\\_a\\_course\\_badge](https://docs.moodle.org/29/en/Using_badges#Adding_a_course_badge)

## 4) Save the URL of the created activity module

There is a need to enter the URL of the created activity module on to the CHILO Producer Spreadsheet which is to be explained later on, so save the URL of the view page of the activity module.

 View page URL is the URL which includes "view.php" as in [<http://xxx.xxx.xx/mod/xxx/view.php?id=xxxxx>].

version			
A	B	C	
1 version		1 Administration version of structure file	
2 language	en	Language used in the book	* Required * The language will be listed as "ja", "en" acco
3 creator	sample	Name of the sheet created in "author.xlsx".	* Required
4 publisher	NPO CCC-TIES	Name of issuer	* Required
5 editor	NPO CCC-TIES	Name of editor	* It will be inserted in the "Copyright" page. Whe
6 published	2015-09-02	Issued date of first edition	
7 revised		Date of revision	
8 rights	NPO CCC-TIES	Owner of copyright	
9 series-name	About CHILO	Name of series of CHILO Book	* Required * It will be inserted in the "Introduction" page o
10 series-introduction	Online education has provided good opportunities for educationally disadvantaged people. However, some traditional learning management systems (LMSs), the base systems of online education, had the limitations in offering standardized education for diversified learners with different skills, objectives, abilities, preferences, and backgrounds. In addition, the traditional LMSs, which required a constant connection of the Internet could	Introduction of the series	
11 series-url		URL of the series introduction page	* It will be inserted below the introduction text
12 cover	015_inside_cover.png	Name of "B. Inside cover" file of "essential materials"	* It will be used as the inside cover image for e
13			
14	* This sheet is used to enter the information about the series. * The cells not allowed to be modified, are protected. There are no passwords for its cancellation.		
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## 2. Create CHiLO Books

CHiLO Book can be created using CHiLO producer. CHiLO Producer is open source software and a java command line application for producing CHiLO Books.

### CHiLO Producer Operating environment



- Environment for Java 8 to operate
- Environment to edit xlsx files (Recommended : Microsoft Office operation check : LibreOffice)

### Download CHiLO Producer from GitHub



<https://github.com/cccties/CHiLO-Producer>

### chilo-producer-master folder

Unzip CHiLO Producer downloaded from GitHub and you will find the following folders under the "chilo-producer-master" folder.



```
chilo-producer-master
├── run.bat / run.sh  * Script to output CHiLO Book (for Windows / Unix-like OS)
├── src              * Source file of the script
├── page_templates  * Template folder defining the page design
│   ├── templates_epub  * Template for EPUB3 CHiLO Book
│   ├── templates_web   * Template for web CHiLO Book
│   └── templates_epub_google * Template for EPUB3 for Google play CHiLO Book
└── (abbr.)
    ├── chiloPro
    │   ├── template-series_english *Template of the series folder: copy this folder to create (English)
    │   │   ├── structure-books.xlsx * Structure file of CHiLO Book
    │   │   ├── vol-n *Folder to save the learning resources to be embedded in CHiLO Book
    │   │   │   ├── images : copy according to the number of CHiLO Books to be created in the series.
    │   │   │   ├── scripts
    │   │   │   ├── text
    │   │   │   └── videos
    │   │   └── common * Folder used in common for the CHiLO Book created within the series folder
    │   │       ├── images
    │   │       ├── scripts
    │   │       ├── styles * Style sheet of the EPUB3 CHiLO Book
    │   │       ├── text
    │   │       ├── videos
    │   │       └── web-styles * Style sheet of the Web CHiLO Book
    │   ├── common * Folder used in common for all the CHiLO Books created within the chiloPro folder
    │   │   ├── authors.xlsx * Spreadsheet to enter information of the "About the Author" page
    │   │   ├── authorImages * Folder to store the image of the author
    │   │   ├── images * Images used in common
    │   │   └── scripts * scripts used in common
    │   ├── sample-series /_english * Sample of CHiLO Book series
    │   └── template-series /_english * Template of the series folder: copy this folder to create
```

## 2-1. Creating work folder

### 1) Creating "chilo-producer-master/chiloPro/*name of your folder*"

Copy "chilo-producer-master/chiloPro/template-series\_english" to "chilo-producer-master/chiloPro/" with the name of your folder.

