

# Designing Top Hat Monocle Demos

## Introduction:

THM Demos are Flash or JavaScript mini applications, which focus on a subject in various types of courses. The goal of these demos is to guide the student through new processes or to help grasp new concept. A good demo should clear and concise rather than difficult. Included with this document are several sample designs and the resulting demos to use as a reference.

## Glossary:

Answer Animation – Every question should have an animation, which shows the user the correct answer. Animations should be between 1-5 seconds.

Curtain – A 50% alpha black box which stops user interaction while animations are occurring or when a message box is waiting for the user to press “OK”.

Designer – An expert in specific subject matter who creates a design document detailing the functionality of a demo.

Developer – A Flash or JavaScript programming who takes the design document and creates an interactive demo from it.

Explore mode – A special scene at the beginning of demos that allows the user to explore a concept without having to worry about submitting answers. Explore mode is optional since it's not applicable for every subject.

MonocleGL – A web plugin we are developing to use demos on mobile devices.

Micro steps – An obsolete concept for breaking up long questions, our current policy is to use a series of buttons to allow the user the step through complex concepts.

GUI (Graphical User Interface) – GUI controls are familiar interaction objects like text fields, sliders, scrollbars, checkboxes, and buttons.

Scene/Stage – The graphical area that is always displayed to the user. The term scene is used for THM demos while stage is used by Flash demos.

Storyboard – A technique commonly used for showing the timeline of an animated story. We use a similar method at Top Hat Monocle for demo designs since they are very graphical in nature.

THM Demo – A demo made for the Top Hat Monocle web plugin monocleGL.

THM Sprite – A graphical object that has mouse events already tied to it. When the mouse goes over it the object lightens in color and shows a tooltip. The developer can easily set mouse events to enable dragging for THM Sprites.

THM Message – A message box to display helpful demo specific text for the user. The Message is display with a curtain background to disable user interaction with the demo. The user must click “OK” to continue and enable user interaction.

Tooltip – A textbox that appears Displays the name of object or the action that will occur if the user clicks on the object.

## **Design Template:**

The design template is a bare bones document to be used as a starting point for each design. Replace all the text inside parentheses with demo specific information. Some fields may not be applicable to some demos in which case just write in a “N/A”.

It's recommended most demos have between 3-4 questions although some demos may be more complicated and may require more questions to cover the concept. For complicated questions you can break it into multiple steps control by a series of numbered buttons. For an example look at the explore mode of the included demo PituitaryAdenoma.swf.

When designing the demo consider that the developer may not have any experience with the demo's subject matter. Be very clear and include any resources you think would be helpful. In general when describing how to animate something it's a lot easier for all parties to use images and movement arrows in conjunction with a brief description.

## **GUI Controls:**

GUI (Graphical User Interface) controls are objects used to allow the user to easily interact with the demo. When creating a design try to use GUI objects we already have in our library. For flash demo we are using the minimalcomps library, which has examples online at <http://www.minimalcomps.com/> under the menu components. A good article on basic GUI design can be found at <http://www.asktog.com/basics/firstPrinciples.html>.

## **Tooltips:**

To show the user an object is interactive we had adopted the standard to add mouse over events to every interactive object. When a user moves the mouse over an interactive object it lightens in color and fades in a brief tooltip. These tool tips display the name of object or the action that will occur if the user clicks on the object. Any interactive objects in the design should include the tooltip text.

## **Copyright infringement:**

Even though these demos are primarily used for educational purposes we must create completely original content. If you use an item that might have a copyright on it then include it in the design document as a reference. The developer will then use reference to create a new item similar to the original.

## **Design Approval:**

Before a design is given to a developer both a content manager and the professor who commissioned the demo must approve it. This is because it's much easier to edit a design document than a finished demo. Once a design is finalized it will be stored on the THM repository and given to the next available developer.