# Home

## Contrib: Word-to-QTI Converter

*Simplified Authoring of Tests & Quizzes in Samigo*

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**Description:** A Word-2-QTI Converter for Samigo.

## What is a Word-2-QTI Converter?

It's a tool that converts lightly formatted text quizzes/tests into QTI standard xml, which can then be imported into Samigo as an assessment or question pool.

## So why do we need a Word-2-QTI Converter for Samigo?

To make it easier for faculty to create assessments and question pools from existing documents they might have.

## Who thought of this?

Melissa Zhuo, Shawn Than, and others at Claremont McKenna College. They developed the initial tool in Perl.

## What is the scope of this effort?

The scope is relatively restricted for the moment. The idea is to provide a tool that will lower the barrier of entry for faculty who need to add large numbers of questions in bulk. We're not looking to cater to power-users of Samigo. We'd like to emphasize simplicity over flexibility and to focus on a reduced set of question types for the moment in the interests of getting the bugs out and keeping the format as simple and intuitive as possible.

## Where does it live?

Originally the developers at Claremont McKenna (Melissa Zhuo et al.) put together a standalone CGI-Perl application that can be used entirely independently of Sakai. It allows the user to rapidly type up a new assessment, download the QTI xml, and then import it into Samigo. See the bottom of this page for Melissa's comment about how to get this code.

We're (UC Davis) now developing a Java version that will live inside of Sakai and will be integrated into Samigo itself. Note that we've changed the formatting slightly from the Perl version – eliminating the need for 'Save answer' statements at the end, and specializing True/False into a different syntax than multiple choice – but the older version formatting should still work in the Java version.

## How does it work?

It's a lot like entering information into a Wiki. We all agree on a **simple** format for each question type, then allow users to cut-and-paste or type questions into a normal textbox, verify that their questions are correctly formatted, and then, using the QTI import functionality of Samigo behind the scenes, we create a new assessment or question pool.

The format is arbitrary, but right now, it goes something like this:

- Every question must begin with the line 'Question' or 'Question x (y points)' or 'Question (y points)'
    - where x is the question number (this gets ignored),
    - and y is the number of points you want that question to have.
        - If it's not included, then the question gets 0 points.
- Correct answers begin with an asterisk *.
- Multiple choice answers are labeled with a., b., c., etc.
- Short essay questions are designated by the text [Essay] at the bottom of the question
- Fill in the blank questions are designated by a word with an asterisk in front for the answer

As much as possible, everything is case insensitive, so qUestion or QUESTion should also work. If you try to type Question (not really) then it will not recognize that as the beginning of a question.

So, for example, I might type the following into the text box:

```
Question (10 points)
The sky is blue.

*True
False

Question (15 points)
Which of the writers below
were American citizens at
some point in their lives?

* a. Bill Faulkner
b. Ginny Woolf
* c. Tom Eliot

Question (5 points)
Who was the first president
of the United States?

*a. Washington
b. Jefferson
c. Lincoln
d. Clinton

Question (5 points)
What color is a violet?  ____
*Blue

Question (18 points)
Explain the purpose of education.
```

And then once I submit this, an assessment will be created with five questions of the following types (respectively):

1. True/False
2. Multiple Correct Answer
3. Multiple Choice
4. Fill in the Blank
5. Short Essay

Currently, these are the only question types that are implemented in the Java version.

## Do I have to keep typing 'Question'?

Actually, as of the current version, there are now several different ways to start a question. Here are some valid examples:

```
1. (10 points) Who was the first president
of the United States?

*a. Washington
b. Jefferson
c. Lincoln
d. Clinton

2. (15 points)
Which of the writers below
were American citizens at
some point in their lives?

* a. Bill Faulkner
b. Ginny Woolf
* c. Tom Eliot

Question 3  (10 points)
What color is a violet?  _____
*Blue

Save answer

4.
What do you put in a _____?
*Blank

Question 5 (20 points)
Explain the meaning of life.

Question
Which branch of government is the president part of?

A. Judiciary
B. Legislative
* C. Executive

7. Java is the best programming language.

*True
False
```

In fact, you can drop the numbering entirely, and simply list the number of points you want:

```
(30 points)
What is the theory of Plate Tectonics?


(10 points)

Jeremiah was a _____?

a. Cat
b. Dog
*c. Bullfrog
```

## Are there any more specific directions?

- Try the Confluence Word-2-QTI Help Pages

## How far along is the effort to build this logic into Samigo?

The current version is now available in the Foundation 2.4 trunk. To allow your users to see it inside of Samigo, all that's required is that you set a property in the sakai.properties file.

To turn it on, add the following property to sakai.properties:

- samigo.samliteEnabled=true

## Do I have to use Microsoft Word?

Nope. In fact, it's just a text converter. It won't handled any of the fancy stuff, so it's not really a replacement for the existing functionality, which is much more flexible.

## What about question-level feedback, etc.?

Currently, we're just focusing on the baseline functionality – being able to add several different types of questions rapidly. It should be possible to add question-level feedback in the future, but we want to be careful not to over-complicate the format.

## Some more reading...

- SAK-2965 Importing a test using a text format that is simpler than IMS compliant format.

## Useful links:

- QTI JIRA Contrib Page