This folder is the work folder for creating CHiLO Books.

### 2) Create vol-x folder

i. Copy "vol-n" folder in the "chilo-producer-master/chiloPro/*name of your folder*", according to the number of CHiLO Books in the series.

ii. Change a name of "vol-n" folders you copied to vol-1, vol-2, vol-3 · · · .

## 2-2. Save and/or upload CHiLO Lecture

### 1) Save CHiLO Lectures

Save the CHiLO Lectures, explanation texts and figures created in the Design step to each videos, texts, and images folder of each CHiLO Book work folder; vol-1, vol-2, vol-3, ....

Also, prepare thumbnails for CHiLO Lectures and save them in the images folder of each CHiLO Book.

Resource	Details	Location to save the learning resources	Example
<b>A. CHiLO Lecture (video) [required]</b>	Video of the CHiLO Lecture. The recommended length of the video is 1-2 minutes. Compress as much as possible in order to embed in EPUB3 format CHiLO Book. Frame rate: 29.97 Bit rate: 384kbps Size: 480x360(4:3) or 560x316(16:9)	chilo-producer-master/chiloPro/ <i>name of your folder</i> /vol-x/videos/ *	
<b>B. Video thumbnail [required]</b>	Thumbnail of the video. Same size as the video JPEG format (recommended)	chilo-producer-master/chiloPro/ <i>name of your folder</i> /vol-x/images/ *	
<b>C. Explanation text [required]</b>	Text displayed below the explanation video. Prepared in extension(.xhtml)text file.	chilo-producer-master/chiloPro/ <i>name of your folder</i> /vol-x/text/ *	
<b>D. Figure [optional]</b>	Embed figures to explain text such as diagrams, charts, graphs and illustration. Recommended resolution: 1024	chilo-producer-master/chiloPro/ <i>name of your folder</i> /vol-x/images/ *	

\* vol-x : x indicates the volume of the CHiLO Book.

### 2) Upload CHiLO Lecture

i. Web version CHiLO Book are delivered by the video-sharing website such as YouTube.

ii. Also, it is essential to enter video-id of each video you uploaded to the CHiLO Producer Spreadsheet, so you have to keep records of the uploaded video.



<https://www.youtube.com/watch?t=5&v=YrAdO44ezh8> → "YrAdO44ezh8" is the video-id for YouTube.

## 2-3. Save the cover image

Save the image file of the book cover and the section cover (inside cover).

### Learning Resources

Resource	Details	Location to save the learning resources	Example
<b>E. Image of book cover [required]</b>	Cover image of the Book Resolution:768x1024 JPEG format(Recommended)	chilo-producer-master/chiloPro/ <i>name of your folder</i> /vol-x/images/ *	
<b>F. Image of section cover [required]</b>	Image for display on the inside cover of the section throughout the series. Resolution: 1024x600 JPEG format(Recommended)	chilo-producer-master/chiloPro/ <i>name of your folder</i> /common/images/	

\* vol-x : x indicates the volume of the CHILO Book.

## 2-4. Create structure-books.xlsx

Enter CHILO Book structure to chilo-producer-master/chiloPro/*name of your folder*/structure-books.xlsx

### 1) "series information" sheet

Configure the information concerning the series.

Field	Description	Note
version	Administration version of structure file	
language	Language used in the book	* Required * The language will be listed as "ja", "en" according to the language tag.
creator	Name of the sheet created in "author.xlsx".	* Required
publisher	Name of issuer	* Required
editor	Name of editor	* It will be inserted in the "Copyright" page. When the editor is not specified, the publisher will be used.
published	Issued date of first edition	
revised	Date of revision	
rights	Owner of copyright	
series-name	Name of series of CHILO Book	* Required * It will be inserted in the "Introduction" page of the book.
series-introduction	Introduction of the series	
series-url	URL of the series introduction page	* It will be inserted below the introduction text.
cover	Name of "B. Inside cover" file of "essential materials"	* It will be used as the inside cover image for the book.

This sheet is used to enter the information about the series.  
The cells not allowed to be modified, are protected. There are no passwords for its cancellation.

