

FIRST - Bug #4315

Images repeating when editing assessment items

08/14/2009 01:48 PM - ben leinfelder

Status:	Resolved	Start date:	08/14/2009
Priority:	Normal	Due date:	
Assignee:	Sandeep Namilikonda	% Done:	0%
Category:	parser	Estimated time:	0.00 hour
Target version:	client-prototype	Spent time:	0.00 hour
Bugzilla-Id:	4315		
Description			
<p>I've found that when I go to edit the assessment items I see duplicate images (that cause invalid QTI, actually). It appears that the same image is showing up twice in the model (debug mode) and the XML. I found this on Jay's test: '2005 Midterm ver A' - questions 67-70. This does not seem to be affecting all questions with images (see question #60). You should be able to reproduce this by using Jay's Morpho backup (just copy the 'jlee' folder into the folder: .first/profiles/<your _profile>/data/jlee</p>			
Related issues:			
Blocked by FIRST - Bug #4309: Some of Data packages could not be uploaded to web		Resolved	08/13/2009

History

#2 - 08/20/2009 08:58 PM - Sandeep Namilikonda

UPDATE:

When the attached document is parsed using just the parser part of the code via Eclipse, apart from the faulty image association issue, there is **NO** duplication of images for any of the questions. Even when I create a data package using Morpho and then parse the attached document as a corresponding

exam in the data package, the initial parse does not show any duplicate images.

Its only when I try to re-open the assessment items that the images are duplicated for Q67-Q70 (e.g., SN-viaEclipse-test2 on Fred).

Another test assessment, SNtest-2005midterm-vA, that I had created using a slightly older version of Morpho had duplicate images for even for questions 39 and 45! With this version, the number of duplicates doubled each time I opened it. I was able to save it to the server but with similar warnings as what Jay had got in his attempts, namely, org.xml.SAXParseException and "Invalid meta data found".

#3 - 08/25/2009 07:24 AM - Sandeep Namilikonda

The following description is only a comment, intended to maintain continuity in the process of debugging the issue. No solution is proposed here, yet.

After examining some relevant code to debug this issue, I was led toward the XML (QTI) documents output corresponding to the assessment items that result in the duplicate images. The problem does not seem to be in the code that reads in the XML document and creates a Question object for display. It must be in the code that writes out those XML documents!

To support this conclusion, I have snippets from the revisions of an assessment item corresponding to question 70 of the attached examination below. Note that the accession numbers are in the chronological order of multiple attempts of re-opening the assessment and editing it. Please focus on how the number of Image tags get duplicated.

----- Accession ID number: 470.4 -----

```
<?xml version="1.0"?>
```

```
<qti:questestinterop xmlns:qti="http://www.imsglobal.org/xsd/ims_qtiasiv1p2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.imsglobal.org/xsd/ims_qtiasiv1p2 ims_qtiasiv1p2.xsd"><assessment id="" "><section id="" "><item
id="namilikonda.470.4" title="QuestionTypeImage hotspot"> <itemmetadata> </itemmetadata>
<presentation label="Question namilikonda.470.3"> <flow> <material> <mattext><![CDATA[
```

This diagram represents the processes of aerobic cellular respiration as 4 simple boxes. Many of the "inputs" and "outputs" are shown as arrows. Open arrows represent energy management molecules, while closed arrows represent other

inputs and outputs such as substrates and products. Use this diagram to answer the following questions.70) Which arrow in the figure above represents CO2?]]></mattext>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
</material>

----- Accession ID number: 470.5 -----

<?xml version="1.0"?>

<qti:questestinterop xmlns:qti="http://www.imsglobal.org/xsd/ims_qtiasiv1p2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.imsglobal.org/xsd/ims_qtiasiv1p2 ims_qtiasiv1p2.xsd"><assessment ident="" "><section ident="" "><item ident="namilikonda.470.5" title="QuestionTypeImage hotspot"> <itemmetadata> </itemmetadata>
<presentation label="Question namilikonda.470.4"> <flow> <material> <mattext><![CDATA[
This diagram represents the processes of aerobic cellular respiration as 4 simple boxes. Many of the "inputs" and "outputs" are shown as arrows. Open arrows represent energy management molecules, while closed arrows represent other inputs and outputs such as substrates and products. Use this diagram to answer the following questions.70) Which arrow in the figure above represents CO2?]]></mattext>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
</material>

