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<?xml version="1.0"?>

<!-- edited with XML Spy v3.5 (http://www.xmlspy.com) by Thomas Wason (private) -->
<!-- filename=ims_cp_rootv1plp2.xsd -->
<!-- Copyright (2) 2001 IMS Global Learning Consortium, Inc. -->
<!-- edited by Thomas Wason -->
<!-- Conforms to w3c http://www.w3.org/TR/xmlschema-1/ 2000-10-24-->

<xsd:schema xmlns="http://www.imsproject.org/xsd/ims_cp_rootv1plp2"
  targetNamespace="http://www.imsproject.org/xsd/ims_cp_rootv1plp2"
  xmlns:xml="http://www.w3.org/XML/1998/namespace"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="unqualified" version="IMS CP 1.1.2">

  <!-- ***** -->
  <!-- ** Change History ** -->
  <!-- ***** -->

  <xsd:annotation>
    <xsd:documentation xml:lang="en">DRAFT XSD for IMS Content Packaging version 1.1
DRAFT</xsd:documentation>
    <xsd:documentation> Copyright (c) 2001 IMS GLC, Inc. </xsd:documentation>
    <xsd:documentation>2000-04-21, Adjustments by T.D. Wason from CP
1.0.</xsd:documentation>
    <xsd:documentation>2001-02-22, T.D.Wason: Modify for 2000-10-24 XML-Schema
version. Modified to support extension.</xsd:documentation>
    <xsd:documentation>2001-03-12, T.D.Wason: Change filename, target and meta-data
namespaces and meta-data fielname. Add meta-data to itemType, fileType and
organizationType.</xsd:documentation>
    <xsd:documentation>Do not define namespaces for xml in XML instances generated
from this xsd.</xsd:documentation>
    <xsd:documentation>Imports IMS meta-data xsd, lower case element names.
</xsd:documentation>
    <xsd:documentation>This XSD provides a reference to the IMS meta-data root
element as imsmd:record</xsd:documentation>
    <xsd:documentation>If the IMS meta-data is to be used in the XML instance then
the instance must define an IMS meta-data prefix with a namespace. The meta-data
targetNamespace should be used. </xsd:documentation>
    <xsd:documentation>2001-03-20, Thor Anderson: Remove manifestref, change
resourceref back to identifierref, change manifest back to contained by manifest. --Tom
Wason: manifest may contain _none_ or more manifests.</xsd:documentation>
    <xsd:documentation>2001-04-13 Tom Wason: corrected attirbute name structure. Was
misnamed type. </xsd:documentation>
    <xsd:documentation>2001-05-14 Schawn Thropp: Made all complexType extensible with
the group.any</xsd:documentation>
    <xsd:documentation>Added the anyAttribute to all complexTypes. Changed the href
attribute on the fileType and resourceType to xsd:string</xsd:documentation>
    <xsd:documentation>Changed the maxLength of the href, identifierref, parameters,
structure attributes to match the Information model.</xsd:documentation>

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    <xsd:documentation>2001-07-25 Schawn Thropp: Changed the namespace for the Schema
of Schemas to the 5/2/2001 W3C XML Schema</xsd:documentation>
    <xsd:documentation>Recommendation. attributeGroup attr.imsmd deleted, was not
used anywhere. Any attribute declarations that have</xsd:documentation>
    <xsd:documentation>use = "default" changed to use="optional" -
attr.structure.req.</xsd:documentation>
    <xsd:documentation>Any attribute declarations that have value="somevalue" changed
to default="somevalue",</xsd:documentation>
    <xsd:documentation>attr.structure.req (hierarchical). Removed references to IMS
MD Version 1.1.</xsd:documentation>
    <xsd:documentation>Modified attribute group "attr.resourcetype.req" to change use
from optional</xsd:documentation>
    <xsd:documentation>to required to match the information model. As a result the
default value also needed to be removed</xsd:documentation>
    <xsd:documentation>Name change for XSD. Changed to match version of CP Spec
    </xsd:documentation>
</xsd:annotation>

<xsd:annotation>
    <xsd:documentation>Inclusions and Imports</xsd:documentation>
</xsd:annotation>

<xsd:import namespace="http://www.w3.org/XML/1998/namespace"
schemaLocation="ims_xml.xsd"/>

<xsd:annotation>
    <xsd:documentation>Attribute Declarations</xsd:documentation>
</xsd:annotation>

<!-- ***** -->
<!-- ** Attribute Declarations ** -->
<!-- ***** -->
<xsd:attributeGroup name="attr.base">
    <xsd:attribute ref="xml:base" use="optional"/>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.default">
    <xsd:attribute name="default" type="xsd:IDREF" use="optional"/>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.href">
    <xsd:attribute name="href" use="optional">
        <xsd:simpleType>
            <xsd:restriction base="xsd:anyURI">
                <xsd:maxLength value="2000"/>
            </xsd:restriction>
        </xsd:simpleType>
    </xsd:attribute>