### Main settings

**language** : Language tag such as "ja", "en" defined by RFC 5646

**creator** : Name of the sheet created in the "author.xlsx" which is to be explained later.

**published** : Issued date of first edition

**rights** : Owner of copyright

**series-name** : Name of series of CHILO Book

**series-introduction** : Introduction of the series

**series-url** : URL of the site introducing the series, if any.

**cover** : Name of "F. Image of section cover" file. Not the book cover of CHILO Book.

### 2) "Book-list" sheet

## List of CHiLO Books included in the series

vol(required)						
A	B	C	D	E	F	G
1	vol(required)	book-title	book-summary	book-cover	identifier	community-url
2	vol-1	Fusion of e-book, LMS and SNS		015_cover_image.png	urn:uuid:cbc73546-971c-492d-b41d-c271e874a17f	
3						
4						
5	(Required) Number of volumes  Listed in order in vol-n format.	Title of CHiLO Book  The title of the CHiLO Books are (set in the series-information sheet) series-name & " " & Chapter n & " " & book-title  This book title will be set in the epub3 dc:title package document and on the "Copyright" page.	Outline of each CHiLO Book  This will be inserted in the "Outline of the Book" page of the "Readme" section.	Cover Image  Name of file with cover image (leave blank when there is no cover image).	Unique ID of CHiLO Book  It will be configured as identifier of epub3 package document (an opf format document).	URL of CHiLO Community  You are able to specify any SNS, such as Facebook, Twitter, or Moodle forum, as CHiLO Community. When left blank, the community icon will not be displayed.
6	<ul style="list-style-type: none"> <li>This sheet is for entering information about each Book of the series.</li> <li>Insert lines according to the number of Books and fill in required information.</li> <li>The cells not allowed to be modified, are protected. There are no passwords for its cancellation.</li> </ul>					
7						
8						
9						
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17						

### Main settings

**vol** : Number CHiLO Books in the series; vol-1, vol-2, vol-3 and so on, in order.

**book-title** : Title of CHiLO Book

**book-summary** : Outline of CHiLO Book

**cover** : Name of "E. Image of book cover" file. The file name of the cover image of CHiLO Book

**identifier** : For uniquely identifying CHiLO Book, enter **"urn:uuid:" + UUID (Universally Unique Identifier)**  
e.g. urn:uuid:a7c4eab7-1540-47bd-9302-7fda5df5c54e



#### How to generate UUID

##### For windows

1. Boot up UUID Generator: [GUIDEGEN \(Microsoft\)](#)
2. Select "4. Guid Format"
3. Click [Copy] and copy uuid to clipboard

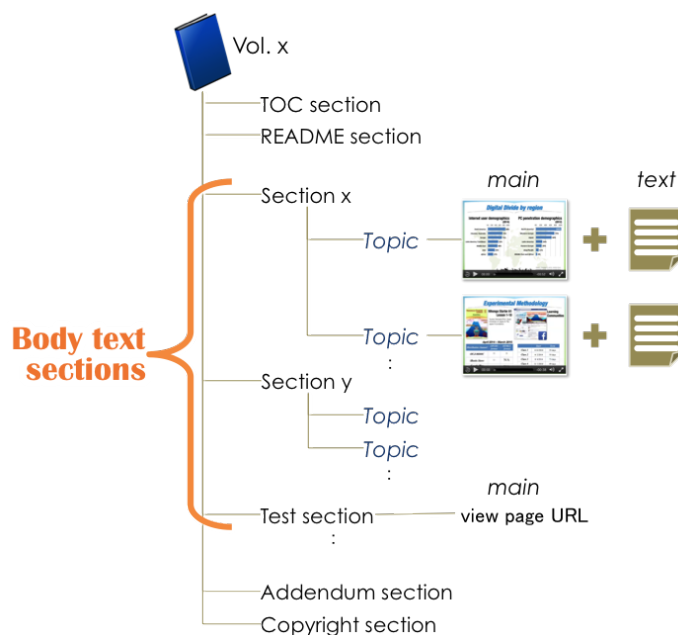
##### For Unix-like OS

Run the following command utilizing command prompt.

> **uuidgen**

### 3) "vol-x" sheet

- i. Copy the vol-n sheet according to the number of CHiLO Books in the series and alter the sheet name to vol-1, vol-2...
- ii. Enter information of the pages to be created in the Body text-section of the CHiLO Book using one row per page from the top.



