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.