

# CMSI 370-01

## INTERACTION DESIGN

Fall 2013

### Assignment 1126

This second of your November programming assignments seeks to “cap off” your hypothetical role-playing game user interface with some custom code.

### Outcomes

This assignment will affect your proficiency measures for outcomes 2b, 3a–3d, and 4a–4f.

### Background Reading

Textbook reading remains centered on the direct manipulation interaction style, which would be Shneiderman/Plaisant Chapter 5. Programming resources include the web and the case studies in Chapter 9 of the JavaScript textbook.

### For Submission

#### A User Interface Widget from Scratch

We end by going back to the basics: design and implement a reusable widget for use in web browsers in general, and for your role-playing game user interface in particular. To emphasize reusability, you will implement your widget as a *jQuery plug-in*.

The point here is to see how low-level event handling (e.g., mouse or keyboard activity) translate into higher-level ones (e.g., selection or change events). You have seen a number of these in Bootstrap—now it’s your turn. If the first programming assignment involved direct manipulation “in the large,” this one exercises direct manipulation “in the small.” Some ideas:

- A selection knob or slider
- A rolling or scrolling item selector
- An entry field that accepts text/numbers with drag-and-drop character tiles
- A “here-to-there” drag-and-drop area
- A directional pad (“d-pad”) control

You may use jQuery but Bootstrap use may be *CSS only*—no Bootstrap JavaScript components allowed, whether in code or triggered by *data* attributes. If you have a widget idea that is not in this list, check with me to see if it will work.

### How to Turn it In

Commit your code in two places. Under *widget-from-scratch/*, provide these two distinct pieces:

1. The reusable code for the widget itself (typically CSS and JavaScript)
  2. A “demonstration page” that shows a stand-alone instance of your widget in action
- “Eat your own dog food.” Under *rpg/*, integrate your widget into the user interface that you have already built.

Finally, as before, upload your work to `~username/cmsi370/widget-from-scratch` and `~username/cmsi370/rpg`, respectively, on *my.cs.lmu.edu*.