A1	:				page-type (required)		
	A	B	C	D	E	F	G
1	page-type (required)	section-title(required)	topic	community	main	video-image	text
2	document	About CHILO	Outline	TRUE	m015_0101.mp4	t015_0101.png	h015_0101.txt
3	document	About CHILO	Digital Divide by region	TRUE	m015_0102.mp4	t015_0102.png	h015_0102.txt
4	document	About CHILO	A Potential Value of E-book	TRUE	m015_0103.mp4	t015_0103.png	h015_0103.txt
5	document	About CHILO	CHILO	TRUE	m015_0104.mp4	t015_0104.png	h015_0104.txt
6	document	About CHILO	The Appearance of a CHILO	TRUE	m015_0105.mp4	t015_0105.png	h015_0105.txt
7	document	About CHILO	Experimental Methodology	TRUE	m015_0106.mp4	t015_0106.png	h015_0106.txt
8	document	About CHILO	Number of CHILO Books Downloaded	TRUE	m015_0107.mp4	t015_0107.png	h015_0107.txt
9	document	About CHILO	Number of Downloads by Country	TRUE	m015_0108.mp4	t015_0108.png	h015_0108.txt
10	document	About CHILO	Survey of users	TRUE	m015_0109.mp4	t015_0109.png	h015_0109.txt
11	document	About CHILO	Respondent's comment	TRUE	m015_0110.mp4	t015_0110.png	h015_0110.txt
12	document	About CHILO	Learning Community	TRUE	m015_0111.mp4	t015_0111.png	h015_0111.txt
13	document	About CHILO	Experimental Results	TRUE	m015_0112.mp4	t015_0112.png	h015_0112.txt
14	test	Quiz about CHILO		TRUE	http://proxy.chilos.jp/q01501010		
15							
16							
17							
18							
19							
	Page type	Chapter title	Section title	Display CHILO Community	Main contents of the page	Name of thumbnail of the explanation video	File name of the explanation text
	Type of page document*** explanation page test*** test page		When page-type is the test, no need to enter.	Choose "TRUE" to display link button for entering CHILO Community.Fill in only when you want to display the community-url.	The main contents will differ according to the page-type. cover*** File name of cover image. (Leave blank when there is no cover image). document*** File name of the explanation video test*** URL of the assignment test of Moodle		
	Enter in lowercase characters.						
20							

## Main settings

**page-type** : Select "document" for embedding CHILO Lectures. Select "test" for assessment of learning outcomes using Moodle activity module.

**section-title** :Enter the section name of the page.

**page-title** : The page title is the topic of the CHILO Lecture.

**community**: Currently not in use.

**main**: When the page type "document" is selected, enter the video file name of the CHILO Lecture.

When the page type "test" is selected, enter the URL of the view page of the Moodle activity module.

**text** : Enter the file name of the explanation text corresponding to the CHILO Lecture.


**video-id**: Enter when creating web version CHILO Book. Enter ID of the video uploaded on the video-sharing website.

## 2-5. Author information

Configure information which displays on the "About the Author" page of Addendum section. The information configured here will be referred to by all the CHILO Books created under the chiloPro folder.

### 1) Save image of the author

#### Learning Resources

Resource	Details	Location to save the learning resources	Example
<b>E. Image of the author [optional]</b>	The image will be displayed on the "About the Author" page. Resolution: 159x159 JPEG format (Recommended)	chilo-producer-master/chiloPro/common/authorImages/	

\* vol-x : x indicates the volume of CHILO Book.

