Dokumentacja platformy – format źródłowy epCollXML

epodreczniki.pl

**Wprowadzenie**

Platforma epodreczniki.pl jest oparta na standardach open source, w szczególności na standardzie XML. Jest to powszechnie stosowany język, używany do tworzenia ustrukturalizowanych zbiorów danych na podstawie reguł semantycznych. W projekcie epodreczniki.pl jest on używany do tworzenia i edytowania e-

podreczników. Do tego celu został zaadaptowany i rozszerzony schemat XML zaproponowany przez projekt Connexions: CNXML, CollXML, mdml, QML and BibTeXML.

Schemat Connexions został stworzony w formacie RNG. Na potrzeby epodreczniki.pl został on skonwertowany do formatu XSD, pozwalającym wyrazić potrzebne reguły i wymagania.

W rezultacie postały nowe schematy XML:

* epCollXML
* epXML

**epCollXML**

epCollXML jest formatem zapisu reprezentującym jeden e-podręcznik. Składa się z zestawu metadanych opisujących właściwości podręcznika oraz kolekcji modułów zawierających właściwą treść e-podręcznika. Każdy moduł jest oddzielnym jednostką zawierającą treść w formacie epXML.

epCollXML definiuje strukturę e-podręcznika, łącznie z opcjonalnymi podkolekcjami (subcollections) modułów i ich kolejnością.

**Schematy**

Elementem głównym każdej kolekcji epCollXML jest element **col:collection**. Zawiera 2 podstawowe elementy podrzędne **col:metadata** i **col:content.**

Metadane specyficzne dla formatu epCollXML (nowe względem Connexions) są zawarte w podelemencie col:metadata: **ep:e-textbook**.

Element col:content zawiera hierarchię elementów **col:module**, które mogą być grupowane w opcjonalnych elementach **col:subcollection**.

**Przykładowy epCollXML**

<?xml version=**"1.0"** encoding=**"utf-8"**?>  
<col:collection xmlns:col=[**"http://cnx.rice.edu/collxml"**](http://cnx.rice.edu/collxml)xmlns:ep=[**"http://epodreczniki.pl/"**](http://epodreczniki.pl/) xmlns:md=[**http://cnx.rice.edu/mdml**](http://cnx.rice.edu/mdml)xmlns:cnxsi=**"**[**http://cnx.rice.edu/system-info**](http://cnx.rice.edu/system-info)**"**>

<col:metadata mdml-version=**"0.5"**>

<md:content-id>**321**</md:content-id>

<md:repository>**https://rep.epodreczniki.pl/repo**</md:repository>

<md:version>**1**</md:version>

<md:created>**2013-08-27 03:35 CEST**</md:created>

<md:revised>**2014-05-12 10:13 CEST**</md:revised>

<md:language>**pl**</md:language>

<md:license url=**"**[**http://www.example.com/license"**](http://www.example.com/license)/>

<md:title>**Matematyka 1. Gimnazjum**</md:title>

<md:education-levellist>

<md:education-level key=**"E3"**>**Gimnazjum**</md:education-level>

</md:education-levellist>

<md:subjectlist>

<md:subject>**matematyka**</md:subject>

</md:subjectlist>

<md:abstract>**Abstrakt e-podręcznika**</md:abstract>

<ep:e-textbook ep:version=**"1.5"** ep:content-status=**"canon"** ep:recipient=**"student"**>

<ep:references>

<ep:collection-header>

<ep:reference ep:id=**"KOD\_WOMI1"**/>

</ep:collection-header>

</ep:references>

<ep:class>**1**</ep:class>

<ep:cover ep:cover-type=**"png"**>**123**</ep:cover>

<ep:signature/>

<ep:show-technical-remarks>**false**</ep:show-technical-remarks>

<ep:learning-objectives>

<ep:learning-objective>

<ep:learning-objective-version ep:key=**"1.1"**>**Dz.U. 30.05.2014, poz. 803**</ep:learning-objective-version>

<ep:learning-objective-stage ep:key=**"E4"**>**Etap 1**</ep:learning-

objective-stage>

<ep:learning-objective-school ep:key=**"SRE"**>**Szkoły**

**ponadgimnazjalne, których ukończenie umożliwia uzyskanie świadectwa dojrzałości po zdaniu egzaminu maturalnego**</ep:learning-objective-school>

<ep:learning-objective-subject ep:key=**"MAT"**>**Matematyka**</ep:learning-objective-subject>

<ep:learning-objective-scope ep:key=**"I"**>**Zakres podstawowy**</ep:learning-objective-scope>

<ep:learning-objective-name ep:key=**"CEL-E4-SRE-MAT-1.0-I- I"**>**Wykorzystanie i tworzenie informacji**</ep:learning-objective-name>

<ep:learning-objective-text>**Uczeń interpretuje tekst matematyczny. Po rozwiązaniu zadania interpretuje otrzymany wynik.**</ep:learning- objective-text>

</ep:learning-objective>

</ep:learning-objectives>

</ep:e-textbook>

<md:actors>

<md:person userid=**"1"**>

<md:fullname>**Jan Kowalski**</md:fullname>

<md:firstname>**Jan**</md:firstname>

<md:surname>**Kowalski**</md:surname>

<md:email>[**jan.kowalskie@example.com**](mailto:jan.kowalskie@example.com)</md:email>

</md:person>

</md:actors>

<md:roles>

<md:role type=**"author"**>**1**</md:role>

</col:metadata>

<col:content>

<col:module cnxsi:version-at-this-collection-version=**"11"** document=**"izpMGjkRLH"** repository=**"**<http://rep.epodreczniki.pl/module/> version=**"11"**>

<md:title>**Strona do pominięcia w spisie**</md:title>

</col:module>

<col:subcollection>

<ep:view-attributes>

<ep:view-attribute ep:type=**"panorama"** ep:id=**"1009"**/>

</ep:view-attributes>

<md:title>**Tytuł rozdziału**</md:title>

<col:content>

<col:module cnxsi:version-at-this-collection-version=**"14"** document=**"i7cNQ1OanJ"** repository=[**"http://rep.epodreczniki.pl/module/"**](file:///C:\Users\anna.stepien\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\06UTM8VM\%22http:\epodreczniki.pl\module\%22)version=**"14"**>

<md:title>**Pojęcie funkcji**</md:title>

</col:module>

<col:module cnxsi:version-at-this-collection-version=**"13"** document=**"iTo6Ej1mUI"** repository=[**"http://rep.epodreczniki.pl/module/"**](file:///C:\Users\anna.stepien\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\06UTM8VM\%22http:\rep.epodreczniki.pl\module\%22)version=**"13"**>

<md:title>**Dziedzina funkcji**</md:title>

</col:module>

<col:module cnxsi:version-at-this-collection-version=**"10"** document=**"iMe73KkQt8"** repository=**"**[**http://rep.epodreczniki.pl/module/**](http://rep.epodreczniki.pl/module/)**"** version=**"10"**>

<md:title>**Argument i wartość funkcji. Miejsca zerowe funkcji liczbowej**</md:title>

</col:module>

</col:content>

</col:subcollection>

</col:content>

</col:collection>

Schema **collxml.xsd**

|  |  |
| --- | --- |
| schema location: | **collxml.xsd** |
| attributeFormDefault: |  |
| elementFormDefault: | **qualified** |
| targetNamespace: | [**http://cnx.rice.edu/collxml**](http://cnx.rice.edu/collxml) |

|  |
| --- |
| Elements |
| [**collection**](#_bookmark0) |
| [**content**](#_bookmark1) |
| [**metadata**](#_bookmark2) |
| [**module**](#_bookmark4) |
| [**subcollection**](#_bookmark9) |

|  |  |
| --- | --- |
| schema location: | **mdml.xsd** |
| attributeFormDefault: |  |
| elementFormDefault: | **qualified** |
| targetNamespace: | [**http://cnx.rice.edu/mdml**](http://cnx.rice.edu/mdml) |

|  |
| --- |
| Elements |
| [**abstract**](#_bookmark10) |
| [**actors**](#_bookmark11) |
| [**content-id**](#_bookmark12) |
| [**content-url**](#_bookmark13) |
| [**created**](#_bookmark14) |
| [**education-levellist**](#_bookmark15) |
| [**keywordlist**](#_bookmark17) |
| [**language**](#_bookmark19) |
| [**license**](#_bookmark20) |
| [**organization**](#_bookmark22) |
| [**person**](#_bookmark27) |
| [**repository**](#_bookmark33) |
| [**revised**](#_bookmark34) |
| [**role**](#_bookmark35) |
| [**roles**](#_bookmark37) |
| [**subjectlist**](#_bookmark38) |
| [**subtitle**](#_bookmark40) |
| [**title**](#_bookmark41) |
| [**version**](#_bookmark42) |
| schema location: | | **ep.xsd** |
| attributeFormDefault: | |  |
| elementFormDefault: | | **qualified** |
| targetNamespace: | | [**http://epodreczniki.pl/**](http://epodreczniki.pl/) |

|  |  |  |  |
| --- | --- | --- | --- |
| Elements | Complex types | Attributes | Attr. groups |
| [**collection-header**](#_bookmark43) | [**type-link-reference**](#_bookmark77) | [**id**](#_bookmark81) | [**group-attr-status-and-recipient**](#_bookmark84) |
| [**cover**](#_bookmark46) |  | [**numbering**](#_bookmark82) |  |
| [**e-textbook**](#_bookmark48) |  | [**toc**](#_bookmark83) |  |
| [**editor**](#_bookmark57) |  |  |  |
| [**learning-objectives**](#_bookmark58) |  |  |  |
| [**origin-id**](#_bookmark67) |  |  |  |
| [**origin-version**](#_bookmark68) |  |  |  |
| [**references**](#_bookmark69) |  |  |  |
| [**root-id**](#_bookmark72) |  |  |  |
| [**view-attributes**](#_bookmark73) |  |  |  |

