Demonstration Beamer/Reveal

Igor M. Coelho

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Section 1

Part 3: Media

Adding Sound and 3D Media

We discuss possibilities for adding audio, video and 3d models on `beamer` and `revealjs` slides.

Section 2

Sound

Adding Sound Media

To add HTML5 embeddings, such as audios, one can do with <audio> tag. This is not visible on beamer.

```
<audio controls="1">
  <source src="https://www.soundhelix.com/examples/mp3/
                                    SoundHelix-Song-1.mp3"
          data-external="1" type="audio/mpeg">
  </source>
</audio>
```

Section 3

3D on Beamer

3D embedding on PDFs

For multimedia and Beamer, it is recommended the `media9` LaTeX package (old `movie15` package).

Not that maximum version of Adobe Player supported is 9.4.1: - `ftp://ftp.adobe.com/pub/adobe/reader/unix/9.x/9.4.1/enu/` (after 9.5 it will not work!).

This also requires flash-player. Sometimes it crashes with `beamer`, thus it's certainly not a solid technology for the future.

On next slide, you will see a 3D dice, as long as you have Adobe 9.4.1 and Flash.

3D embedding example on Beamer

An example for dice.u3d.

```
\includemedia[
    label=diceB,
    width=0.3\textheight,height=0.3\textheight,
    activate=pageopen,deactivate=pageclose,
    3Dviews=3Dviews.txt,
]{}{dice.u3d}
```

Thanks the many advices on Internet, such as:

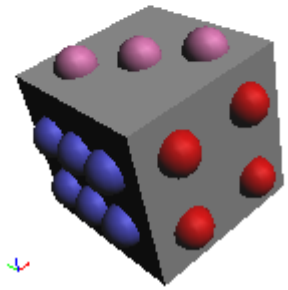
https://tex.stackexchange.com/questions/228989/beamer-class-and-u3d-

3D as an image

Beamer PDF: `acroread beamer-3-media.pdf`

3D embedding example on Beamer

An example for dice.u3d.



```
\includemedia[
    label=diceB,
    width=0.3\textheight,height=0.3\textheight,
    activate=pageopen,deactivate=pageclose,
    3Dviews=3Dviews.txt,
]{}{dice.u3d}
```

Section 4

3D on Reveal.js

Atom-only 3D

This will only appear on Atom.

Thanks a lot to this three.js tutorial.

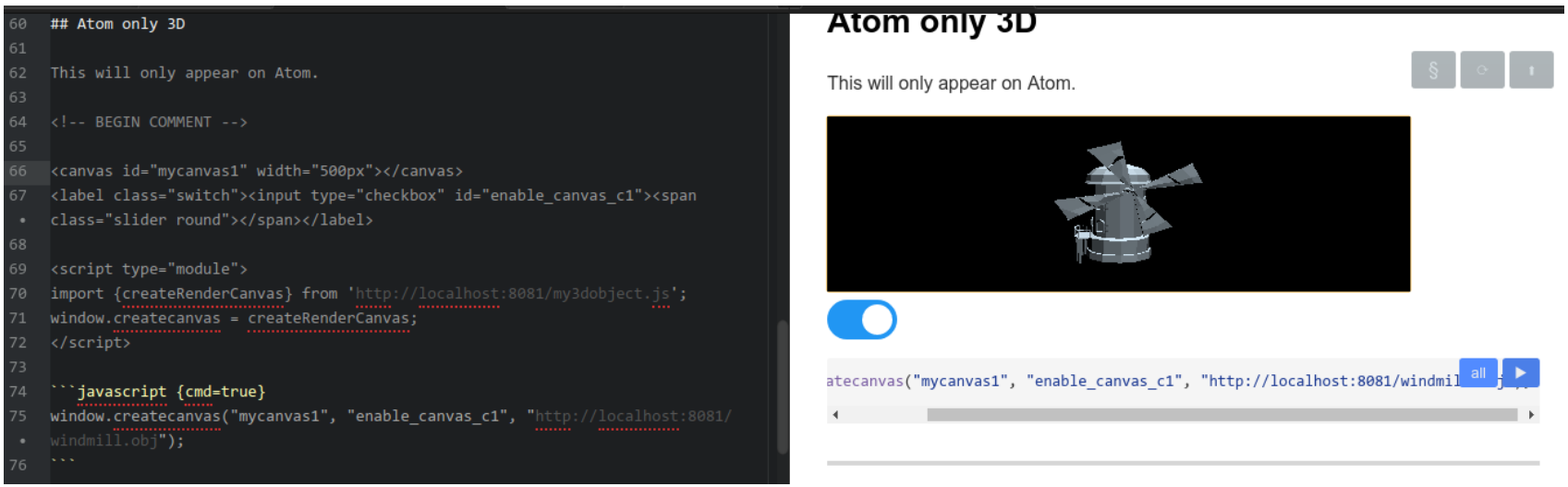


Figure 2: Preview on Atom

To see this example on Atom, execute `make run` or any local server

Atom-only 3D (source-code)

```
<!-- BEGIN COMMENT -->
<canvas id="mycanvas1" width="500px"></canvas>
<label class="switch"><input type="checkbox" id="enable_canvas_c1"><spa
<script type="module">
import {createRenderCanvas} from 'http://localhost:8081/my3dobject.js';
window.createcanvas = createRenderCanvas;
</script>
\```javascript {cmd=true}
window.createcanvas("mycanvas1", "enable_canvas_c1", "http://localhost:
\```
<!-- END COMMENT -->
```

Again, thanks a lot to this three.js tutorial, which have been compressed in this helper script my3dobject.js, for object model windmill.obj.

See: https://threejsfundamentals.org/threejs/lessons/threejs-load-obj.html.

JS-only 3D

This will not appear on beamer, only on revealjs.

Section 5

Videos

Video Embedding with HTML5 I

```
<!-- BEGIN COMMENT TO beamer -->
<video src="http://v2v.cc/~j/theora_testsuite/320x240.ogg"
  Your document does not support  <code>video</code>.
</video>
<!-- END COMMENT TO beamer -->
```

Section 6

Finish

Try more formats

Feel free to try other plot formats and technologies.

Learning more

Please contribute with us if you find more nice things!