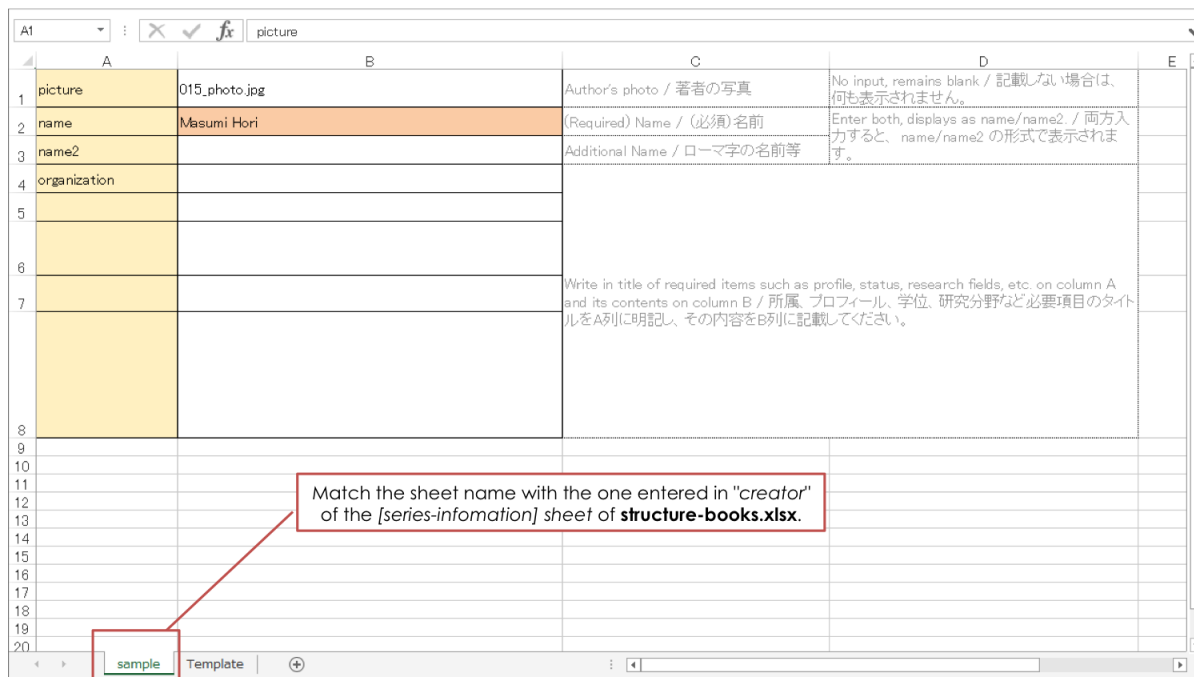
### 2) Create author.xlsx

i. Copy "series-infomation" sheet of chilo-producer-master/chiloPro/common/author.xlsx and name the sheet with an easy-to-recognize name.



Match the sheet name with the one entered in "creator" of the [series-infomation] sheet of **structure-books.xlsx**.

ii. Enter author information.



## 2-6. Output CHILO Book

CHILO Producer can output two types of CHILO Books: EPUB3 format *EPUB3 CHILO Book* and HTML5 format *Web CHILO Book*.

Run the following Java command utilizing command prompt.

CHILO Book is output to chilo-producer-master/OutputBase/*name of your folder*/



```
*** To output EPUB CHiLO Book ***
> run.bat -c <name of your folder> -t epub (Windows)
> sh run.sh -c <name of your folder> -t epub (Unix-like OS)

*** To output Web CHiLO Book ***
> run.bat -c <name of your folder> -t web (Windows)
> sh run.sh -c <name of your folder> -t web (Unix-like OS)
```

command line option: -t type of CHiLO Book



Once you run a command, the former CHiLO Book will be overwritten, so save it if necessary.

If you failed to output CHiLO Book, refer to [Common errors](#).

### 3. Check the output CHiLO Book

#### ► EPUB3 CHiLO Book

The output EPUB3 CHiLO Book can be found in chilo-producer-master/OutputBase/*name of your folder*/epub3.

The contents of the output EPUB3 CHiLO Book may be confirmed using the following ebook reader.

- For Mac OS: iBooks
- For Windows,Linux: Radium

#### ► Web CHiLO Book

The output Web CHiLO Book can be found in chilo-producer-master/OutputBase/name of your folder/html

*vol-x*/nav.html is the contents page of the web CHiLO Book. Confirm using the Web browser.

You will not be able to check web CHiLO Book in local environment in the following cases:

- When explanation videos are videos uploaded to YouTube
- When there is an input in *fb-app-id* of [series-information] sheet of *chiloPro/SeriesName/structure-books.xlsx*

In these cases, check by uploading Web CHiLO Book files to the remote server or run the web server in local environment.