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</xsd:attributeGroup>

<xsd:attributeGroup name="attr.href.req">
  <xsd:attribute name="href" use="required">
    <xsd:simpleType>
      <xsd:restriction base="xsd:anyURI">
        <xsd:maxLength value="2000"/>
      </xsd:restriction>
    </xsd:simpleType>
  </xsd:attribute>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.identifier.req">
  <xsd:attribute name="identifier" type="xsd:ID" use="required"/>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.identifier">
  <xsd:attribute name="identifier" type="xsd:ID" use="optional"/>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.isvisible">
  <xsd:attribute name="isvisible" type="xsd:boolean" use="optional"/>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.parameters">
  <xsd:attribute name="parameters" use="optional">
    <xsd:simpleType>
      <xsd:restriction base="xsd:string">
        <xsd:maxLength value="1000"/>
      </xsd:restriction>
    </xsd:simpleType>
  </xsd:attribute>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.identifierref">
  <xsd:attribute name="identifierref" use="optional">
    <xsd:simpleType>
      <xsd:restriction base="xsd:string">
        <xsd:maxLength value="2000"/>
      </xsd:restriction>
    </xsd:simpleType>
  </xsd:attribute>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.identifierref.req">
  <xsd:attribute name="identifierref" use="required">
    <xsd:simpleType>
      <xsd:restriction base="xsd:string">

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        <xsd:maxLength value="2000"/>
    </xsd:restriction>
</xsd:simpleType>
</xsd:attribute>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.resourcetype.req">
    <xsd:attribute name="type" use="required">
        <xsd:simpleType>
            <xsd:restriction base="xsd:string">
                <xsd:maxLength value="1000"/>
            </xsd:restriction>
        </xsd:simpleType>
    </xsd:attribute>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.structure.req">
    <xsd:attribute name="structure" use="optional" default="hierarchical">
        <xsd:simpleType>
            <xsd:restriction base="xsd:string">
                <xsd:maxLength value="200"/>
            </xsd:restriction>
        </xsd:simpleType>
    </xsd:attribute>
</xsd:attributeGroup>

<xsd:attributeGroup name="attr.version">
    <xsd:attribute name="version" use="optional">
        <xsd:simpleType>
            <xsd:restriction base="xsd:string">
                <xsd:maxLength value="20"/>
            </xsd:restriction>
        </xsd:simpleType>
    </xsd:attribute>
</xsd:attributeGroup>

<xsd:annotation>
    <xsd:documentation>element groups</xsd:documentation>
</xsd:annotation>

<xsd:group name="grp.any">
    <xsd:annotation>
        <xsd:documentation>Any namespaced element from any namespace may be included
within an &quot;any&quot; element. The namespace for the imported element must be
defined in the instance, and the schema must be imported. </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:any namespace="##other" processContents="strict" minOccurs="0"

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maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:group>

<!-- ***** -->
<!-- ** Element Declarations ** -->
<!-- ***** -->

<xsd:element name="dependency" type="dependencyType"/>
<xsd:element name="file" type="fileType"/>
<xsd:element name="item" type="itemType"/>
<xsd:element name="manifest" type="manifestType"/>
<xsd:element name="metadata" type="metadataType"/>
<xsd:element name="organization" type="organizationType"/>
<xsd:element name="organizations" type="organizationsType"/>
<xsd:element name="resource" type="resourceType"/>
<xsd:element name="resources" type="resourcesType"/>
<xsd:element name="schema" type="schemaType"/>
<xsd:element name="schemaversion" type="schemaversionType"/>
<xsd:element name="title" type="titleType"/>

<!-- ***** -->
<!-- ** Complex Types ** -->
<!-- ***** -->

<!-- ***** -->
<!-- ** dependency ** -->
<!-- ***** -->
<xsd:complexType name="dependencyType">
    <xsd:sequence>
        <xsd:group ref="grp.any"/>
    </xsd:sequence>
    <xsd:attributeGroup ref="attr.identifierref.req"/>
    <xsd:anyAttribute namespace="##other" processContents="strict"/>
</xsd:complexType>

<!-- ***** -->
<!-- ** file ** -->
<!-- ***** -->
<xsd:complexType name="fileType">
    <xsd:sequence>
        <xsd:element ref="metadata" minOccurs="0"/>
        <xsd:group ref="grp.any"/>
    </xsd:sequence>
    <xsd:attributeGroup ref="attr.href.req"/>
    <xsd:anyAttribute namespace="##other" processContents="strict"/>
</xsd:complexType>