----- Accession ID number: 470.6 -----

<?xml version="1.0"?>

<qti:questestinterop xmlns:qti="http://www.imsglobal.org/xsd/ims_qtiasiv1p2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.imsglobal.org/xsd/ims_qtiasiv1p2 ims_qtiasiv1p2.xsd"><assessment ident="" "><section ident="" "><item ident="namilikonda.470.6" title="QuestionTypeImage hotspot"> <itemmetadata> </itemmetadata>
<presentation label="Question namilikonda.470.5"> <flow> <material> <mattext><![CDATA[
This diagram represents the processes of aerobic cellular respiration as 4 simple boxes. Many of the "inputs" and "outputs" are shown as arrows. Open arrows represent energy management molecules, while closed arrows represent other inputs and outputs such as substrates and products. Use this diagram to answer the following questions.70) Which arrow in the figure above represents CO2?]]></mattext>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
</material>

----- Accession ID number: 470.7 -----

<?xml version="1.0"?>

<qti:questestinterop xmlns:qti="http://www.imsglobal.org/xsd/ims_qtiasiv1p2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.imsglobal.org/xsd/ims_qtiasiv1p2 ims_qtiasiv1p2.xsd"><assessment ident="" "><section ident="" "><item ident="namilikonda.470.7" title="QuestionTypeImage hotspot"> <itemmetadata> </itemmetadata>
<presentation label="Question namilikonda.470.6"> <flow> <material> <mattext><![CDATA[
This diagram represents the processes of aerobic cellular respiration as 4 simple boxes. Many of the "inputs" and "outputs" are shown as arrows. Open arrows represent energy management molecules, while closed arrows represent other inputs and outputs such as substrates and products. Use this diagram to answer the following questions.70) Which arrow in the figure above represents CO2?]]></mattext>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
<matimage imagtype="image/1" uri="ecogrid://knb/namilikonda.483.1"> </matimage>
</material>

#4 - 08/26/2009 08:40 AM - ben leinfelder

Are you not seeing duplicate images the first time you parse an exam as in:
----- jlee.1607.1 -----

```

<?xml version="1.0"?>
<qti:questestinterop xmlns:qti="http://www.imsglobal.org/xsd/ims_qtiasiv1p2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.imsglobal.org/xsd/ims_qtiasiv1p2 ims_qtiasiv1p2.xsd"><assessment ident=""><section ident=""><item
ident="jlee.1607.1" title="QuestionTypeShort answer"> <itemmetadata> </itemmetadata>
<presentation label="Question 2"> <flow> <material> <mattext><![CDATA[

<head>

<lt;/head>>
  <lt;/body>>
    2) Which molecule can function as a base?
  <lt;/body>>
<lt;/html>>
]]><lt;/mattext>>
  <lt;/material>>
  <lt;/material>>
  <lt;/response_str ident="Q2" rcardinality="Ordered" rtiming="No">> <lt;/material>> <lt;/mattext>><lt;/![CDA
TA[ <lt;/head>>

<lt;/head>>
  <lt;/body>>
    2) Which molecule can function as a base?
  <lt;/body>>
<lt;/html>>
]]><lt;/mattext>>
  <lt;/material>>
<lt;/material>><lt;/matimage imagtype="image/1" uri="ecogrid://knb/jlee.1423.1">> <lt;/matimage>>
  <lt;/material>>
  <lt;/render_fib columns="80" fibtype="String" prompt="Box" rows="20">> <lt;/response_label ident="A">><lt;/
response_label>>
  <lt;/render_fib>>
  <lt;/response_str>>
  <lt;/flow>>
  <lt;/presentation>>
  <lt;/item>>
  <lt;/section>>
<lt;/assessment>>
<lt;/qti:questestinterop>>

```

#5 - 08/26/2009 10:52 AM - Sandeep Namilikonda

Reply to Ben's question:

Indeed! When I open the parser window for the first time (i.e., while creating the data package), I do not see any duplicates in the parser window. So, I assumed that that version of XML representation is alright. But, it turns out that right from the first copy (470.1) onwards, there are two <material> *** </material> tags.

Thanks for pointing out, Ben! So, the problem might be with the code that creates/writes out the XML document.

#6 - 08/29/2009 01:24 PM - Sandeep Namilikonda

The issue was that the prompt and the images were being added to the XML document for two kinds of response items (question types) namely, "Image Hot Spot" and "True/False".

Here is a sequence of function calls for reference to help future bug fixing:

MainWindow.java:

save-and-close menu item calls saveDocAction which calls persistParserStateToMorpho!

AssessmentItemUtil.java:

persistParserStateToMorpho calls questionList2DataPackages(QuestionList)

ResponseItem.java:

questionList2DataPackages calls generateQuestionXML() which calls outputPromptAndImageList() and <ResponseItemType>.generateXML()

#7 - 03/27/2013 02:26 PM - Redmine Admin

Original Bugzilla ID was 4315

Files

Fall05-Midterm_vA.pdf

115 KB

08/21/2009

Sandeep Namilikonda