



Computer Science and Games: *Just For Girls!*

Why Good Design
Matters

What's Wrong With This Picture?



<http://www.danlockton.co.uk/research/images/hincmanbench.jpg>

What's Wrong With This Picture?



<http://images.amazon.com/images/P/0385267746.01.LZZZZZZZ.jpg>

What's Wrong With This Picture?



<http://www.tubz.com/images/porcher/imgLarge1380.jpg>

What's Wrong With This Picture?

The image shows a screenshot of an "EMI Calculator" web application. The interface is titled "EMI Calculator" in a dark blue header. Below the header, there are several input fields and buttons:

- Loan Amount:** A text input field containing the value "1".
- Buttons:** Two buttons labeled "Calculate" and "Reset" are positioned below the loan amount field.
- Interest Rate:** A slider control showing a value of "7.3000000000000000". The slider has tick marks at 5 and 30.
- Tenure:** A slider control showing a value of "10 Years". The slider has tick marks at 1 and 30.
- EMI:** A slider control showing a value of "Rs. 0.01".

The overall appearance is that of a simple, possibly outdated, web-based calculator. The values entered are highly unusual for a typical loan calculation, such as a loan amount of 1 and an EMI of Rs. 0.01.

<http://yeskarthi.files.wordpress.com/2007/05/emi.jpg>

What's Wrong With This Picture?



http://static.flickr.com/51/169941715_d767577f64_o.jpg

What's Wrong With This Picture?



<http://www.kitchencontraptions.com/archives/pictures/smeg-double-oven-stainless-steel-range.jpg>

Your Turn!

Draw some pictures of (or describe) some really bad user interface designs.

What problems could bad designs cause for the companies that make them?

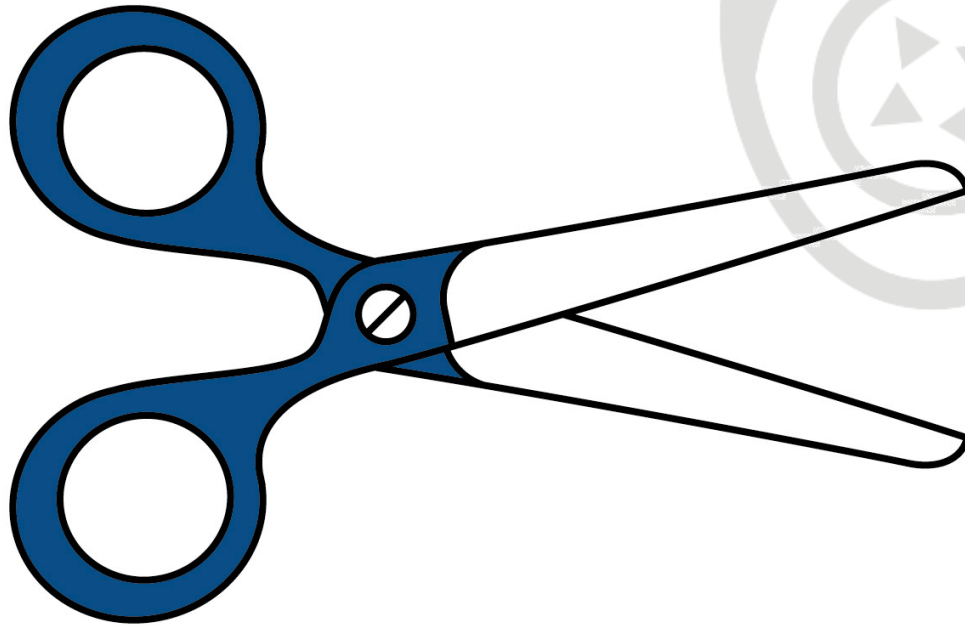
What about for the people that buy them?



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Principles of Good
Design

Good Conceptual Model



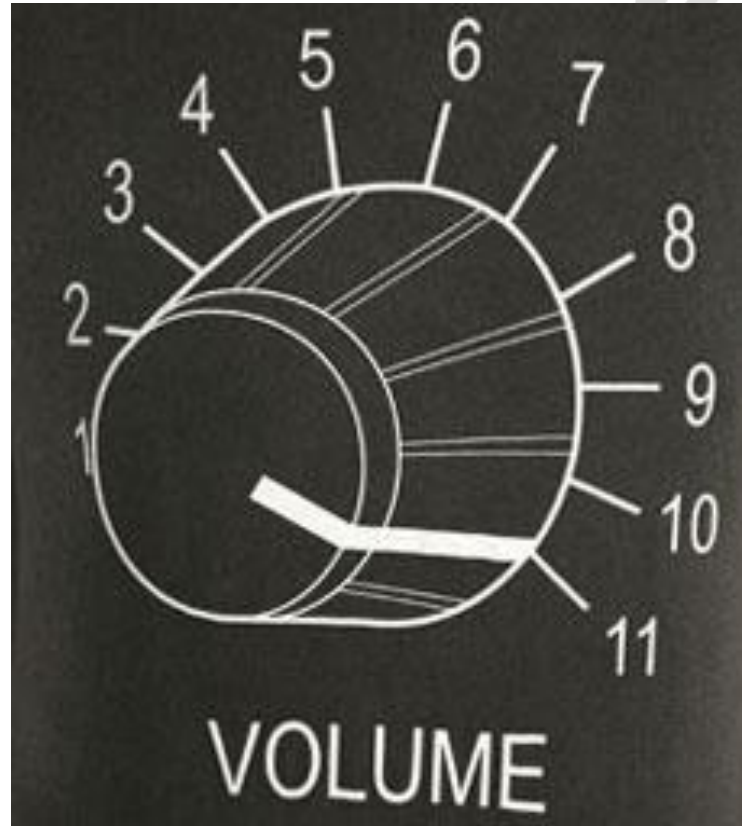
<http://www.abcteach.com/free/s/scissors1brgb.jpg>

Make Things Visible



http://xcelsius.files.wordpress.com/2007/08/auto_dash.jpg

Natural Mapping



<http://www.uncrate.com/men/images/2006/06/paul-frank-volume-tee.jpg>

Feedback



<http://www.ivantodorov.com/blog/wp-content/070128/office5.jpg>

Know Your Users!



<http://www.it-c.dk/research/EyeGazeInteraction/Images/Anders.jpg>



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Designing for Oompa-
Loompas

Human Interface Design

CS Unplugged Activity: The Chocolate Factory



<http://www.1halloween.net/images/cosoompa.jpg>



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Usability and Video
Games

Game Usability

How can we make video games work better for players by applying principles of good design?

Credits

Notes by your instructor Gail Carmichael:

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<http://gailcarmichael.com/>

Notes partially based on:

The Design of Everyday Things, Donald Norman