

Assignment # 7 - Lamp Jumps Playblast

Assignment Description:

- A. Set up your lamp character for animation by building a control rig
- B. Animate your character
- C. Add a light source to the Lamp shade
- D. Add two light sources into the scene
- E. Add an environment
- F. Setup to render
- G. Create a nice camera angle
- H. Create a playlist
- I. Make the playlist look good

Lesson Topics: Rigging, Animation, Key Framing, Staging a Scene, Creating Test Renders, Lighting, Cameras.

Lesson Notes:

Follow steps to setup your Lamp skeleton and rig for animation as we did in class

Steps illustrated in the provided series of images on N: drive Step by Step: Lamp Skeletal Setup for Animation

If needed, adjust the Lamp parts, their proportions and shape.

Follow your Lamp Animation Planning to set up the key poses and improve the timing and poses.

To do list:

- **Animation**

Save key poses on 4 items and adjust the animation curves in the Graph Editor

- Add key poses for these items:

- Root_Lamp (Trans and Rot)
- Base_mesh (Rot Only)
- **IKHandle (Trans Only)** (it can be parented to the Root_lamp)
- Lamp Shade (Rot Only)
- To show and hide the IK blend chain (brown chain) Select [Window > Settings/Preferences > Preferences](#).
- In the Preferences window, click Kinematics under Display to open the Kinematic Display Preferences. The Inverse Kinematics preferences appear. Select None if you do not want to display any of the IK/FK blend skeletons.

• **Add a Light source to Lamp shade**

- Create an Ambient light (or a Spotlight), without shadow, adjust it and add it to the lamp shade hierarchy so it moves with it.
- Place the light outside of any geometry.
- Change material of the lightbulb to Surface Shader and make it gray white glow.

• **Add two other light sources in the scene**

- One key light, a Spotlight, Ambient or Directional with Shadow active
- One fill light, an Ambient or Directional light of intensity 0.3 so the shadows are not pitch black, no shadow

Note from Autodesk:

Hardware shadows do not display for transparent objects.

Hardware shadows do not work with Point and Area lights.

In hardware X-Ray mode (Shading > X-Ray), all objects are transparent, and no hardware shadows display.

• **Environment**

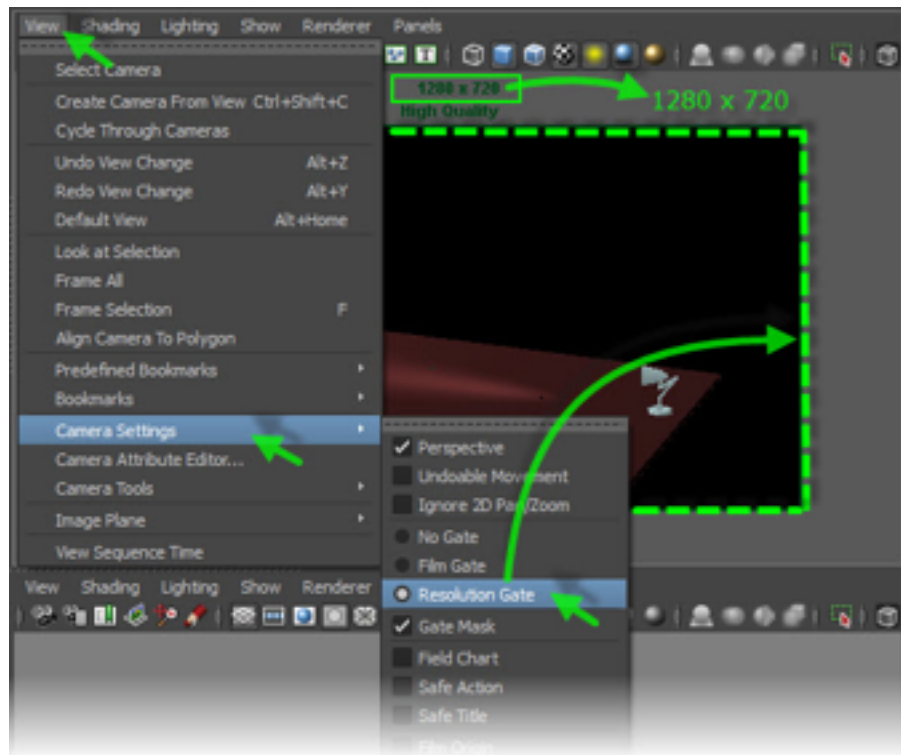
- Add a desk surface that serve as the lamp floor, add a material. You might have to edit the animation and reduce the length of the jumps if desk looks too big
- Add some walls to the room, surfaces that fill the camera frame, simple grids will do.
- Add Props to the scene and scale them to the right scale to fit with the lamp.