|  |  |
| --- | --- |
| schema location: | **cnxsi.xsd** |
| attributeFormDefault: |  |
| elementFormDefault: | **qualified** |
| targetNamespace: | [**http://cnx.rice.edu/system-info**](http://cnx.rice.edu/system-info) |

|  |
| --- |
| Attributes |
| [**version-at-this-collection-version**](#_bookmark87) |

|  |  |
| --- | --- |
| schema location: | **common.xsd** |
| attributeFormDefault: |  |
| elementFormDefault: | **qualified** |
| targetNamespace: | [**http://cnx.rice.edu/mdml**](http://cnx.rice.edu/mdml) |

|  |  |
| --- | --- |
| Complex types | Simple types |
| [**type-elem-string-attr-key**](#_bookmark88) | [**type-not-empty-positive-integer**](#_bookmark92) |
| [**type-elem-string-attr-key-qualified**](#_bookmark90) | [**type-not-empty-string**](#_bookmark93) |
|  | [**type-string-min-lenght-one**](#_bookmark94) |
|  | [**type-string-skip-include**](#_bookmark95) |

|  |  |
| --- | --- |
| schema location: | **common.xsd** |
| attributeFormDefault: |  |
| elementFormDefault: | **qualified** |
| targetNamespace: | [**http://epodreczniki.pl/**](http://epodreczniki.pl/) |

|  |  |
| --- | --- |
| Complex types | Simple types |
| [**type-elem-string-attr-key**](#_bookmark96) | [**type-not-empty-positive-integer**](#_bookmark100) |
| [**type-elem-string-attr-key-qualified**](#_bookmark98) | [**type-not-empty-string**](#_bookmark101) |

|  |
| --- |
| [**type-string-min-lenght-one**](#_bookmark102) |
| [**type-string-skip-include**](#_bookmark103) |

element **collection**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/collxml> |
| properties | content complex |
| children | [**metadata**](#_bookmark2) [**content**](#_bookmark1) |
| annotation | documentation  Document element of a CollXML document; it and its contents describe a collection of modules at a particular version.n |
| source | <xs:element name="collection">  <xs:annotation>  <xs:documentation>Document element of a CollXML document; it and its contents describe a collection of modules at a particular version.n</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:sequence>  <xs:element ref="metadata" minOccurs="0"/>  <xs:element ref="content"/>  </xs:sequence>  </xs:complexType>  </xs:element> |

element **content**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/collxml> |
| properties | content complex |
| children | [**module**](#_bookmark4) [**subcollection**](#_bookmark9) |
| used by | elements [**collection**](#_bookmark0) [**subcollection**](#_bookmark9) |
| annotation | documentation  An element to hold the content of the context element ('subcollection', 'module'). |
| source | <xs:element name="content">  <xs:annotation>  <xs:documentation>An element to hold the content of the context element ('subcollection', |

|  |  |
| --- | --- |
|  | 'module').</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:choice minOccurs="0" maxOccurs="unbounded">  <xs:element ref="module"/>  <xs:element ref="subcollection"/>  </xs:choice>  </xs:complexType>  </xs:element> |

element **metadata**

|  |  |  |
| --- | --- | --- |
| diagram |  | |
| namespace | <http://cnx.rice.edu/collxml> | |
| properties | content | complex |
| children | [**content-id**](#_bookmark12) [**content-url**](#_bookmark13) [**repository**](#_bookmark33) [**version**](#_bookmark42) [**created**](#_bookmark14) [**revised**](#_bookmark34) [**language**](#_bookmark19) [**license**](#_bookmark20) [**title**](#_bookmark41) [**subtitle**](#_bookmark40) [**education-levellist**](#_bookmark15)[**keywordlist**](#_bookmark17) [**subjectlist**](#_bookmark38) [**abstract**](#_bookmark10) [**e-textbook**](#_bookmark48) [**actors**](#_bookmark11) [**roles**](#_bookmark37) [**root-id**](#_bookmark72) [**origin-id**](#_bookmark67) [**origin-version**](#_bookmark68) | |
| used by | element [**collection**](#_bookmark0) | |
| attributes | Name Type Use Default Fixed Annotation [mdml-version](#_bookmark3) **xs:decimal** 0.5 | |
| annotation | documentation  An element to hold details about collection. | |
| source | <xs:element name="metadata">  <xs:annotation>  <xs:documentation>An element to hold details about collection.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:all>  <xs:element ref="md:content-id"/>  <xs:element ref="md:content-url" minOccurs="0"/>  <xs:element ref="md:repository"/>  <xs:element ref="md:version"/>  <xs:element ref="md:created"/>  <xs:element ref="md:revised"/>  <xs:element ref="md:language"/>  <xs:element ref="md:license"/>  <xs:element ref="md:title"/>  <xs:element ref="md:subtitle" minOccurs="0"/>  <xs:element ref="md:education-levellist" minOccurs="0"/>  <xs:element ref="md:keywordlist" minOccurs="0"/>  <xs:element ref="md:subjectlist" minOccurs="0"/>  <xs:element ref="md:abstract" minOccurs="0"/>  <xs:element ref="ep:e-textbook"/>  <xs:element ref="md:actors"/>  <xs:element ref="md:roles"/>  <xs:element ref="ep:root-id" minOccurs="0"/>  <xs:element ref="ep:origin-id" minOccurs="0"/>  <xs:element ref="ep:origin-version" minOccurs="0"/>  </xs:all>  <xs:attribute name="mdml-version" type="xs:decimal" default="0.5"/>  </xs:complexType>  </xs:element> | |

attribute **metadata/@ mdml -version**

|  |  |
| --- | --- |
| type | **xs:decimal** |
| properties | default 0.5 |
| source | <xs:attribute name="mdml-version" type="xs:decimal" default="0.5"/> |

element **module**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| diagram |  | | | |
| namespace | <http://cnx.rice.edu/collxml> | | | |
| properties | content | complex | | |
| children | [**title**](#_bookmark41) [**subtitle**](#_bookmark40) | | | |
| used by | element [**content**](#_bookmark1) | | | |
| attributes | Name Type Use Default Fixed Annotation [repository](#_bookmark5) **xs:anyURI** documentation  An attribute that represents  main address | | | |
|  |  | |  | of repository. |
| [url](#_bookmark6) | | **xs:anyURI** | documentation An attribute that represents location of current module in  repository. |
| [document](#_bookmark7) | | **xs:string** | documentation An attribute that represents  module id. |
| [version](#_bookmark8) | | **xs:string** |  |
| [cnxsi:version-at-](#_bookmark87) [this-collection-](#_bookmark87) [version](#_bookmark87) | | **xs:string** | documentation An attribute that specifies the version of the module that is used in the version of the collection expressed by the containing CollXML 'collection'. If the collection author has selected a particular version of the module to be used in this collection version, then the value will be that version number; if the collection author has chosen to use the 'latest' version of the module in this collection version, then the value will be the particular version of the module that was the latest version when this collection version was  published. |
| [ep:toc](#_bookmark83) | | [**type-string-**](#_bookmark103)[**skip-include**](#_bookmark103) | documentation An attribute that specifies if a module declaration should be included (default value) or skipped in the Table Of  Contents. |
| [ep:numbering](#_bookmark82) | | [**type-string-**](#_bookmark103) | documentation |

|  |  |  |
| --- | --- | --- |
|  | [**skip-include**](#_bookmark103) | An attribute that specifies if a module numbering should be included or skipped in Table Of  Content. |
| annotation | documentation |  |
| An element that represents a module in a collection. |  |
| source | <xs:element name="module">  <xs:annotation>  <xs:documentation>An element that represents a module in a collection.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:all>  <xs:element ref="md:title"/>  <xs:element ref="md:subtitle" minOccurs="0"/>  </xs:all>  <xs:attribute name="repository" type="xs:anyURI">  <xs:annotation>  <xs:documentation>An attribute that represents main address of repository.</xs:documentation>  </xs:annotation>  </xs:attribute>  <xs:attribute name="url" type="xs:anyURI">  <xs:annotation>  <xs:documentation>An attribute that represents location of current module in repository.</xs:documentation>  </xs:annotation>  </xs:attribute>  <xs:attribute name="document" type="xs:string">  <xs:annotation>  <xs:documentation>An attribute that represents module id.</xs:documentation>  </xs:annotation>  </xs:attribute>  <xs:attribute name="version" type="xs:string"/>  <xs:attribute ref="cnxsi:version-at-this-collection-version"/>  <xs:attribute ref="ep:toc"/>  <xs:attribute ref="ep:numbering"/>  </xs:complexType>  </xs:element> | |

attribute **module/@ repository**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| annotation | documentation  An attribute that represents main address of repository. |
| source | <xs:attribute name="repository" type="xs:anyURI">  <xs:annotation>  <xs:documentation>An attribute that represents main address of repository.</xs:documentation>  </xs:annotation>  </xs:attribute> |

attribute **module/@ url**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| annotation | documentation  An attribute that represents location of current module in repository. |
| source | <xs:attribute name="url" type="xs:anyURI">  <xs:annotation>  <xs:documentation>An attribute that represents location of current module in repository.</xs:documentation>  </xs:annotation>  </xs:attribute> |

attribute **module/@ document**

|  |  |
| --- | --- |
| type | **xs:string** |
| annotation | documentation  An attribute that represents module id. |
| source | <xs:attribute name="document" type="xs:string">  <xs:annotation>  <xs:documentation>An attribute that represents module id.</xs:documentation>  </xs:annotation>  </xs:attribute> |

attribute **module/@ version**

|  |  |
| --- | --- |
| type | **xs:string** |
| source | <xs:attribute name="version" type="xs:string"/> |

