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# **EbookLib Documentation**

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EbookLib is a Python library for managing EPUB2/EPUB3 and Kindle files. It's capable of reading and writing EPUB files programmatically (Kindle support is under development).

The API is designed to be as simple as possible, while at the same time making complex things possible too. It has support for covers, table of contents, spine, guide, metadata and more. EbookLib works with Python 2.7 and Python 3.3.

Homepage: <https://github.com/aerkalov/ebooklib/>



## ebooklib Package

### epub Module

**class** `ebooklib.epub.EpubBook`

Bases: `object`

**add\_author** (*author, file\_as=None, role=None, uid='creator'*)  
Add author for this document

**add\_item** (*item*)  
Add additional item to the book. If not defined, media type and chapter id will be defined for the item.

#### Args

- *item*: Item instance

**add\_metadata** (*namespace, name, value, others=None*)  
Add metadata

**add\_prefix** (*name, uri*)  
Appends custom prefix to be added to the content.opf document

```
>>> epub_book.add_prefix('bkterms', 'http://booktype.org/')
```

#### Args

- *name*: namespace name
- *uri*: URI for the namespace

**get\_item\_with\_href** (*href*)  
Returns item for defined HREF.

```
>>> book.get_item_with_href('EPUB/document.xhtml')
```

**Args**

- href: HREF for the item we are searching for

**Returns** Returns item object. Returns None if nothing was found.

**get\_item\_with\_id** (*uid*)

Returns item for defined UID.

```
>>> book.get_item_with_id('image_001')
```

**Args**

- uid: UID for the item

**Returns** Returns item object. Returns None if nothing was found.

**get\_items** ()

Returns all items attached to this book.

**Returns** Returns all items as tuple.

**get\_items\_of\_media\_type** (*media\_type*)

Returns all items of specified media type.

**Args**

- media\_type: Media type for items we are searching for

**Returns** Returns found items as tuple.

**get\_items\_of\_type** (*item\_type*)

Returns all items of specified type.

```
>>> book.get_items_of_type(epub.ITEM_IMAGE)
```

**Args**

- item\_type: Type for items we are searching for

**Returns** Returns found items as tuple.

**get\_metadata** (*namespace, name*)

Retrieve metadata

**get\_template** (*name*)

Returns value for the template.

**Args**

- name: template name

**Returns** Value of the template.

**reset** ()

Initialises all needed variables to default values

**set\_cover** (*file\_name, content, create\_page=True*)

Set cover and create cover document if needed.



**Args**

- `file_name`: file name of the cover page
- `content`: Content for the cover image
- `create_page`: Should cover page be defined. Defined as bool value (optional). Default value is True.

**set\_direction** (*direction*)**Args**

- `direction`: Options are “ltr”, “rtl” and “default”

**set\_identifier** (*uid*)

Sets unique id for this epub

**Args**

- `uid`: Value of unique identifier for this book

**set\_language** (*lang*)

Set language for this epub. You can set multiple languages. Specific items in the book can have different language settings.

**Args**

- `lang`: Language code

**set\_template** (*name, value*)

Defines templates which are used to generate certain types of pages. When defining new value for the template we have to use content of type ‘str’ (Python 2) or ‘bytes’ (Python 3).

**At the moment we use these templates:**

- `ncx`
- `nav`
- `chapter`
- `cover`

**Args**

- `name`: Name for the template
- `value`: Content for the template

**set\_title** (*title*)

Set title. You can set multiple titles.

**Args**

- `title`: Title value

**set\_unique\_metadata** (*namespace, name, value, others=None*)

Add metadata if metadata with this identifier does not already exist, otherwise update existing metadata.

**class** `ebooklib.epub.EpubCover` (*uid='cover-img', file\_name=''*)Bases: `ebooklib.epub.EpubItem`

Represents Cover image in the EPUB file.

**class** ebooklib.epub.**EpubCoverHtml** (*uid='cover', file\_name='cover.xhtml', image\_name='', title='Cover'*)

Bases: *ebooklib.epub.EpubHtml*

Represents Cover page in the EPUB file.

**get\_content** ()

Returns content for cover page as HTML string. Content will be of type 'str' (Python 2) or 'bytes' (Python 3).

**Returns** Returns content of this document.

**is\_chapter** ()

Returns if this document is chapter or not.

**Returns** Returns book value.

**exception** ebooklib.epub.**EpubException** (*code, msg*)

Bases: *exceptions.Exception*

**class** ebooklib.epub.**EpubHtml** (*uid=None, file\_name='', media\_type='', content=None, title='', lang=None, direction=None*)

Bases: *ebooklib.epub.EpubItem*

Represents HTML document in the EPUB file.