File > Import your PropsUVs.mb

Multi-select the three props and group them (Edit > Group) (hotkey Shift-G)

Scale the groups with Props to match proportions for the size of your lamp

Viewport window >Camera Settings >Activate Resolution Gate



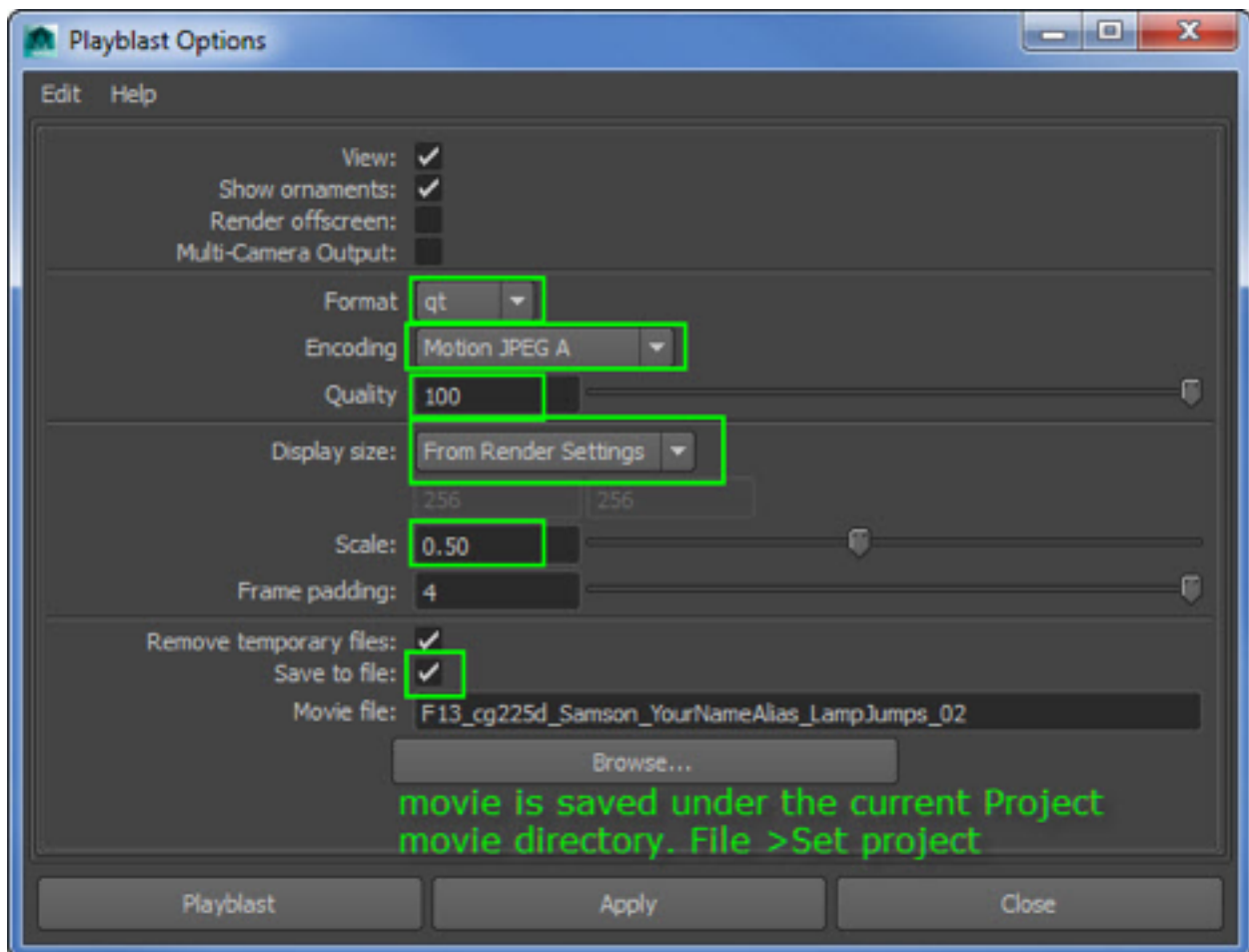
(fig. Resolution Gate)