element **subcollection**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://cnx.rice.edu/collxml> | | | | | |
| properties | content complex | | | | | |
| children | [**title**](#_bookmark41) [**view-attributes**](#_bookmark73) [**content**](#_bookmark1) | | | | | |
| used by | element | [**content**](#_bookmark1) |  |  |  |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [ep:id](#_bookmark81) | [**type-not-empty-**](#_bookmark101)[**string**](#_bookmark101) |  |  |  | documentation An attribute  that represent id of element. |
| annotation | documentation | |  |  |  |  |
| An element that represents a subcollection in a collection. | | | |  |  |
| source | <xs:element name="subcollection">  <xs:annotation>  <xs:documentation>An element that represents a subcollection in a collection.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:all>  <xs:element ref="md:title"/>  <xs:element ref="ep:view-attributes" minOccurs="0"/>  <xs:element ref="content"/>  </xs:all>  <xs:attribute ref="ep:id"/>  </xs:complexType>  </xs:element> | | | | | |

element **abstract**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that specifies short module content description. |
| source | <xs:element name="abstract" type="xs:string">  <xs:annotation>  <xs:documentation>An element that specifies short module content description.</xs:documentation>  </xs:annotation>  </xs:element> |

element **actors**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| properties | content complex |
| children | [**person**](#_bookmark27) [**organization**](#_bookmark22) |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that represents list of persons object. |
| source | <xs:element name="actors">  <xs:annotation>  <xs:documentation>An element that represents list of persons object.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:choice minOccurs="1" maxOccurs="unbounded">  <xs:element ref="person" maxOccurs="unbounded"/>  <xs:element ref="organization" maxOccurs="unbounded"/>  </xs:choice>  </xs:complexType>  </xs:element> |

element **content-id**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:NMTOKEN** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that represent content id. |
| source | <xs:element name="content-id" type="xs:NMTOKEN">  <xs:annotation>  <xs:documentation>An element that represent content id.</xs:documentation>  </xs:annotation>  </xs:element> |

element **content-url**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:anyURI** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that represent content url. |
| source | <xs:element name="content-url" type="xs:anyURI">  <xs:annotation>  <xs:documentation>An element that represent content url.</xs:documentation>  </xs:annotation>  </xs:element> |

element **created**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that specifies module created date. |
| source | <xs:element name="created" type="xs:string">  <xs:annotation>  <xs:documentation>An element that specifies module created date.</xs:documentation>  </xs:annotation>  </xs:element> |

element **education-levellist**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| properties | content complex |
| children | [**education-level**](#_bookmark16) |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that specifies list of education level. |
| source | <xs:element name="education-levellist">  <xs:annotation>  <xs:documentation>An element that specifies list of education level.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:sequence>  <xs:element name="education-level" type="type-elem-string-attr-key" minOccurs="1" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that represents single education level.</xs:documentation>  </xs:annotation>  </xs:element>  </xs:sequence>  </xs:complexType>  </xs:element> |

element **education-levellist/education-level**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://cnx.rice.edu/mdml> | | | | | |
| type | [**type-elem-string-attr-key**](#_bookmark88) | | | | | |
| properties | minOcc | 1 |  |  |  |  |
| maxOcc | unbounded |  |  |  |  |
| content | complex |  |  |  |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [key](#_bookmark89) | **xs:string** |  |  |  | documentation A coded representation  of an element of the object. |
| annotation | documentation | |  |  |  |  |
| An element that represents single education level. | | |  |  |  |
| source | <xs:element name="education-level" type="type-elem-string-attr-key" minOccurs="1" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that represents single education level.</xs:documentation>  </xs:annotation>  </xs:element> | | | | | |

element **keywordlist**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| properties | content complex |
| children | [**keyword**](#_bookmark18) |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that specifies list of keyword related with collection. |
| source | <xs:element name="keywordlist">  <xs:annotation>  <xs:documentation>An element that specifies list of keyword related with collection.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:sequence>  <xs:element name="keyword" minOccurs="1" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that determines single keyword.</xs:documentation>  </xs:annotation>  </xs:element>  </xs:sequence>  </xs:complexType>  </xs:element> |

element **keywordlist/keyword**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| properties | minOcc 1  maxOcc unbounded |
| annotation | documentation  An element that determines single keyword. |
| source | <xs:element name="keyword" minOccurs="1" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that determines single keyword.</xs:documentation>  </xs:annotation>  </xs:element> |

element **language**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that specifies module content language. |
| source | <xs:element name="language" type="xs:string">  <xs:annotation>  <xs:documentation>An element that specifies module content language.</xs:documentation>  </xs:annotation>  </xs:element> |

element **license**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://cnx.rice.edu/mdml> | | | | | |
| type | extension of **xs:string** | | | | | |
| properties | content | complex |  |  |  |  |
| used by | element | [**metadata**](#_bookmark2) |  |  |  |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [url](#_bookmark21) | **xs:anyURI** |  |  |  | documentation An attribute that contains url with license. |
| annotation | documentation | |  |  |  |  |
| An element that specifies single license definition. | | |  |  |  |
| source | <xs:element name="license">  <xs:annotation>  <xs:documentation>An element that specifies single license definition.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:simpleContent>  <xs:extension base="xs:string">  <xs:attribute name="url" type="xs:anyURI">  <xs:annotation>  <xs:documentation>An attribute that contains url with license.</xs:documentation>  </xs:annotation>  </xs:attribute>  </xs:extension>  </xs:simpleContent>  </xs:complexType>  </xs:element> | | | | | |

attribute **license/@ url**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| annotation | documentation  An attribute that contains url with license. |
| source | <xs:attribute name="url" type="xs:anyURI">  <xs:annotation>  <xs:documentation>An attribute that contains url with license.</xs:documentation>  </xs:annotation>  </xs:attribute> |

element **organization**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| properties | content complex |
| children | [**fullname**](#_bookmark24) [**shortname**](#_bookmark25) [**email**](#_bookmark26) |
| used by | element [**actors**](#_bookmark11) |
| attributes | Name Type Use Default Fixed Annotation [userid](#_bookmark23) **xs:string** |
| annotation | documentation  An element that represents single organization. |
| source | <xs:element name="organization">  <xs:annotation>  <xs:documentation>An element that represents single organization.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:all>  <xs:element name="fullname" type="xs:string"/>  <xs:element name="shortname" type="xs:string"/>  <xs:element name="email" type="xs:string" minOccurs="0"/>  </xs:all>  <xs:attribute name="userid" type="xs:string"/>  </xs:complexType>  </xs:element> |

attribute **organization/@ userid**

|  |  |
| --- | --- |
| type | **xs:string** |
| source | <xs:attribute name="userid" type="xs:string"/> |

element **organization/fullname**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| source | <xs:element name="fullname" type="xs:string"/> |

element **organization/shortname**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| source | <xs:element name="shortname" type="xs:string"/> |

element **organization/email**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | minOcc 0  maxOcc 1 content simple |
| source | <xs:element name="email" type="xs:string" minOccurs="0"/> |

element **person**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| properties | content complex |
| children | [**firstname**](#_bookmark29) [**surname**](#_bookmark30) [**fullname**](#_bookmark31) [**email**](#_bookmark32) |
| used by | element [**actors**](#_bookmark11) |
| attributes | Name Type Use Default Fixed Annotation [userid](#_bookmark28) **xs:string** |
| annotation | documentation  An element that represents single person. |
| source | <xs:element name="person">  <xs:annotation>  <xs:documentation>An element that represents single person.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:all>  <xs:element name="firstname" type="xs:string"/>  <xs:element name="surname" type="xs:string"/>  <xs:element name="fullname" type="xs:string"/>  <xs:element name="email" type="xs:string" minOccurs="0"/>  </xs:all>  <xs:attribute name="userid" type="xs:string"/>  </xs:complexType>  </xs:element> |

attribute **person/@ userid**

|  |  |
| --- | --- |
| type | **xs:string** |
| source | <xs:attribute name="userid" type="xs:string"/> |

element **person/firstname**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| source | <xs:element name="firstname" type="xs:string"/> |

element **person/surname**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| source | <xs:element name="surname" type="xs:string"/> |

element **person/fullname**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| source | <xs:element name="fullname" type="xs:string"/> |

element **person/email**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | minOcc 0  maxOcc 1 content simple |
| source | <xs:element name="email" type="xs:string" minOccurs="0"/> |

element **repository**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |

|  |  |
| --- | --- |
| type | **xs:string** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that specifies repository location. |
| source | <xs:element name="repository" type="xs:string">  <xs:annotation>  <xs:documentation>An element that specifies repository location.</xs:documentation>  </xs:annotation>  </xs:element> |

element **revised**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that specifies module revised date. |
| source | <xs:element name="revised" type="xs:string">  <xs:annotation>  <xs:documentation>An element that specifies module revised date.</xs:documentation>  </xs:annotation>  </xs:element> |

element **role**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | extension of **xs:string** |
| properties | content complex |
| used by | element [**roles**](#_bookmark37) |
| attributes | Name Type Use Default Fixed Annotation [type](#_bookmark36) **xs:string** |
| annotation | documentation  An element that represents single role. |
| source | <xs:element name="role">  <xs:annotation>  <xs:documentation>An element that represents single role.</xs:documentation> |

|  |  |
| --- | --- |
|  | </xs:annotation>  <xs:complexType>  <xs:simpleContent>  <xs:extension base="xs:string">  <xs:attribute name="type" type="xs:string"/>  </xs:extension>  </xs:simpleContent>  </xs:complexType>  </xs:element> |

attribute **role/@ type**

|  |  |
| --- | --- |
| type | **xs:string** |
| source | <xs:attribute name="type" type="xs:string"/> |

element **roles**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| properties | content complex |
| children | [**role**](#_bookmark35) |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that represents list of roles object. |
| source | <xs:element name="roles">  <xs:annotation>  <xs:documentation>An element that represents list of roles object.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:sequence>  <xs:element ref="role" minOccurs="1" maxOccurs="unbounded"/>  </xs:sequence>  </xs:complexType>  </xs:element> |