**add\_item** (*item*)

Add other item to this document. It will create additional links according to the item type.

**Args**

- item: item we want to add defined as instance of EpubItem

**add\_link** (*\*\*kwargs*)

Add additional link to the document. Links will be embedded only inside of this document.

```
>>> add_link(href='styles.css', rel='stylesheet', type='text/css')
```

**get\_body\_content** ()

Returns content of BODY element for this HTML document. Content will be of type 'str' (Python 2) or 'bytes' (Python 3).

**Returns** Returns content of this document.

**get\_content** (*default=None*)

Returns content for this document as HTML string. Content will be of type 'str' (Python 2) or 'bytes' (Python 3).

**Args**

- default: Default value for the content if it is not defined.

**Returns** Returns content of this document.

**get\_language** ()

Get language code for this book item. Language of the book item can be different from the language settings defined globally for book.

**Returns** As string returns language code.

**get\_links** ()

Returns list of additional links defined for this document.

**Returns** As tuple return list of links.

**get\_links\_of\_type** (*link\_type*)

Returns list of additional links of specific type.

**Returns** As tuple returns list of links.

**get\_type** ()

Always returns ebooklib.ITEM\_DOCUMENT as type of this document.

**Returns** Always returns ebooklib.ITEM\_DOCUMENT

**is\_chapter** ()

Returns if this document is chapter or not.

**Returns** Returns book value.

**set\_language** (*lang*)

Sets language for this book item. By default it will use language of the book but it can be overwritten with this call.

**class** ebooklib.epub.**EpubImage**

Bases: *ebooklib.epub.EpubItem*

Represents Image in the EPUB file.

**get\_type** ()

**class** ebooklib.epub.**EpubItem** (*uid=None, file\_name='', media\_type='', content='', manifest=True*)

Bases: *object*

Base class for the items in a book.

**get\_content** (*default=''*)

Returns content of the item. Content should be of type 'str' (Python 2) or 'bytes' (Python 3)

**Args**

- default: Default value for the content if it is not already defined.

**Returns** Returns content of the item.

**get\_id** ()

Returns unique identifier for this item.

**Returns** Returns uid number as string.

**get\_name** ()

Returns name for this item. By default it is always file name but it does not have to be.

**Returns** Returns file name for this item.

**get\_type** ()

Guess type according to the file extension. Might not be the best way how to do it, but it works for now.

**Items can be of type:**

- ITEM\_UNKNOWN = 0
- ITEM\_IMAGE = 1
- ITEM\_STYLE = 2
- ITEM\_SCRIPT = 3
- ITEM\_NAVIGATION = 4
- ITEM\_VECTOR = 5
- ITEM\_FONT = 6

- ITEM\_VIDEO = 7
- ITEM\_AUDIO = 8
- ITEM\_DOCUMENT = 9

We map type according to the extensions which are defined in `ebooklib.EXTENSIONS`.

**Returns** Returns type of the item as number.

**set\_content** (*content*)

Sets content value for this item.

**Args**

- content: Content value

```
class ebooklib.epub.EpubNav (uid='nav', file_name='nav.xhtml', me-
                             dia_type='application/xhtml+xml')
```

Bases: `ebooklib.epub.EpubHtml`

Represents Navigation Document in the EPUB file.

**is\_chapter** ()

Returns if this document is chapter or not.

**Returns** Returns book value.

```
class ebooklib.epub.EpubNcx (uid='ncx', file_name='toc.ncx')
```

Bases: `ebooklib.epub.EpubItem`

Represents Navigation Control File (NCX) in the EPUB.

```
class ebooklib.epub.EpubReader (epub_file_name, options=None)
```

Bases: `object`

**DEFAULT\_OPTIONS** = {}

**load** ()

**process** ()

**read\_file** (*name*)

```
class ebooklib.epub.EpubWriter (name, book, options=None)
```

Bases: `object`

**DEFAULT\_OPTIONS** = {'package\_direction': False, 'spine\_direction': True, 'epub3\_landmark': True, 'epub2\_guide': Tr

**process** ()

**write** ()

```
class ebooklib.epub.Link (href, title, uid=None)
```

Bases: `object`

```
class ebooklib.epub.Section (title, href='')
```

Bases: `object`

```
ebooklib.epub.read_epub (name, options=None)
```

Creates new instance of `EpubBook` with the content defined in the input file.

```
>>> book = ebooklib.read_epub ('book.epub')
```

