CS5245 Project Progress Update

What should have been done

According to our original timeline, by now we should have finished the special effects video project.

Week of 27 Sept: animating creature and virtual camera, animating morph

Week of 4 Oct: animating morph, compositing creature animation into the video

Week of 11 Oct: compositing creature animation and morph animation into the video

Week of 18 Oct: compositing and final editing

What have been done

1. We have chosen a model of *Jar Jar Binks*¹, a character from Star Wars², as our creature model.

- 2. We have finished shooting the video with supporting actors as figurant students.
- 3. We have finished animating *Jar Jar Binks* for scene 1 and scene 3 (see the figures below).
- 4. We have finished the morphing video from teacher's reflection into Jar Jar Binks.
- 5. We have finished the composition for the 1st scene (the scene where the teacher's reflection morphs into *Jar Jar Binks*)



Scene 1

In this scene the teacher's reflection will morph into *Jar Jar Binks*. This part has been finished.



Scene 2

This part has not been done yet.

http://www.starwars.com/databank/character/jarjarbinks/index.html

¹ The model can be found at: http://scifi3d.theforce.net/list.asp?intGenreID=10&intCatID=13.

² Jar Jar Binks' information can be found at



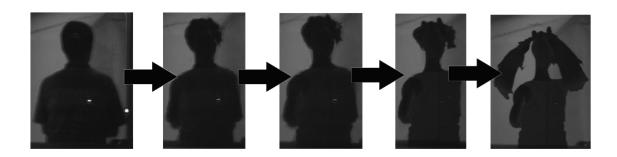
Scene 3

We have animated *Jar Jar Binks* we have not done the composition yet. This is the longest special effect sequence in our video (approximately 20 second)



Scene 4

The last scene where the student is trying to fix her glasses, then camera view will be blurred for a while and after that the teacher's reflection will back to normal.



Morphing sequence in scene 1

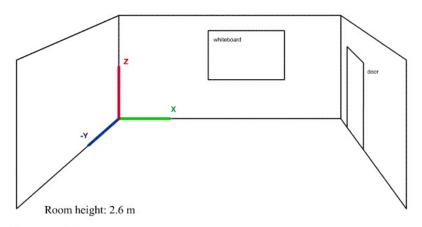


Composition result of scene 1, there are 3 layers:

- 1. the original video (with teacher's reflection)
- 2. the clean plate (to remove the teacher's reflection)
- 3. the Jar Jar Binks animation

During the shooting process, we measured the camera position and the room dimensions, which are used in animation creating process.

Room: S16-03-03

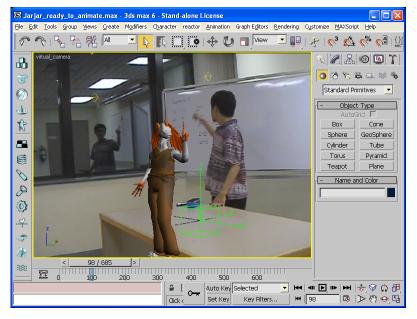


Camera positions:

- (1) wideshot from the back of the room: (4.2, -6.14, 1.25) m
- (2) teacher erase board: (4.32, -3.2, 1.25) m
- (3) closing shot: (3.8, -4.27, 1.06) m

Animation is created using 3D Studio Max 6.

The articulated 3D model Jar Jar Binks is animated according to the video footage.



Note:

The background video footage is only used for reference purpose.

The actual model position and camera position are according to the measurement mentioned above.



Image on the left shows the animation of *Jar-Jar-Binks* erasing the whiteboard (scene 3) after redering with the blue background color.

When compositing the animation with video, we remove the blue background, and darken the model.

This is because the lighting condition in the shooting venue is not so good. The reflection in the video is almost black, so we need to darken the model to make it look consistent and natural.