Computer Animation II

Assignment 1

The purpose of this assignment is to get everyone back up to speed with where they left off in Computer Animation I. For those who did not take CA I in Maya, this assignment is to make sure that your prior experience adequately qualifies as a pre-requisite for this class.

You are to produce a loopable shot containing an old-style, pendulum-driven clock (or metronome, or other pendulum-driven apparatus of your choice). You need only animate and render one cycle of the sequence - just make sure that when looped in QuickTime Player it transitions seamlessly from the last frame to the first frame.

Requirements:

- Model the clock itself - no numbers necessary - and enough objects to block the black Maya background from appearing in your renders. Start with primitives and move points/polygons as you see fit. I recommend working with your designs and layout on paper before jumping into Maya (you are strongly encouraged to try and evoke a particular visual style or mood with your designs, composition, etc).
- Set appropriate surface and material properties for your objects. Do NOT use procedural textures or image maps unless you know these things and have extra time - just work with the basic material properties.
- Lay these objects out in front of a STATIC camera. No moving cameras.
- Animate the swinging pendulum cycle (what should the curve(s) look like in the graph editor to make believable pendulum motion?).
- Add a light and make sure it casts shadows. Add other lights if you like.
- Render TO INDIVIDUAL TIFF FILES (see below) with a size of 640x480. Use the "3D motion blur production" quality preset and make sure you click the "motion blur" box (3d) further down in the render globals window. Check and make sure you see that moving objects are blurry in the final render.
- After the render is completed, load the individual TIFFs as an image sequence in QuickTime Pro and Export the movie as a QuickTime movie with the Animation codec (best quality, 24fps). See below again.
- Make sure the movie plays appropriately on QuickTime Player in the classroom.
- You must hand in your scene file, a folder with the individual TIFFs, and the exported, self-contained QuickTime movie. Name everything unambiguously with your name. The hand-in folder is on urza under cs266 (pass cs266).

Notes:

- To render to individual frames, go to the **Common** tab in the **Render Global Settings** window. Under **Frame/Animation Ext** choose **name.#.ext** (this will name your frames something like myShot.002.tif). Choose **Tiff** as the **Image Format**.
- To export a standalone QuickTime movie in the Animation codec, run QuickTime player and go to **File->Open Image Sequence…** Select your first rendered frame on disk and choose 24 frames per second when prompted. When the movie is loaded, go to **File->Export…** Give your movie a name and choose **Movie to QuickTime Movie**, **Default Settings** (for now). Then click the **Options…** button to change the default settings and choose a new codec. You only want to export video (check only that box), and you want to select **Settings…** to get you to the codec window. Choose **Animation**, **Millions of Colors**, **Best Quality**, and set 24fps with none of the other boxes checked. Click your way out of the nested windows and, when done, you should have a 24fps QuickTime movie on disk. Check it and make sure!
- DO NOT hand in your work directly from a group shared folder to the hand-in folder unless you make a copy first. By moving your work into hand-in you will make it disappear from group-shared. If you hand-in from the Desktop of the machine you're working on everything should be okay.
- While working in the lab, I recommend creating a local project on the desktop of the machine you're working on instead of using data on group shared. It is always safer to use the local disk instead of the networked one.
- The Course Storage disk is accessed from the classroom by going to the Finder, then clicking Go->Connect to Server and typing "urza" as the server name. The class login is cs266 and the password is cs266 as well.
- Do not try to overdo any part of this assignment. All I want is for everyone to hand in a complete, motion blurred sequence on time that meets the many listed requirements.
- Make use of the online pdf Maya manual (in the handouts folder on the Course Storage disk) and of your classmates, the class email list (which includes me), the animation list, and any other resources you can tap. See the course information sheet for email addresses and extensions.