element **subjectlist**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |

|  |  |
| --- | --- |
| properties | content complex |
| children | [**subject**](#_bookmark39) |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that specifies list of subject associated with collection. |
| source | <xs:element name="subjectlist">  <xs:annotation>  <xs:documentation>An element that specifies list of subject associated with collection.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:sequence>  <xs:element name="subject" minOccurs="1" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that represents single subject from restriction list of possible values.</xs:documentation>  </xs:annotation>  <xs:simpleType>  <xs:restriction base="xs:string">  <xs:enumeration value="matematyka"/>  <xs:enumeration value="język polski"/>  <xs:enumeration value="fizyka"/>  <xs:enumeration value="chemia"/>  <xs:enumeration value="biologia"/>  <xs:enumeration value="geografia"/>  <xs:enumeration value="przyroda"/>  <xs:enumeration value="edukacja wczesnoszkolna"/>  <xs:enumeration value="historia i społeczeństwo"/>  <xs:enumeration value="historia"/>  <xs:enumeration value="informatyka"/>  <xs:enumeration value="zajęcia komputerowe"/>  <xs:enumeration value="wiedza o społeczeństwie"/>  <xs:enumeration value="edukacja dla bezpieczeństwa"/>  </xs:restriction>  </xs:simpleType>  </xs:element>  </xs:sequence>  </xs:complexType>  </xs:element> |

element **subjectlist/subject**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | restriction of **xs:string** |
| properties | minOcc 1  maxOcc unbounded |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | content | simple | |  |
| facets | Kind |  | Value | Annotation |
| enumeration | | matematyka |  |
| enumeration | | język polski |  |
| enumeration | | fizyka |  |
| enumeration | | chemia |  |
| enumeration | | biologia |  |
| enumeration | | geografia |  |
| enumeration | | przyroda |  |
| enumeration | | edukacja wczesnoszkolna | |
| enumeration | | historia i społeczeństwo | |
| enumeration | | historia |  |
| enumeration | | informatyka |  |
| enumeration | | zajęcia komputerowe | |
| enumeration | | wiedza o społeczeństwie | |
| enumeration | | edukacja dla bezpieczeństwa | |
| annotation | documentation | | |  |
| An element that represents single subject from restriction list of possible values. | | | |
| source | <xs:element name="subject" minOccurs="1" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that represents single subject from restriction list of possible values.</xs:documentation>  </xs:annotation>  <xs:simpleType>  <xs:restriction base="xs:string">  <xs:enumeration value="matematyka"/>  <xs:enumeration value="język polski"/>  <xs:enumeration value="fizyka"/>  <xs:enumeration value="chemia"/>  <xs:enumeration value="biologia"/>  <xs:enumeration value="geografia"/>  <xs:enumeration value="przyroda"/>  <xs:enumeration value="edukacja wczesnoszkolna"/>  <xs:enumeration value="historia i społeczeństwo"/>  <xs:enumeration value="historia"/>  <xs:enumeration value="informatyka"/>  <xs:enumeration value="zajęcia komputerowe"/>  <xs:enumeration value="wiedza o społeczeństwie"/>  <xs:enumeration value="edukacja dla bezpieczeństwa"/>  </xs:restriction>  </xs:simpleType>  </xs:element> | | | |

element **subtitle**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |

|  |  |
| --- | --- |
| properties | content simple |
| used by | elements [**metadata**](#_bookmark2) [**module**](#_bookmark4) |
| annotation | documentation  An element that specifies module subtitle. |
| source | <xs:element name="subtitle" type="xs:string">  <xs:annotation>  <xs:documentation>An element that specifies module subtitle.</xs:documentation>  </xs:annotation>  </xs:element> |

element **title**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | content simple |
| used by | elements [**metadata**](#_bookmark2) [**module**](#_bookmark4)[**subcollection**](#_bookmark9) |
| annotation | documentation  An element that specifies module title. |
| source | <xs:element name="title" type="xs:string">  <xs:annotation>  <xs:documentation>An element that specifies module title.</xs:documentation>  </xs:annotation>  </xs:element> |

element **version**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:positiveInteger** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that specifies version of metadata. |
| source | <xs:element name="version" type="xs:positiveInteger">  <xs:annotation>  <xs:documentation>An element that specifies version of metadata.</xs:documentation>  </xs:annotation>  </xs:element> |

element **collection-header**

|  |  |  |
| --- | --- | --- |
| diagram |  | |
| namespace | <http://epodreczniki.pl/> | |
| properties | content | complex |
| children | [**reference**](#_bookmark45) | |
| used by | element [**references**](#_bookmark69) | |
| attributes | Name Type Use Default Fixed Annotation  [title-presentation](#_bookmark44) **derived by:** documentation  **xs:string** An attribute  that specifies title theme color. | |
| annotation | documentation  An element that specifies womi to be used on details page of e-textbook on epodreczniki.pl portal. | |
| source | <xs:element name="collection-header">  <xs:annotation>  <xs:documentation>An element that specifies womi to be used on details page of e-textbook on epodreczniki.pl portal.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:all>  <xs:element name="reference" type="type-link-reference">  <xs:annotation>  <xs:documentation>An element that specifies womi to be used in ep:collection- header.</xs:documentation>  </xs:annotation>  </xs:element>  </xs:all>  <xs:attribute name="title-presentation">  <xs:annotation>  <xs:documentation>An attribute that specifies title theme color.</xs:documentation>  </xs:annotation>  <xs:simpleType>  <xs:restriction base="xs:string">  <xs:enumeration value="dark"/>  <xs:enumeration value="light"/>  </xs:restriction>  </xs:simpleType>  </xs:attribute>  </xs:complexType>  </xs:element> | |

attribute **collection-header/@ title -presentation**

|  |  |  |  |
| --- | --- | --- | --- |
| type | restriction of **xs:string** | | |
| facets | Kind | Value | Annotation |
| enumeration | dark |  |
| enumeration | light |  |
| annotation | documentation | |  |
| An attribute that specifies title theme color. | | |
| source | <xs:attribute name="title-presentation">  <xs:annotation>  <xs:documentation>An attribute that specifies title theme color.</xs:documentation>  </xs:annotation>  <xs:simpleType>  <xs:restriction base="xs:string">  <xs:enumeration value="dark"/>  <xs:enumeration value="light"/>  </xs:restriction>  </xs:simpleType>  </xs:attribute> | | |

element **collection-header/reference**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-link-reference**](#_bookmark77) |
| properties | content complex |
| children | [**link**](#_bookmark78) |
| attributes | Name Type Use Default Fixed Annotation  [id](#_bookmark81) [**type-not-empty-**](#_bookmark101)documentation  [**string**](#_bookmark101)An attribute  that represent id of element. |
| annotation | documentation  An element that specifies womi to be used in ep:collection-header. |
| source | <xs:element name="reference" type="type-link-reference">  <xs:annotation>  <xs:documentation>An element that specifies womi to be used in ep:collection- header.</xs:documentation>  </xs:annotation>  </xs:element> |

element **cover**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://epodreczniki.pl/> | | | | | |
| type | extension of **xs:string** | | | | | |
| properties | content | complex |  |  |  |  |
| used by | element | [**e-textbook**](#_bookmark48) |  |  |  |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [cover-type](#_bookmark47) | **xs:string** |  |  |  | documentation An attribute that declares the format of the cover image (sample  value: "png"). |
| annotation | documentation | |  |  |  |  |
| An element that repressent information about collection cover. | | | |  |  |
| source | <xs:element name="cover">  <xs:annotation>  <xs:documentation>An element that repressent information about collection cover.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:simpleContent>  <xs:extension base="xs:string">  <xs:attribute name="cover-type" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute that declares the format of the cover image (sample value: "png").</xs:documentation>  </xs:annotation>  </xs:attribute>  </xs:extension>  </xs:simpleContent>  </xs:complexType>  </xs:element> | | | | | |

attribute **cover/@ cover -type**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | form qualified |
| annotation | documentation  An attribute that declares the format of the cover image (sample value: "png"). |
| source | <xs:attribute name="cover-type" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute that declares the format of the cover image (sample value: |
|  | "png").</xs:documentation>  </xs:annotation>  </xs:attribute> |

element **e-textbook**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| properties | content complex |
| children | [**references**](#_bookmark69) [**class**](#_bookmark50) [**volume**](#_bookmark51) [**cover**](#_bookmark46) [**publication-date**](#_bookmark52) [**signature**](#_bookmark53) [**stylesheet**](#_bookmark54) [**environment-type**](#_bookmark55) [**show-technical-remarks**](#_bookmark56)[**learning-objectives**](#_bookmark58) [**editor**](#_bookmark57) |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| used by | element | [**metadata**](#_bookmark2) | |  |  |  |  |
| attributes | Name |  | Type | Use | Default | Fixed | Annotation |
| [version](#_bookmark49) |  | **xs:decimal** |  | 1.5 |  | documentation An attribute speciefies formats' schema  version. |
| [content-status](#_bookmark85) | | **derived by: xs:string** |  |  |  | documentation An atrribute that specifies type of content  in e-textbook. |
| [recipient](#_bookmark86) |  | **derived by: xs:string** |  |  |  | documentation An atrribute that specifies a recipient of content in e-  textbook. |
| source | <xs:element name="e-textbook">  <xs:complexType>  <xs:sequence>  <xs:element ref="references" minOccurs="0"/>  <xs:element name="class" type="type-string-min-lenght-one" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the class the e-textbook's content is intended for (sample value: "1").</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="volume" type="type-not-empty-positive-integer" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the volume (single e-textbook) that is part of a larger e-textbook.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element ref="cover" minOccurs="0"/>  <xs:element name="publication-date" type="xs:string" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the official publication date of the e-textbook (sample value: "1 września 2015").</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="signature" type="xs:string" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that represents formal number declaring the e-textbook's conformance with core curriculum.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="stylesheet" type="type-string-min-lenght-one" minOccurs="0">  <xs:annotation>  <xs:documentation>An element to hold name of used stylesheet.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="environment-type" type="type-string-min-lenght-one" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that defines a special mode for displaying e-textbooks, e.g. for early school education.</xs:documentation>  </xs:annotation> | | | | | | |