Create a nice Camera Shot angle/composition

- Frame your action so it includes the entire animation on screen from start to finish.
- Make the action read well by lighting the scene well and changing materials if needed

Create a low resolution PlayBlast Movie

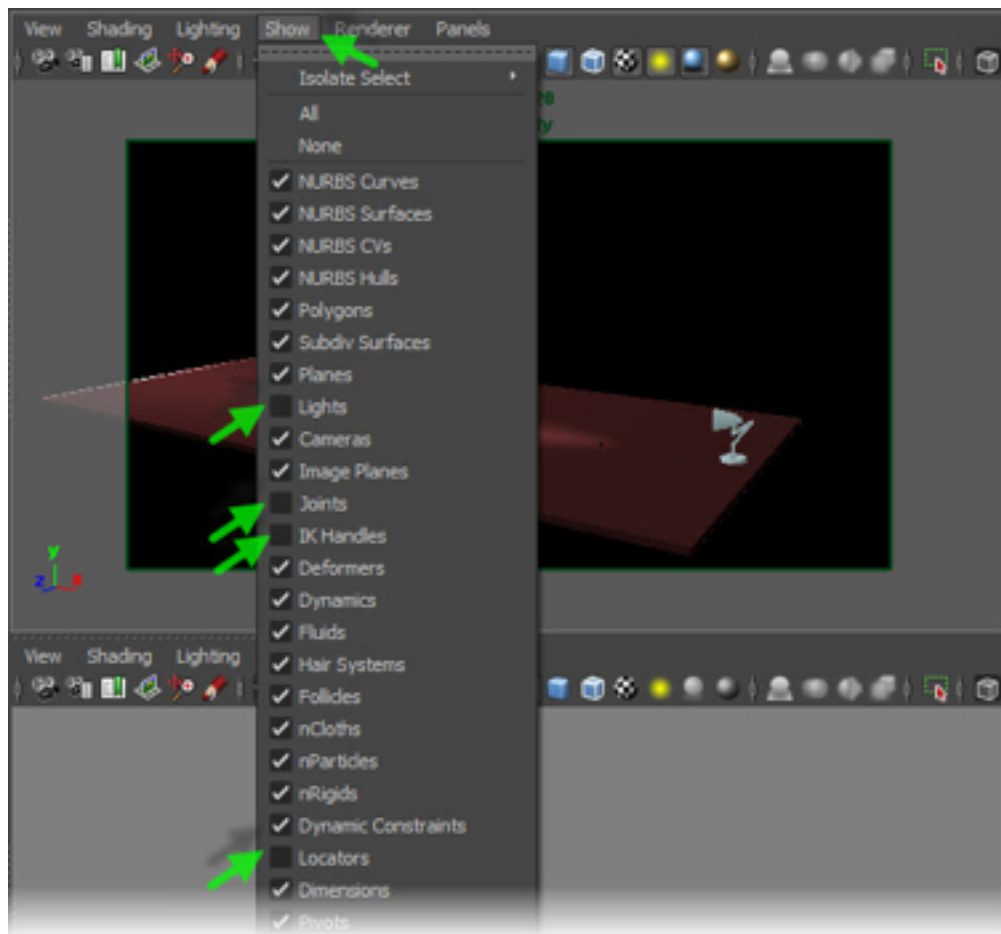
- While in Full Frame on the Perspective
- Render Settings: HD 720
- This generates a small movie of your animation, half of the full frame resolution in the Render Settings because the scale is at 0.5



