CMSI 370-01

INTERACTION DESIGN

Fall 2015

Assignment 1211 Feedback—Direct Manipulation Application

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Notes while running (asterisks indicate major observations):

- Interesting calibration—the boxes feel like they're floating in water **:)** Not a problem, just noticing.
- All function points generally check out: flicking, bouncing, device motion. +(*3a*, *3b*, *4a*)
- Vertical bounce seems a little unusual though: the boxes seem to have a "plateau state" where they are moving horizontally even if the device is vertical. Will have to investigate… (*3b*, *4a*)

Code review (asterisks indicate major observations):

1. Arg, some tabs got past you—look at the CSS file. (*4c*)
2. This was already perfectly formatted from the sample code—why mess it up? (*4c*)
3. Surround binary operators with spaces for readability. (*4c*)
4. Recommendation: add a blank line between major blocks of code. (*4c*)
5. Space after `if` (and most other reserved words) please. (*4c*)
6. Unless adjacent to same-sided parentheses, have a space before and after braces. (*4c*)
7. Incorrect indentation. (*4c*)
8. *** Magic numbers: these values have a meaning. Express that meaning in the code. (*4b*, *4c*)
9. OK, so the issue with the somewhat off-behavior of your boxes' physics comes down to something that the browser is doing behind your back. When you set the location of an element, the browser might actually "adjust" that location according to certain rules—one of which is rounding off when locations get fractional. When you are computing locations to this degree of precision, that round-off becomes an issue. Essentially, you can't rely on the browser's record of the object's position, because it might change it to fit the screen. The solution is to store the offset yourself, so that the browser can't touch it. Use that offset for your calculations. I've marked the affected lines with `// JD: 9` so you can see what it takes to bounce things better. (*3b*, *4a*)

2b — **+**

3a — **+**

3b — **+** …In the end, that browser-behind-your-back behavior is pretty obscure so I won't ding you for it. But keep incidents like this in mind in case you encounter similar issues in the future.

4a — **+**

4b — **|** …OK, the magic numbers I'll get you for **:)**

4c — **/** …And the code's presentation—overall the glitches add up to a cluttered, inconsistent look.

4d — **+**

4e — **|** …Commit activity is a **+** …but the directory name is incorrect! Spec must be followed…

4f — **/** …Finished within nearly one week after the due date.