|  |  |
| --- | --- |
|  | </xs:element>  <xs:element name="show-technical-remarks" type="xs:boolean">  <xs:annotation>  <xs:documentation>An element indicates that technical remarks (e.g. WOMI verification status) should be included after transformations in the e-textbook's output formats.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element ref="learning-objectives" maxOccurs="unbounded"/>  <xs:element ref="editor" minOccurs="0"/>  </xs:sequence>  <xs:attribute name="version" type="xs:decimal" default="1.5" form="qualified">  <xs:annotation>  <xs:documentation>An attribute speciefies formats' schema version.</xs:documentation>  </xs:annotation>  </xs:attribute>  <xs:attributeGroup ref="group-attr-status-and-recipient"/>  </xs:complexType>  </xs:element> |

attribute **e-textbook/@ version**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:decimal** |
| properties | default 1.5  form qualified |
| annotation | documentation  An attribute speciefies formats' schema version. |
| source | <xs:attribute name="version" type="xs:decimal" default="1.5" form="qualified">  <xs:annotation>  <xs:documentation>An attribute speciefies formats' schema version.</xs:documentation>  </xs:annotation>  </xs:attribute> |

element **e-textbook/class**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-string-min-lenght-one**](#_bookmark102) |
| properties | minOcc 0  maxOcc 1 content simple |
| facets | Kind Value Annotation  minLength 1 |
| annotation | documentation  An element that declares the class the e-textbook's content is intended for (sample value: "1"). |
| source | <xs:element name="class" type="type-string-min-lenght-one" minOccurs="0">  <xs:annotation> |

|  |  |
| --- | --- |
|  | <xs:documentation>An element that declares the class the e-textbook's content is intended for (sample value: "1").</xs:documentation>  </xs:annotation>  </xs:element> |

element **e-textbook/volume**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-not-empty-positive-integer**](#_bookmark100) |
| properties | minOcc 0  maxOcc 1 content simple |
| facets | Kind Value Annotation  pattern [0-9]+ |
| annotation | documentation  An element that declares the volume (single e-textbook) that is part of a larger e-textbook. |
| source | <xs:element name="volume" type="type-not-empty-positive-integer" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the volume (single e-textbook) that is part of a larger e-textbook.</xs:documentation>  </xs:annotation>  </xs:element> |

element **e-textbook/publication-date**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | minOcc 0  maxOcc 1 content simple |
| annotation | documentation  An element that declares the official publication date of the e-textbook (sample value: "1 września 2015"). |
| source | <xs:element name="publication-date" type="xs:string" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the official publication date of the e-textbook (sample value: "1 września 2015").</xs:documentation>  </xs:annotation>  </xs:element> |

element **e-textbook/signature**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | minOcc 0  maxOcc 1 content simple |
| annotation | documentation  An element that represents formal number declaring the e-textbook's conformance with core curriculum. |
| source | <xs:element name="signature" type="xs:string" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that represents formal number declaring the e-textbook's conformance with core curriculum.</xs:documentation>  </xs:annotation>  </xs:element> |

element **e-textbook/stylesheet**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-string-min-lenght-one**](#_bookmark102) |
| properties | minOcc 0  maxOcc 1 content simple |
| facets | Kind Value Annotation  minLength 1 |
| annotation | documentation  An element to hold name of used stylesheet. |
| source | <xs:element name="stylesheet" type="type-string-min-lenght-one" minOccurs="0">  <xs:annotation>  <xs:documentation>An element to hold name of used stylesheet.</xs:documentation>  </xs:annotation>  </xs:element> |

element **e-textbook/environment-type**

|  |  |  |  |
| --- | --- | --- | --- |
| diagram |  | | |
| namespace | <http://epodreczniki.pl/> | | |
| type | [**type-string-min-lenght-one**](#_bookmark102) | | |
| properties | minOcc | 0 |  |
| maxOcc | 1 |  |
| content | simple |  |
| facets | Kind | Value | Annotation |
| minLength | 1 |  |
| annotation | documentation | |  |
| An element that defines a special mode for displaying e-textbooks, e.g. for early school education. | | |
| source | <xs:element name="environment-type" type="type-string-min-lenght-one" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that defines a special mode for displaying e-textbooks, e.g. for early school education.</xs:documentation>  </xs:annotation>  </xs:element> | | |

element **e-textbook/show-technical-remarks**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:boolean** |
| properties | content simple |
| annotation | documentation  An element indicates that technical remarks (e.g. WOMI verification status) should be included after transformations in the e-textbook's output formats. |
| source | <xs:element name="show-technical-remarks" type="xs:boolean">  <xs:annotation>  <xs:documentation>An element indicates that technical remarks (e.g. WOMI verification status) should be included after transformations in the e-textbook's output formats.</xs:documentation>  </xs:annotation>  </xs:element> |

element **editor**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | restriction of **xs:string** |
| properties | content simple |
| used by | element [**e-textbook**](#_bookmark48) |
| facets | Kind Value Annotation  enumeration external-in- documentation |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | progress | Version was thrown from outer editor. The next versions will be throw from outer  editor also. |
| enumeration | external-final | documentation  Last version was thrown from outer editor. There will not be next versions. |
| enumeration | edition-online | documentation  Version was thrown (sealed) from EO. |
| annotation | documentation | |  |
| Cut off flag which means that detailed validation is not required in throw collection to RT or import to EO. | | |
| source | <xs:element name="editor">  <xs:annotation>  <xs:documentation>Cut off flag which means that detailed validation is not required in throw collection to RT or import to EO.</xs:documentation>  </xs:annotation>  <xs:simpleType>  <xs:restriction base="xs:string">  <xs:enumeration value="external-in-progress">  <xs:annotation>  <xs:documentation>Version was thrown from outer editor. The next versions will be throw from outer editor also.</xs:documentation>  </xs:annotation>  </xs:enumeration>  <xs:enumeration value="external-final">  <xs:annotation>  <xs:documentation>Last version was thrown from outer editor. There will not be next versions.</xs:documentation>  </xs:annotation>  </xs:enumeration>  <xs:enumeration value="edition-online">  <xs:annotation>  <xs:documentation>Version was thrown (sealed) from EO.</xs:documentation>  </xs:annotation>  </xs:enumeration>  </xs:restriction>  </xs:simpleType>  </xs:element> | | |

element **learning-objectives**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| properties | content complex |
| children | [**learning-objective**](#_bookmark59) |
| used by | element [**e-textbook**](#_bookmark48) |
| annotation | documentation  An element that contains list of learning objective. |
| source | <xs:element name="learning-objectives">  <xs:annotation>  <xs:documentation>An element that contains list of learning objective.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:sequence> |

|  |  |
| --- | --- |
|  | <xs:element name="learning-objective" maxOccurs="unbounded">  <xs:complexType>  <xs:all>  <xs:element name="learning-objective-stage" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that declares the education level of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-school" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that declares the school type of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-version" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that declares the version of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-subject" type="type-elem-string-attr-key-qualified" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the subject of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-scope" type="type-elem-string-attr-key-qualified" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the scope of the learning objective (e.g. elementary, expanding).</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-text" type="xs:string" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that contains detailed text description of the learning objective (sample value: "A student interprets mathematical text. After solving an exercise, he interprets the result").</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-name" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that represents general text description of the learning objective (sample value: "Creating and using information").</xs:documentation>  </xs:annotation>  </xs:element>  </xs:all>  </xs:complexType>  </xs:element>  </xs:sequence>  </xs:complexType>  </xs:element> |

element **learning-objectives/learning-objective**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| properties | minOcc 1  maxOcc unbounded content complex |
| children | [**learning-objective-stage**](#_bookmark60) [**learning-objective-school**](#_bookmark61) [**learning-objective-version**](#_bookmark62) [**learning-objective-subject**](#_bookmark63) [**learning-**](#_bookmark64)[**objective-scope**](#_bookmark64) [**learning-objective-text**](#_bookmark65) [**learning-objective-name**](#_bookmark66) |
| source | <xs:element name="learning-objective" maxOccurs="unbounded">  <xs:complexType>  <xs:all>  <xs:element name="learning-objective-stage" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that declares the education level of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-school" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that declares the school type of the learning objective.</xs:documentation> |
|  | </xs:annotation>  </xs:element>  <xs:element name="learning-objective-version" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that declares the version of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-subject" type="type-elem-string-attr-key-qualified" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the subject of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-scope" type="type-elem-string-attr-key-qualified" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the scope of the learning objective (e.g. elementary, expanding).</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-text" type="xs:string" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that contains detailed text description of the learning objective (sample value: "A student interprets mathematical text. After solving an exercise, he interprets the result").</xs:documentation>  </xs:annotation>  </xs:element>  <xs:element name="learning-objective-name" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that represents general text description of the learning objective (sample value: "Creating and using information").</xs:documentation>  </xs:annotation>  </xs:element>  </xs:all>  </xs:complexType>  </xs:element> |

element **learning-objectives/learning-objective/learning-objective-stage**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-elem-string-attr-key-qualified**](#_bookmark98) |
| properties | content complex |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [key](#_bookmark99) | **xs:string** |  |  |  | documentation A coded representation of an element  of the object. |
| annotation | documentation | |  |  |  |  |
| An element that declares the education level of the learning objective. | | | |  |  |
| source | <xs:element name="learning-objective-stage" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that declares the education level of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element> | | | | | |

element **learning-objectives/learning-objective/learning-objective-school**

|  |  |  |
| --- | --- | --- |
| diagram |  | |
| namespace | <http://epodreczniki.pl/> | |
| type | [**type-elem-string-attr-key-qualified**](#_bookmark98) | |
| properties | content | complex |
| attributes | Name Type Use Default Fixed Annotation  [key](#_bookmark99) **xs:string** documentation  A coded representation of an element of the object. | |
| annotation | documentation  An element that declares the school type of the learning objective. | |
| source | <xs:element name="learning-objective-school" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that declares the school type of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element> | |

element **learning-objectives/learning-objective/learning-objective-version**

|  |  |  |
| --- | --- | --- |
| diagram |  | |
| namespace | <http://epodreczniki.pl/> | |
| type | [**type-elem-string-attr-key-qualified**](#_bookmark98) | |
| properties | content | complex |
| attributes | Name Type Use Default Fixed Annotation  [key](#_bookmark99) **xs:string** documentation  A coded representation of an element  of the object. | |
| annotation | documentation  An element that declares the version of the learning objective. | |
| source | <xs:element name="learning-objective-version" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that declares the version of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element> | |

