MonocleGL Programming Guidelines

Each MonocleGL demo needs to follow these guidelines before it is approve and payment is made. If a demo does not follow these guidelines it will be sent back for revisions. In general there is always a more interactive way of presenting the content and the only real limits are the hardware and our imaginations.

MonocleGL demo Do's:

- Do load all of your sprites using mediaURL to point MonocleGL to the correct path.
- Do load all of your sprites resources in the initQuiz() callback. This will queue them to be loaded at the beginning of the demo during the preload phase.
- Do make mouse hot zones big enough to be used by fat fingers on a mobile device.
- Do make sure all text is clear, large (12pt+), legible and has some white space separating it from other text or images.
- Do make sure each of the demo buttons work as intended. The biggest example is the reset button needs to reset the question back to its original state. The only exception is the explore button will not be enabled if there is no explore mode.
- Do keep script efficiency in mind. JavaScript runs very quickly on a PC but when run on a mobile device can slow down to a crawl.
- Do make sure the checkAnswer() callback returns a boolean every time it's ran. Return true if the question is correct and false otherwise.
- Do show the curtain for any animation sequences to prevent the user from messing with the animation. (Do remember to lift the curtain afterwards.)
- Do create modules to simplify code and help abstract complicated ideas. Make sure the final source submitted is ordered correctly (ie. nothing is called before it's defined) and in one file.
- Do stay consistent with variable scope. If you declare a variable under window or this always reference it using the same scope.

MonocleGL demo Don'ts:

- Don't make an animation sequences last longer 5 seconds with 2 seconds as the average. The student should be more involved with the animation and where ever possible controlling the animation.
- Don't put more then one of the same type of mouse event on an object. Function calls between MonocleGL and Javascript are quite slow and add up quickly.
- Don't use DOM elements! Even window should be avoided since it's up to 75x slower then pure JavaScript. You shouldn't ever need to access any part of the DOM while making demos. This means you should generally not use window.<variable> or document.<variable>.
- Don't use the eval() command. Using eval is generally bad JavaScript practice, and it has

different scoping behaviour in different browsers. If you need eval, you’re doing it wrong.