

AP EECS

Creating a Course

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Creating a Course

Creating a course that can be used within this application is as simple as making a directory available on the internet. The directory must contain two things: input.xml and study.pdf. Additionally, the directory may contain anything that may be required for the questions, such as image files.

input.xml

This file is what specifies the course's structure. A sample input.xml file is shown below.

```
<topiclist>
  <topic n="Topic One">
    <question type="xchoice" q="What's my name?">
      <response>Luke</response>
      <response>Mike</response>
      <response correct="true">David</response>
    </question>
  </topic>
</topiclist>
```

The example above contains one topic named "Topic One", as specified by the n attribute. This topic contains one question of type xchoice, which contains the necessary information for the application to ask the user a multiple choice question. See the following section for an explanation of the available question types, as well as how to specify a question of that type in input.xml.

Question Types

This section discusses the various types of questions that can be specified within the input.xml

file.

xchoice

The xchoice question type is used to ask the user a multiple choice question. Questions of this type must have an 'q' attribute which is used to specify the question being asked. Additionally, it may contain an 'img' attribute, which specifies an accompanying image for the given question. Note that this image is scaled to the width of the iPad display before being presented to the user, so make sure that the necessary information is visible at that size.

Each question may contain one or more <response> elements. Each of these elements will be presented to the user as a possible answer to the question. The correct response should also have an attribute named correct, with a value of true (<response correct="true"></response>). This is the answer that the app will accept as correct.

bin

The bin question type is used to ask the user a question that requires them to convert a number in base 10 to binary, or vice versa. This question is specified as follows:

```
<question type="bin" toDec="true|false">X</question>
```

Where the **X** in bold is either left blank, or a number. If left blank, a number between 0 and 128 will be picked at random for the question at run time. Note that X is always base 10, regardless of the direction of conversion.

study.pdf

This is a pdf document that the user will be presented with upon pressing the "Study" button in the upper-right hand corner of the application. It should contain content relevant to the course that the user can review while answering questions for the course.

Additional Files

As of this writing, the only type of additional file that need be in this directory is an image file. As discussed in the input.xml section, multiple choice questions may have accompanying images. These images can be specified in the xml file (with a path relative to the course URL), and will be loaded from the directory as needed.