element **learning-objectives/learning-objective/learning-objective-subject**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://epodreczniki.pl/> | | | | | |
| type | [**type-elem-string-attr-key-qualified**](#_bookmark98) | | | | | |
| properties | minOcc | 0 |  |  |  |  |
| maxOcc | 1 |  |  |  |  |
| content | complex |  |  |  |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [key](#_bookmark99) | **xs:string** |  |  |  | documentation A coded representation  of an element of the object. |
| annotation | documentation | |  |  |  |  |
| An element that declares the subject of the learning objective. | | | |  |  |
| source | <xs:element name="learning-objective-subject" type="type-elem-string-attr-key-qualified" minOccurs="0"> | | | | | |
|  | <xs:annotation>  <xs:documentation>An element that declares the subject of the learning objective.</xs:documentation>  </xs:annotation>  </xs:element> | | | | | |

element **learning-objectives/learning-objective/learning-objective-scope**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://epodreczniki.pl/> | | | | | |
| type | [**type-elem-string-attr-key-qualified**](#_bookmark98) | | | | | |
| properties | minOcc | 0 |  |  |  |  |
| maxOcc | 1 |  |  |  |  |
| content | complex |  |  |  |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [key](#_bookmark99) | **xs:string** |  |  |  | documentation A coded representation  of an element of the object. |
| annotation | documentation | |  |  |  |  |
| An element that declares the scope of the learning objective (e.g. elementary, expanding). | | | | |  |
| source | <xs:element name="learning-objective-scope" type="type-elem-string-attr-key-qualified" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that declares the scope of the learning objective (e.g. elementary, expanding).</xs:documentation>  </xs:annotation>  </xs:element> | | | | | |

element **learning-objectives/learning-objective/learning-objective-text**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | minOcc 0  maxOcc 1 content simple |
| annotation | documentation |

|  |  |
| --- | --- |
|  | An element that contains detailed text description of the learning objective (sample value: "A student interprets  mathematical text. After solving an exercise, he interprets the result"). |
| source | <xs:element name="learning-objective-text" type="xs:string" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that contains detailed text description of the learning objective (sample value: "A student interprets mathematical text. After solving an exercise, he interprets the result").</xs:documentation>  </xs:annotation>  </xs:element> |

element **learning-objectives/learning-objective/learning-objective-name**

|  |  |  |
| --- | --- | --- |
| diagram |  | |
| namespace | <http://epodreczniki.pl/> | |
| type | [**type-elem-string-attr-key-qualified**](#_bookmark98) | |
| properties | content | complex |
| attributes | Name Type Use Default Fixed Annotation  [key](#_bookmark99) **xs:string** documentation  A coded representation of an element of the object. | |
| annotation | documentation  An element that represents general text description of the learning objective (sample value: "Creating and using information"). | |
| source | <xs:element name="learning-objective-name" type="type-elem-string-attr-key-qualified">  <xs:annotation>  <xs:documentation>An element that represents general text description of the learning objective (sample value: "Creating and using information").</xs:documentation>  </xs:annotation>  </xs:element> | |

element **origin-id**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| source | <xs:element name="origin-id" type="xs:string"/> |

element **origin-version**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| source | <xs:element name="origin-version" type="xs:string"/> |

element **references**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| properties | content complex |
| children | [**collection-header**](#_bookmark43) [**collection-toc**](#_bookmark70) |
| used by | element [**e-textbook**](#_bookmark48) |
| annotation | documentation  An element contains list of womis associated with the e-textbook; allowed child element: "ep:collection-header". |
| source | <xs:element name="references">  <xs:annotation>  <xs:documentation>An element contains list of womis associated with the e-textbook; allowed child element: "ep:collection-header".</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:all>  <xs:element ref="collection-header" minOccurs="0"/>  <xs:element name="collection-toc" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that contains special toc of collection.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:all>  <xs:element name="reference" type="type-link-reference">  <xs:annotation>  <xs:documentation>An element specifies womi to be used in ep:collection- toc.</xs:documentation>  </xs:annotation>  </xs:element>  </xs:all> |
|  | </xs:complexType>  </xs:element>  </xs:all>  </xs:complexType>  </xs:element> |

element **references/collection-toc**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| properties | minOcc 0  maxOcc 1 content complex |
| children | [**reference**](#_bookmark71) |
| annotation | documentation  An element that contains special toc of collection. |
| source | <xs:element name="collection-toc" minOccurs="0">  <xs:annotation>  <xs:documentation>An element that contains special toc of collection.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:all>  <xs:element name="reference" type="type-link-reference">  <xs:annotation>  <xs:documentation>An element specifies womi to be used in ep:collection- toc.</xs:documentation>  </xs:annotation>  </xs:element>  </xs:all>  </xs:complexType>  </xs:element> |

element **references/collection-toc/reference**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |

|  |  |  |
| --- | --- | --- |
| type | [**type-link-reference**](#_bookmark77) | |
| properties | content | complex |
| children | [**link**](#_bookmark78) | |
| attributes | Name Type Use Default Fixed Annotation  [id](#_bookmark81) [**type-not-empty-**](#_bookmark101)documentation  [**string**](#_bookmark101)An attribute  that represent  id of element. | |
| annotation | documentation  An element specifies womi to be used in ep:collection-toc. | |
| source | <xs:element name="reference" type="type-link-reference">  <xs:annotation>  <xs:documentation>An element specifies womi to be used in ep:collection- toc.</xs:documentation>  </xs:annotation>  </xs:element> | |

element **root-id**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | content simple |
| used by | element [**metadata**](#_bookmark2) |
| annotation | documentation  An element that represents main root id of collection. |
| source | <xs:element name="root-id" type="xs:string">  <xs:annotation>  <xs:documentation>An element that represents main root id of collection.</xs:documentation>  </xs:annotation>  </xs:element> |

element **view-attributes**

|  |  |
| --- | --- |
| diagram |  |
| namespace | <http://epodreczniki.pl/> |
| properties | content complex |
| children | [**view-attribute**](#_bookmark74) |
| used by | element [**subcollection**](#_bookmark9) |
| annotation | documentation  Main element for collection-specific presentation attributes. |
| source | <xs:element name="view-attributes"> |

|  |  |
| --- | --- |
|  | <xs:annotation>  <xs:documentation>Main element for collection-specific presentation attributes.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:sequence>  <xs:element name="view-attribute" minOccurs="1" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that specifies a collection-specific WOMI.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:attribute ref="id">  <xs:annotation>  <xs:documentation>An identifier for a WOMI used in collection's presentation attribute.</xs:documentation>  </xs:annotation>  </xs:attribute>  <xs:attribute name="type" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute that represents type of the collection's presentation attribute (sample value: "panorama").</xs:documentation>  </xs:annotation>  </xs:attribute>  <xs:attribute name="value" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute that represents value of the collection's presentation attribute (sample value: "#ABCDEF").</xs:documentation>  </xs:annotation>  </xs:attribute>  <!--<xs:assert test="@ep:type and (@ep:id or @ep:value)"/>-->  </xs:complexType>  </xs:element>  </xs:sequence>  </xs:complexType>  </xs:element> |

element **view-attributes/view-attribute**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://epodreczniki.pl/> | | | | | |
| properties | minOcc | 1 |  |  |  |  |
| maxOcc | unbounded |  |  |  |  |
| content | complex |  |  |  |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [id](#_bookmark81) | [**type-not-empty-**](#_bookmark101)[**string**](#_bookmark101) |  |  |  | documentation An identifier for a WOMI used in collection's presentation  attribute. |
| [type](#_bookmark75) | **xs:string** |  |  |  | documentation An attribute that represents type of the collection's presentation attribute (sample value:  "panorama"). |
| [value](#_bookmark76) | **xs:string** |  |  |  | documentation An attribute that represents value of the collection's presentation attribute (sample value:  "#ABCDEF"). |
| annotation | documentation | |  |  |  |  |
| An element that specifies a collection-specific WOMI. | | |  |  |  |
| source | <xs:element name="view-attribute" minOccurs="1" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that specifies a collection-specific WOMI.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:attribute ref="id">  <xs:annotation>  <xs:documentation>An identifier for a WOMI used in collection's presentation attribute.</xs:documentation> | | | | | |
|  | </xs:annotation>  </xs:attribute>  <xs:attribute name="type" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute that represents type of the collection's presentation attribute (sample value: "panorama").</xs:documentation>  </xs:annotation>  </xs:attribute>  <xs:attribute name="value" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute that represents value of the collection's presentation attribute (sample value: "#ABCDEF").</xs:documentation>  </xs:annotation>  </xs:attribute>  <!--<xs:assert test="@ep:type and (@ep:id or @ep:value)"/>-->  </xs:complexType>  </xs:element> | | | | | |

attribute **view-attributes/view-attribute/@ type**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | form qualified |
| annotation | documentation  An attribute that represents type of the collection's presentation attribute (sample value: "panorama"). |
| source | <xs:attribute name="type" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute that represents type of the collection's presentation attribute (sample value: "panorama").</xs:documentation>  </xs:annotation>  </xs:attribute> |

attribute **view-attributes/view-attribute/@ value**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | form qualified |
| annotation | documentation  An attribute that represents value of the collection's presentation attribute (sample value: "#ABCDEF"). |
| source | <xs:attribute name="value" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute that represents value of the collection's presentation attribute (sample value: "#ABCDEF").</xs:documentation>  </xs:annotation>  </xs:attribute> |