**Args**

- name: full path to the input file

- options: extra options as dictionary (optional)

**Returns** Instance of EpubBook.

`ebooklib.epub.write_epub` (*name*, *book*, *options=None*)  
Creates epub file with the content defined in EpubBook.

```
>>> ebooklib.write_epub('book.epub', book)
```

#### Args

- name: file name for the output file
- book: instance of EpubBook
- options: extra options as dictionary (optional)

## utils Module

`ebooklib.utils.debug` (*obj*)

`ebooklib.utils.guess_type` (*extension*)

`ebooklib.utils.parse_html_string` (*s*)

`ebooklib.utils.parse_string` (*s*)

## Subpackages

### plugins Package

#### base Module

**class** `ebooklib.plugins.base.BasePlugin`

Bases: `object`

**after\_read** (*book*)

Processing after save

**after\_write** (*book*)

Processing after save

**before\_read** (*book*)

Processing before save

**before\_write** (*book*)

Processing before save

**html\_after\_read** (*book*, *chapter*)

Processing HTML before read.

**html\_before\_write** (*book*, *chapter*)

Processing HTML before save.

**item\_after\_read** (*book*, *item*)

Process general item after read.

`item_before_write` (*book, item*)  
Process general item before write.

### booktype Module

`class ebooklib.plugins.booktype.BooktypeFootnotes` (*booktype\_book*)  
Bases: `ebooklib.plugins.base.BasePlugin`

`NAME = 'Booktype Footnotes'`

`html_before_write` (*book, chapter*)

`class ebooklib.plugins.booktype.BooktypeLinks` (*booktype\_book*)  
Bases: `ebooklib.plugins.base.BasePlugin`

`NAME = 'Booktype Links'`

`html_before_write` (*book, chapter*)

### sourcecode Module

`class ebooklib.plugins.sourcecode.SourceHighlighter`  
Bases: `ebooklib.plugins.base.BasePlugin`

`html_before_write` (*book, chapter*)

### standard Module

`class ebooklib.plugins.standard.SyntaxPlugin`  
Bases: `ebooklib.plugins.base.BasePlugin`

`NAME = 'Check HTML syntax'`

`html_before_write` (*book, chapter*)

`ebooklib.plugins.standard.leave_only` (*item, tag\_list*)

### tidyhtml Module

`class ebooklib.plugins.tidyhtml.TidyPlugin` (*extra={}*)  
Bases: `ebooklib.plugins.base.BasePlugin`

`NAME = 'Tidy HTML'`

`OPTIONS = {'char-encoding': 'utf8', 'tidy-mark': 'no'}`

`html_after_read` (*book, chapter*)

`html_before_write` (*book, chapter*)

`ebooklib.plugins.tidyhtml.tidy_cleanup` (*content, \*\*extra*)

### Reading

```
from ebooklib import epub
import ebooklib

book = epub.read_epub('test.epub')

for image in book.get_items_of_type(ebooklib.ITEM_IMAGE):
    print image
```

### Writing

```
from ebooklib import epub

book = epub.EpubBook()

# set metadata
book.set_identifier('id123456')
book.set_title('Sample book')
book.set_language('en')

book.add_author('Author Authorowski')
book.add_author('Danko Bananko', file_as='Gospodin Danko Bananko', role='ill', uid=
→ 'coauthor')

# create chapter
c1 = epub.EpubHtml(title='Intro', file_name='chap_01.xhtml', lang='hr')
c1.content=u'<h1>Intro heading</h1><p>Žaba je skočila u baru.</p>'

# add chapter
book.add_item(c1)
```

```
# define Table Of Contents
book.toc = (epub.Link('chap_01.xhtml', 'Introduction', 'intro'),
            (epub.Section('Simple book'),
             (c1, ))
            )

# add default NCX and Nav file
book.add_item(epub.EpubNcx())
book.add_item(epub.EpubNav())

# define CSS style
style = 'BODY {color: white;}'
nav_css = epub.EpubItem(uid="style_nav", file_name="style/nav.css", media_type="text/
↪css", content=style)

# add CSS file
book.add_item(nav_css)

# basic spine
book.spine = ['nav', c1]

# write to the file
epub.write_epub('test.epub', book, {})
```

Further examples are available in <https://github.com/aerkalov/ebooklib/tree/master/samples>



## CHAPTER 3

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### Indices and tables

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- `modindex`
- `search`



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