

## Assignment Flash 1

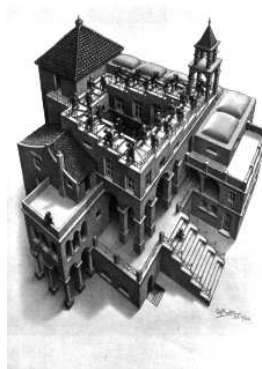
**Due Date: February 15**

### Purpose

This small Flash assignment is to ease you into creating a movie clip that has some interaction, graphics, and animation. It will also allow you to think about a fun visualization problem.

### Problem

There are many interesting optical illusions, some famous, such as Escher's staircase:



There are many, much simpler, illusions, such as the one shown below. In this case, squares A and B actually are the exact same color/shade! I first saw this on a Happy Meal bag, and had trouble believing it, until I folded the paper in such a way so as to have the two squares next to one another. Yep, the color was exactly the same. So illusions are cool, but sometimes you have to convince the viewer that what is claimed is true. Go to

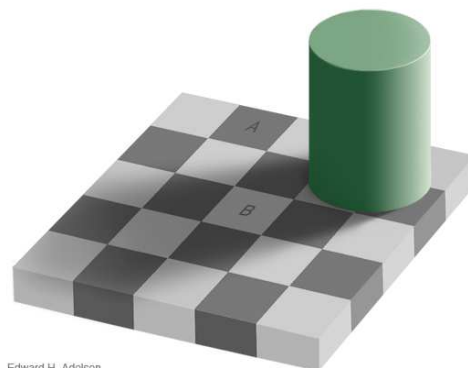
[http://michaelbach.de/ot/lum\\_adelsonCheckShadow/index.html](http://michaelbach.de/ot/lum_adelsonCheckShadow/index.html)

for a visualization that tries to do just that for the image below (but which I think fails - perhaps you can do better?). Michael Bach's home page at

<http://www.michaelbach.de/ot/index.html>

has all sorts of interesting optical illusions (don't miss

[http://michaelbach.de/ot/cog\\_impossHallucii/index.html!](http://michaelbach.de/ot/cog_impossHallucii/index.html!)).



Edward H. Adelson

Your job is to write a Flash movie(s) run from a Web page that shows at least two optical illusions with some animation/graphical method that will convince the viewer of your claim. You must do something different than what is shown on Web sites such as the above. For some easily implemented illusions, check out the poster that, hopefully, I will have posted by my door soon.<sup>1</sup>

### Input

Your movie should have a simple user interface (UI) to let the viewer change from one illusion to another. More importantly, there should be a button or other method to let the viewer set your visualization in motion to convince him/her of your claim, as well as to reset the scene to its original configuration.

### Output

You must create a Web page named *index.html* on the Wheaton fileservers that serves as a “gateway” to all of your other projects. Put your name, the course, and a link to a Web page that contains this Flash project. The Flash movie should be part of a full Web page that has a banner and so forth. The Flash movie should include one of (at least) two illusions at a time, the UI that controls everything, and a visualization/animation to convince the viewer of your claims.

### Specifics

- Use ActionScript 3 for your Flash movie.
- Your Web pages should have a title/banner describing their contents.
- The Flash movie should be well integrated in the Web page. Choose colors that go well together for the movie and the Web page.
- You can use Dreamweaver or any other Web page tools to create your page.

### Notes

- Instructions on how to access your file space on the Wheaton server are available on the course Web page.
- On the bottom of all of your html pages, include the following lines:

```
Last updated
<script language="JavaScript">
    document.write(document.lastModified);
</script>
```

*Beware of bugs in the above code; I have only proved it correct, not tried it.*

– Donald Knuth

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<sup>1</sup>It used to be in the hall, but I think Rolf Nelson put it away.