complexType **type-link-reference**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://epodreczniki.pl/> | | | | | |
| children | [**link**](#_bookmark78) | | | | | |
| used by | elements | [**collection-header/reference**](#_bookmark45) [**references/collection-toc/reference**](#_bookmark71) | | | |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [id](#_bookmark81) | [**type-not-empty-**](#_bookmark101)[**string**](#_bookmark101) |  |  |  | documentation An attribute  that represent id of element. |
| source | <xs:complexType name="type-link-reference">  <xs:sequence>  <xs:element name="link" minOccurs="0" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that contains link reference for related table of content and module.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:attribute name="toc-id" type="type-not-empty-string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute specifies id of related table of content.</xs:documentation>  </xs:annotation>  </xs:attribute>  <xs:attribute name="module-id" type="type-not-empty-string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute specifies id of related module.</xs:documentation>  </xs:annotation>  </xs:attribute>  </xs:complexType>  </xs:element>  </xs:sequence>  <xs:attribute ref="id"/>  </xs:complexType> | | | | | |

element **type-link-reference/link**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://epodreczniki.pl/> | | | | | |
| properties | minOcc | 0 |  |  |  |  |
| maxOcc | unbounded |  |  |  |  |
| content | complex |  |  |  |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [toc-id](#_bookmark79) | [**type-not-empty-**](#_bookmark101)[**string**](#_bookmark101) |  |  |  | documentation An attribute specifies id of related table  of content. |
| [module-id](#_bookmark80) | [**type-not-empty-**](#_bookmark101)[**string**](#_bookmark101) |  |  |  | documentation An attribute specifies id of related  module. |
| annotation | documentation | |  |  |  |  |
| An element that contains link reference for related table of content and module. | | | | |  |
| source | <xs:element name="link" minOccurs="0" maxOccurs="unbounded">  <xs:annotation>  <xs:documentation>An element that contains link reference for related table of content and module.</xs:documentation>  </xs:annotation>  <xs:complexType>  <xs:attribute name="toc-id" type="type-not-empty-string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute specifies id of related table of content.</xs:documentation>  </xs:annotation>  </xs:attribute>  <xs:attribute name="module-id" type="type-not-empty-string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute specifies id of related module.</xs:documentation>  </xs:annotation>  </xs:attribute>  </xs:complexType>  </xs:element> | | | | | |

attribute **type-link-reference/link/@ toc -id**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-not-empty-string**](#_bookmark101) |
| properties | form qualified |
| facets | Kind Value Annotation  pattern .+ |
| annotation | documentation |
|  | An attribute specifies id of related table of content. |
| source | <xs:attribute name="toc-id" type="type-not-empty-string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute specifies id of related table of content.</xs:documentation>  </xs:annotation>  </xs:attribute> |

attribute **type-link-reference/link/@ module -id**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-not-empty-string**](#_bookmark101) |
| properties | form qualified |
| facets | Kind Value Annotation  pattern .+ |
| annotation | documentation  An attribute specifies id of related module. |
| source | <xs:attribute name="module-id" type="type-not-empty-string" form="qualified">  <xs:annotation>  <xs:documentation>An attribute specifies id of related module.</xs:documentation>  </xs:annotation>  </xs:attribute> |

attribute **id**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-not-empty-string**](#_bookmark101) |
| used by | elements [**subcollection**](#_bookmark9) [**view-attributes/view-attribute**](#_bookmark74)  complexType [**type-link-reference**](#_bookmark77) |
| facets | Kind Value Annotation  pattern .+ |
| annotation | documentation  An attribute that represent id of element. |
| source | <xs:attribute name="id" type="type-not-empty-string">  <xs:annotation>  <xs:documentation>An attribute that represent id of element.</xs:documentation>  </xs:annotation>  </xs:attribute> |

attribute **numbering**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-string-skip-include**](#_bookmark103) |
| used by | element [**module**](#_bookmark4) |
| facets | Kind Value Annotation  enumeration skip enumeration include |
| annotation | documentation  An attribute that specifies if a module numbering should be included or skipped in Table Of Content. |
| source | <xs:attribute name="numbering" type="type-string-skip-include"> |

|  |  |
| --- | --- |
|  | <xs:annotation>  <xs:documentation>An attribute that specifies if a module numbering should be included or skipped in Table Of Content.</xs:documentation>  </xs:annotation>  </xs:attribute> |

attribute **toc**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | [**type-string-skip-include**](#_bookmark103) |
| used by | element [**module**](#_bookmark4) |
| facets | Kind Value Annotation  enumeration skip enumeration include |
| annotation | documentation  An attribute that specifies if a module declaration should be included (default value) or skipped in the Table Of Contents. |
| source | <xs:attribute name="toc" type="type-string-skip-include">  <xs:annotation>  <xs:documentation>An attribute that specifies if a module declaration should be included (default value) or skipped in the Table Of Contents.</xs:documentation>  </xs:annotation>  </xs:attribute> |

attributeGroup **group-attr-status-and-recipient**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| namespace | <http://epodreczniki.pl/> | | | | | | |
| used by | element | [**e-textbook**](#_bookmark48) | |  |  |  |  |
| attributes | Name |  | Type | Use | Default | Fixed | Annotation |
| [content-status](#_bookmark85) | | **derived by: xs:string** |  |  |  | documentation An atrribute that specifies type of content  in e-textbook. |
| [recipient](#_bookmark86) |  | **derived by: xs:string** |  |  |  | documentation An atrribute that specifies a recipient of content in e-  textbook. |
| source | <xs:attributeGroup name="group-attr-status-and-recipient">  <xs:attribute name="content-status" form="qualified">  <xs:annotation>  <xs:documentation>An atrribute that specifies type of content in e- textbook.</xs:documentation>  </xs:annotation>  <xs:simpleType>  <xs:restriction base="xs:string">  <xs:enumeration value="canon">  <xs:annotation>  <xs:documentation>It declares content that needs to be included.</xs:documentation>  </xs:annotation>  </xs:enumeration>  <xs:enumeration value="expanding"> | | | | | | |

|  |  |
| --- | --- |
|  | <xs:annotation>  <xs:documentation>It declares expanding content that are optional and covering more than canon.</xs:documentation>  </xs:annotation>  </xs:enumeration>  <xs:enumeration value="supplemental">  <xs:annotation>  <xs:documentation>It declares supplemental content that are mainly for recipients with disabilities.</xs:documentation>  </xs:annotation>  </xs:enumeration>  </xs:restriction>  </xs:simpleType>  </xs:attribute>  <xs:attribute name="recipient" form="qualified">  <xs:annotation>  <xs:documentation>An atrribute that specifies a recipient of content in e- textbook.</xs:documentation>  </xs:annotation>  <xs:simpleType>  <xs:restriction base="xs:string">  <xs:enumeration value="student">  <xs:annotation>  <xs:documentation>It declares that content are ordinary.</xs:documentation>  </xs:annotation>  </xs:enumeration>  <xs:enumeration value="teacher">  <xs:annotation>  <xs:documentation>It declares that content are teacher-oriented.</xs:documentation>  </xs:annotation>  </xs:enumeration>  </xs:restriction>  </xs:simpleType>  </xs:attribute>  </xs:attributeGroup> |

attribute **group-attr-status-and-recipient/@ content -status**

|  |  |  |
| --- | --- | --- |
| namespace | <http://epodreczniki.pl/> | |
| type | restriction of **xs:string** | |
| properties | form | qualified |
| facets | Kind Value Annotation  enumeration canon documentation  It declares content that needs to be included. enumeration expanding documentation  It declares expanding content that are optional and covering more than canon. enumeration supplemental documentation  It declares supplemental content that are mainly for recipients with disabilities. | |
| annotation | documentation  An atrribute that specifies type of content in e-textbook. | |
| source | <xs:attribute name="content-status" form="qualified">  <xs:annotation>  <xs:documentation>An atrribute that specifies type of content in e-textbook.</xs:documentation>  </xs:annotation>  <xs:simpleType> | |

|  |  |
| --- | --- |
|  | <xs:restriction base="xs:string">  <xs:enumeration value="canon">  <xs:annotation>  <xs:documentation>It declares content that needs to be included.</xs:documentation>  </xs:annotation>  </xs:enumeration>  <xs:enumeration value="expanding">  <xs:annotation>  <xs:documentation>It declares expanding content that are optional and covering more than canon.</xs:documentation>  </xs:annotation>  </xs:enumeration>  <xs:enumeration value="supplemental">  <xs:annotation>  <xs:documentation>It declares supplemental content that are mainly for recipients with disabilities.</xs:documentation>  </xs:annotation>  </xs:enumeration>  </xs:restriction>  </xs:simpleType>  </xs:attribute> |

attribute **group-attr-status-and-recipient/@ recipient**

|  |  |  |
| --- | --- | --- |
| namespace | <http://epodreczniki.pl/> | |
| type | restriction of **xs:string** | |
| properties | form | qualified |
| facets | Kind Value Annotation  enumeration student documentation  It declares that content are ordinary. enumeration teacher documentation  It declares that content are teacher-oriented. | |
| annotation | documentation  An atrribute that specifies a recipient of content in e-textbook. | |
| source | <xs:attribute name="recipient" form="qualified">  <xs:annotation>  <xs:documentation>An atrribute that specifies a recipient of content in e- textbook.</xs:documentation>  </xs:annotation>  <xs:simpleType>  <xs:restriction base="xs:string">  <xs:enumeration value="student">  <xs:annotation>  <xs:documentation>It declares that content are ordinary.</xs:documentation>  </xs:annotation>  </xs:enumeration>  <xs:enumeration value="teacher">  <xs:annotation>  <xs:documentation>It declares that content are teacher-oriented.</xs:documentation>  </xs:annotation>  </xs:enumeration>  </xs:restriction>  </xs:simpleType>  </xs:attribute> | |