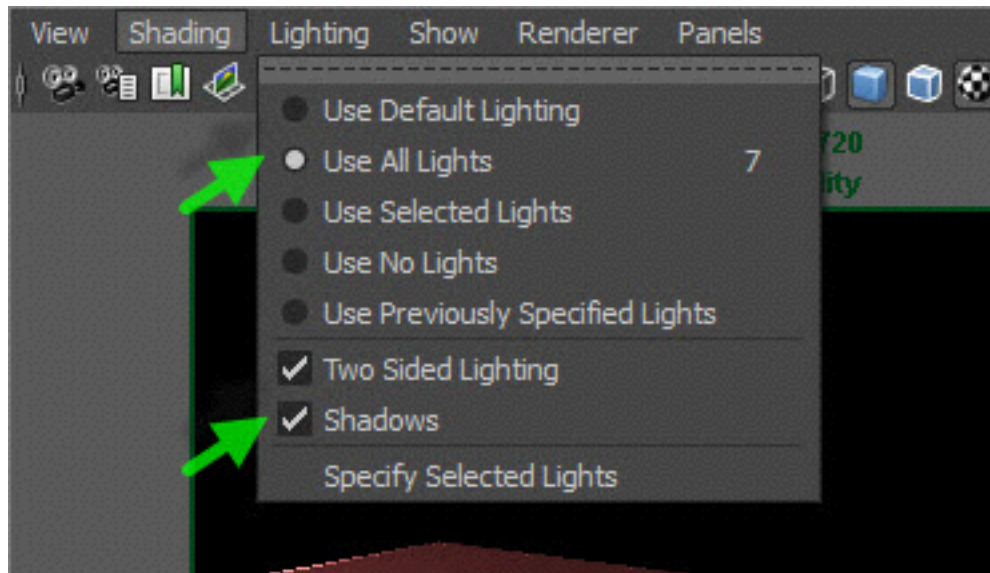
(fig. Playblast Options)

Make the Playblast movie look good

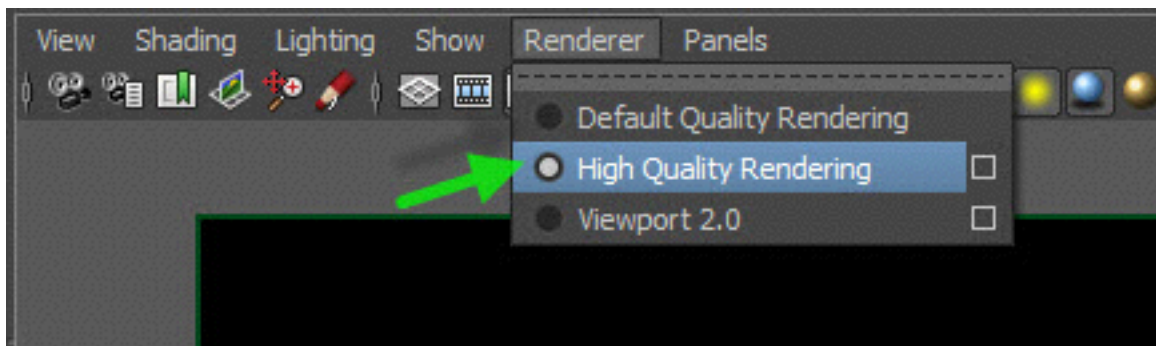
- Viewport > Show
- **Hide the grid, the joints, the lights...** (fig.1)
- Viewport >Lighting > Use All lights and Shadows (fig.2)
- Viewport Renderer >High Quality Rendering (fig.3)
- **Render Settings: HD 720**
- **Hide Poly count Display >Heads up Display >Poly Count**



(fig.1)



(fig.2)



(fig.3)

Evaluation Notes: This exercise will push your abilities to stage and present an animated film. Think about the best way to present your character. Does the lighting make the scene look its best? How does the camera angle/placement affect the animation? Do all of the different elements work together?

Grading rubric

20%	Environment: Props are present, desk and walls are present. Quality lighting. Small Playblast movie in Smooth Shade All mode, not showing joints, nor IKHandle nor wireframe.
20%	Action Shot: Subject and action are readable. Lighting enhances the action. One still camera angle.
20%	Arcs Quality: Quality adjustment of the tangents of keyframes in the graph editor for Root_Lamp, Base, IKHandle and Lamp Shade
20%	Timing quality of key poses for each jump: Spacing of the keyframes in the graph editor. Movie duration from 5 sec. to 8 sec. (24 frames/sec.)
20%	Key poses quality: Lamp poses for Root_Lamp, Base_mesh, IKHandle and Lamp Shade show animation principles. Anticipation, follow-through as well as full extension and landing poses. Lamp starts at a stand still and coming to a stop at the end of the animation.

Naming Scheme

File name must use this naming convention: **S15_cg125_Briley_YourName_LampJumps**

To Be Submitted

One zipped file including:

- Your resulting Maya file (.mb) Animation scene including texture files (jpg)
- Playblast is under the 'movie' folder (see Playblast Options above) (.mov)

All files should be submitted to Moodle and the N: drive

Assignment Due

All assignments are due the day before class at 4PM