



Modules Descriptions

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1. Text Module

1.1 Input Attributes

Required:

- Int xStart
- Int yStart
- Int xEnd
- Int yEnd

Optional:

- String font
- String fontColour
- String lineColour
- Int fontSize
- Int startTime
- Int duration
- Int layer

Sub-elements (optional for specifying typefaces):

- Boolean bold
- Boolean italics
- Boolean underlined
- Boolean highlighted
- Boolean superscript
- Boolean subscript
- Int orientation

1.2 Outputs

A JPanel fitted to the size of the text string. The size is derived using the xStart, yStart, xEnd and yEnd values that are required for all text objects.

A JPanel containing the rendered text object will be returned per text object. The returned JPanel will need to be placed at the correct location on-screen, which will require implementation by individual teams. This is due to different teams using different portions or areas of the screen, and a provided implementation would likely be incorrect for others.

Multiple JPanels should be able to be displayed on-screen at once. This will make use of the layer tag to define in what order they should be visible to the viewer. The returned JPanel will have a translucency of 0 so that it will seamlessly blend into the background of the slide.

1.3 Additional Functionality

- Ability to render superscript

- Ability to render subscript
- Ability to render characters from Greek alphabet
- Ability to render a limited range of common mathematical operators and symbols
- Ability to highlight portions of the text
- Ability to set the orientation of text object within the JPanel

2. Image Module

2.1 Input Attributes

Required:

- String urlName
- Int xStart
- Int yStart

Optional:

- Int width
- Int height
- Int startTime
- Int duration
- Int layer
- Int branch
- Int orientation

Accepted File Formats;

- PNG
- JPG
- GIF

2.2 Outputs

A JPanel fitted around the size of the image. If the height and width tags are specified, these will be used to define the size of the JPanel. Otherwise the size will be derived from the image itself.

A JPanel containing a single rendered image will be returned. The returned JPanel will need to be placed at the correct location on-screen, which will require implementation by individual teams. This is due to different teams using different portions or areas of the screen, and a provided implementation would likely be incorrect for others.

Multiple JPanels should be able to be displayed on-screen at once. This will make use of the layer tag to define in what order they should be visible to the viewer. The returned JPanel will have a translucency of 0 so that it will seamlessly blend into the background of the slide.

2.3 Additional Functionality

- Ability to set the orientation of the image object within the JPanel

3. Video Module

3.1 Input Attributes

Required;

- String urlName
- Int xStart
- Int yStart

Optional;

- Boolean loop
- Int startTime
- Int playtime
- Int duration
- Int layer
- Int oreientation

Accepted File Formats;

- MP4
- AVI

3.2 Outputs

A JPanel fitted around the initial size of the video. The size will be derived from the first frame of the video itself. A control bar containing common video features (see below), will be overlaid on the bottom portion of the video, but within the JPanel.

A JPanel containing a video object will be returned. The returned JPanel will need to be placed at the correct location on-screen, which will require implementation by individual teams. This is due to different teams using different portions or areas of the screen, and a provided implementation would likely be incorrect for others.

Multiple JPannels should be able to be displayed on-screen at once. This will make use of the layer tag to define in what order they should be visible to the viewer. The returned JPanel will have a translucency of 0 so that it will seamlessly blend into the background of the slide.

3.3 Additional Functionality

- Ability to set full screen mode
- Ability to set orientation of the video object within the JPanel
- Control Bar
 - Play/pause button
 - Stop button
 - Full screen button
 - Volume control (slider or buttons)
 - Scrubbing bar (for selecting position in video by dragging)