attribute **version-at-this-collection-version**

|  |  |
| --- | --- |
| namespace | <http://cnx.rice.edu/system-info> |
| type | **xs:string** |
| used by | element [**module**](#_bookmark4) |
| annotation | documentation  An attribute that specifies the version of the module that is used in the version of the collection expressed by the containing CollXML 'collection'. If the collection author has selected a particular version of the module to be used in this collection version, then the value will be that version number; if the collection author has chosen to use the 'latest' version of the module in this collection version, then the value will be the particular version of the module that was the latest version when this collection version was published. |
| source | <xs:attribute name="version-at-this-collection-version" type="xs:string">  <xs:annotation>  <xs:documentation>An attribute that specifies the version of the module that is used in the version of the collection expressed by the containing CollXML 'collection'. If the collection author has selected a particular version of the module to be used in this collection version, then the value will be that version number; if the collection author has chosen to use the 'latest' version of the module in this collection version, then the value will be the particular version of the module that was the latest version when this collection version was published.</xs:documentation>  </xs:annotation>  </xs:attribute> |

complexType **type-elem-string-attr-key**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | |
| namespace | <http://cnx.rice.edu/mdml> | | | | | |
| type | extension of **xs:string** | | | | | |
| properties | base | xs:string |  |  |  |  |
| used by | element | [**education-levellist/education-level**](#_bookmark16) | |  |  |  |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| [key](#_bookmark89) | **xs:string** |  |  |  | documentation A coded representation of an element of the object. |
| source | <xs:complexType name="type-elem-string-attr-key">  <xs:simpleContent>  <xs:extension base="xs:string">  <xs:attribute name="key" type="xs:string">  <xs:annotation>  <xs:documentation>A coded representation of an element of the object.</xs:documentation>  </xs:annotation>  </xs:attribute>  </xs:extension>  </xs:simpleContent>  </xs:complexType> | | | | | |

attribute **type-elem-string-attr-key/@ key**

|  |  |
| --- | --- |
| type | **xs:string** |
| annotation | documentation  A coded representation of an element of the object. |
| source | <xs:attribute name="key" type="xs:string">  <xs:annotation>  <xs:documentation>A coded representation of an element of the object.</xs:documentation>  </xs:annotation>  </xs:attribute> |

complexType **type-elem-string-attr-key-qualified**

|  |  |  |
| --- | --- | --- |
| diagram |  | |
| namespace | <http://cnx.rice.edu/mdml> | |
| type | extension of **xs:string** | |
| properties | base | xs:string |
| attributes | Name Type Use Default Fixed Annotation  [key](#_bookmark91) **xs:string** documentation  A coded representation of an element  of the object. | |
| source | <xs:complexType name="type-elem-string-attr-key-qualified">  <xs:simpleContent>  <xs:extension base="xs:string">  <xs:attribute name="key" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>A coded representation of an element of the object.</xs:documentation>  </xs:annotation>  </xs:attribute>  </xs:extension>  </xs:simpleContent>  </xs:complexType> | |

attribute **type-elem-string-attr-key-qualified/@ key**

|  |  |
| --- | --- |
| namespace | <http://cnx.rice.edu/mdml> |
| type | **xs:string** |
| properties | form qualified |
| annotation | documentation  A coded representation of an element of the object. |
| source | <xs:attribute name="key" type="xs:string" form="qualified">  <xs:annotation> |
|  | <xs:documentation>A coded representation of an element of the object.</xs:documentation>  </xs:annotation>  </xs:attribute> |

simpleType **type-not-empty-positive-integer**

|  |  |
| --- | --- |
| namespace | <http://cnx.rice.edu/mdml> |
| type | restriction of **xs:positiveInteger** |
| properties | base xs:positiveInteger |
| facets | Kind Value Annotation  pattern [0-9]+ |
| source | <xs:simpleType name="type-not-empty-positive-integer">  <xs:restriction base="xs:positiveInteger">  <xs:pattern value="[0-9]+"/>  </xs:restriction>  </xs:simpleType> |

simpleType **type-not-empty-string**

|  |  |
| --- | --- |
| namespace | <http://cnx.rice.edu/mdml> |
| type | restriction of **xs:string** |
| properties | base xs:string |
| facets | Kind Value Annotation  pattern .+ |
| source | <xs:simpleType name="type-not-empty-string">  <xs:restriction base="xs:string">  <xs:pattern value=".+"/>  </xs:restriction>  </xs:simpleType> |

simpleType **type-string-min-lenght-one**

|  |  |
| --- | --- |
| namespace | <http://cnx.rice.edu/mdml> |
| type | restriction of **xs:string** |
| properties | base xs:string |
| facets | Kind Value Annotation  minLength 1 |
| source | <xs:simpleType name="type-string-min-lenght-one">  <xs:restriction base="xs:string">  <xs:minLength value="1"/>  </xs:restriction>  </xs:simpleType> |

simpleType **type-string-skip-include**

|  |  |
| --- | --- |
| namespace | <http://cnx.rice.edu/mdml> |

|  |  |  |
| --- | --- | --- |
| type | restriction of **xs:string** | |
| properties | base | xs:string |
| facets | Kind Value Annotation enumeration skip  enumeration include | |
| source | <xs:simpleType name="type-string-skip-include">  <xs:restriction base="xs:string">  <xs:enumeration value="skip"/>  <xs:enumeration value="include"/>  </xs:restriction>  </xs:simpleType> | |

complexType **type-elem-string-attr-key**

|  |  |  |
| --- | --- | --- |
| diagram |  | |
| namespace | <http://epodreczniki.pl/> | |
| type | extension of **xs:string** | |
| properties | base | xs:string |
| attributes | Name Type Use Default Fixed Annotation  [key](#_bookmark97) **xs:string** documentation  A coded representation of an element of the object. | |
| source | <xs:complexType name="type-elem-string-attr-key">  <xs:simpleContent>  <xs:extension base="xs:string">  <xs:attribute name="key" type="xs:string">  <xs:annotation>  <xs:documentation>A coded representation of an element of the object.</xs:documentation>  </xs:annotation>  </xs:attribute>  </xs:extension>  </xs:simpleContent>  </xs:complexType> | |

attribute **type-elem-string-attr-key/@ key**

|  |  |
| --- | --- |
| type | **xs:string** |
| annotation | documentation  A coded representation of an element of the object. |
| source | <xs:attribute name="key" type="xs:string">  <xs:annotation>  <xs:documentation>A coded representation of an element of the object.</xs:documentation>  </xs:annotation> |

|  |  |
| --- | --- |
|  | </xs:attribute> |

complexType **type-elem-string-attr-key-qualified**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| diagram |  | | | | | | |
| namespace | <http://epodreczniki.pl/> | | | | | | |
| type | extension of **xs:string** | | | | | | |
| properties | base | xs:string | |  |  |  |  |
| used by | elements | | [**learning-objectives/learning-objective/learning-objective-name**](#_bookmark66) [**learning-objectives/learning-**](#_bookmark61)  [**objective/learning-objective-school**](#_bookmark61) [**learning-objectives/learning-objective/learning-objective-scope**](#_bookmark64)[**learning-objectives/learning-objective/learning-objective-stage**](#_bookmark60) [**learning-objectives/learning-**](#_bookmark63)[**objective/learning-objective-subject**](#_bookmark63) [**learning-objectives/learning-objective/learning-objective-version**](#_bookmark62) | | | | |
| attributes | Name |  | Type | Use | Default | Fixed | Annotation |
| [key](#_bookmark99) |  | **xs:string** |  |  |  | documentation A coded representation of an element of the object. |
| source | <xs:complexType name="type-elem-string-attr-key-qualified">  <xs:simpleContent>  <xs:extension base="xs:string">  <xs:attribute name="key" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>A coded representation of an element of the object.</xs:documentation>  </xs:annotation>  </xs:attribute>  </xs:extension>  </xs:simpleContent>  </xs:complexType> | | | | | | |

attribute **type-elem-string-attr-key-qualified/@ key**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | **xs:string** |
| properties | form qualified |
| annotation | documentation  A coded representation of an element of the object. |
| source | <xs:attribute name="key" type="xs:string" form="qualified">  <xs:annotation>  <xs:documentation>A coded representation of an element of the object.</xs:documentation>  </xs:annotation>  </xs:attribute> |

simpleType **type-not-empty-positive-integer**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |

|  |  |
| --- | --- |
| type | restriction of **xs:positiveInteger** |
| properties | base xs:positiveInteger |
| used by | element [**e-textbook/volume**](#_bookmark51) |
| facets | Kind Value Annotation pattern [0-9]+ |
| source | <xs:simpleType name="type-not-empty-positive-integer">  <xs:restriction base="xs:positiveInteger">  <xs:pattern value="[0-9]+"/>  </xs:restriction>  </xs:simpleType> |

simpleType **type-not-empty-string**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | restriction of **xs:string** |
| properties | base xs:string |
| used by | attributes [**id**](#_bookmark81) [**type-link-reference/link/@**](#_bookmark80) **module -id** [**type-link-reference/link/@**](#_bookmark79) **toc -id** |
| facets | Kind Value Annotation  pattern .+ |
| source | <xs:simpleType name="type-not-empty-string">  <xs:restriction base="xs:string">  <xs:pattern value=".+"/>  </xs:restriction>  </xs:simpleType> |

simpleType **type-string-min-lenght-one**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | restriction of **xs:string** |
| properties | base xs:string |
| used by | elements [**e-textbook/class**](#_bookmark50) [**e-textbook/environment-type**](#_bookmark55)[**e-textbook/stylesheet**](#_bookmark54) |
| facets | Kind Value Annotation  minLength 1 |
| source | <xs:simpleType name="type-string-min-lenght-one">  <xs:restriction base="xs:string">  <xs:minLength value="1"/>  </xs:restriction>  </xs:simpleType> |

simpleType **type-string-skip-include**

|  |  |
| --- | --- |
| namespace | <http://epodreczniki.pl/> |
| type | restriction of **xs:string** |
| properties | base xs:string |
| used by | attributes [**numbering**](#_bookmark82) [**toc**](#_bookmark83) |

|  |  |  |  |
| --- | --- | --- | --- |
| facets | Kind | Value | Annotation |
| enumeration | skip |  |
| enumeration | include |  |
| source | <xs:simpleType name="type-string-skip-include">  <xs:restriction base="xs:string">  <xs:enumeration value="skip"/>  <xs:enumeration value="include"/>  </xs:restriction>  </xs:simpleType> | | |