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<!-- ***** -->
<!-- ** item ** -->
<!-- ***** -->
<xsd:complexType name="itemType">
  <xsd:sequence>
    <xsd:element ref="title" minOccurs="0"/>
    <xsd:element ref="item" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element ref="metadata" minOccurs="0"/>
    <xsd:group ref="grp.any"/>
  </xsd:sequence>
  <xsd:attributeGroup ref="attr.identifier.req"/>
  <xsd:attributeGroup ref="attr.identifierref"/>
  <xsd:attributeGroup ref="attr.isvisible"/>
  <xsd:attributeGroup ref="attr.parameters"/>
  <xsd:anyAttribute namespace="##other" processContents="strict"/>
</xsd:complexType>

<!-- ***** -->
<!-- ** manifest ** -->
<!-- ***** -->
<xsd:complexType name="manifestType">
  <xsd:sequence>
    <xsd:element ref="metadata" minOccurs="0"/>
    <xsd:element ref="organizations"/>
    <xsd:element ref="resources"/>
    <xsd:element ref="manifest" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:group ref="grp.any"/>
  </xsd:sequence>
  <xsd:attributeGroup ref="attr.identifier.req"/>
  <xsd:attributeGroup ref="attr.version"/>
  <xsd:attribute ref="xml:base"/>
  <xsd:anyAttribute namespace="##other" processContents="strict"/>
</xsd:complexType>

<!-- ***** -->
<!-- ** metadata ** -->
<!-- ***** -->
<xsd:complexType name="metadataType">
  <xsd:sequence>
    <xsd:element ref="schema" minOccurs="0"/>
    <xsd:element ref="schemaversion" minOccurs="0"/>
    <xsd:group ref="grp.any"/>
  </xsd:sequence>
</xsd:complexType>

<!-- ***** -->
<!-- ** organizations ** -->
<!-- ***** -->

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<xsd:complexType name="organizationsType">
  <xsd:sequence>
    <xsd:element ref="organization" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:group ref="grp.any"/>
  </xsd:sequence>
  <xsd:attributeGroup ref="attr.default"/>
  <xsd:anyAttribute namespace="##other" processContents="strict"/>
</xsd:complexType>

<!-- ***** -->
<!-- ** organization ** -->
<!-- ***** -->
<xsd:complexType name="organizationType">
  <xsd:sequence>
    <xsd:element ref="title" minOccurs="0"/>
    <xsd:element ref="item" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element ref="metadata" minOccurs="0"/>
    <xsd:group ref="grp.any"/>
  </xsd:sequence>
  <xsd:attributeGroup ref="attr.identifier.req"/>
  <xsd:attributeGroup ref="attr.structure.req"/>
  <xsd:anyAttribute namespace="##other" processContents="strict"/>
</xsd:complexType>

<!-- ***** -->
<!-- ** resources ** -->
<!-- ***** -->
<xsd:complexType name="resourcesType">
  <xsd:sequence>
    <xsd:element ref="resource" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:group ref="grp.any"/>
  </xsd:sequence>
  <xsd:attributeGroup ref="attr.base"/>
  <xsd:anyAttribute namespace="##other" processContents="strict"/>
</xsd:complexType>

<!-- ***** -->
<!-- ** resource ** -->
<!-- ***** -->
<xsd:complexType name="resourceType">
  <xsd:sequence>
    <xsd:element ref="metadata" minOccurs="0"/>
    <xsd:element ref="file" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element ref="dependency" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:group ref="grp.any"/>
  </xsd:sequence>
  <xsd:attributeGroup ref="attr.identifier.req"/>
  <xsd:attributeGroup ref="attr.resourcetype.req"/>

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    <xsd:attributeGroup ref="attr.base"/>
    <xsd:attributeGroup ref="attr.href"/>
    <xsd:anyAttribute namespace="##other" processContents="strict"/>
</xsd:complexType>

<!-- ***** -->
<!-- ** Simple Types ** -->
<!-- ***** -->

<!-- ***** -->
<!-- ** schema ** -->
<!-- ***** -->
<xsd:simpleType name="schemaType">
    <xsd:restriction base="xsd:string">
        <xsd:maxLength value="100"/>
    </xsd:restriction>
</xsd:simpleType>

<!-- ***** -->
<!-- ** schemaversion ** -->
<!-- ***** -->
<xsd:simpleType name="schemaversionType">
    <xsd:restriction base="xsd:string">
        <xsd:maxLength value="20"/>
    </xsd:restriction>
</xsd:simpleType>

<!-- ***** -->
<!-- ** title ** -->
<!-- ***** -->
<xsd:simpleType name="titleType">
    <xsd:restriction base="xsd:string">
        <xsd:maxLength value="200"/>
    </xsd:restriction>
</xsd:simpleType>

</xsd:schema>

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