CS5245 Project Proposal

Title
Tentative: “The Reflection”

The Effect (Summary)
We have two effects in mind. They both involve a real person standing next to a glassy surface, thus casting his reflection on the glassy surface.
1. In the beginning, his reflection is natural. Then, as our first effect, his reflection morphs into a computer-generated reflection which looks different from him.
2. After this, the person moves around, causing the computer-generated reflection move along in a similar manner, but probably with stylizations and exaggerations to make the video more interesting.
The glassy surface will be real (that is, not computer-generated).

What is the input?
1. A video sequence with the person and his reflection on glassy surface captured.
2. Another video sequence in with no person and no reflection. This serves as a kind of clean plate to which we will composite the computer-generated reflection.
3. A 3D humanoid character to be animated in the reflection. As far as possible, we want to avoid modeling for scratch, so we will probably download free, ready-to-animate models. The lighting cast to the character should approximate the lighting of the scene captured in the two video sequences.

What is the output?
A video sequence containing the finalized effects.

Storyboard
Wide shot of a classroom, gradually zooming in to capture the teacher and one particular student.

Over-the-shoulder shot.
POV: The student’s view. At this point, the glassy surface may be visible, but we do not yet pay special attention to it.
Mid shot. The student gets bored and starts to stare at the glassy surface.

As the student daydreams, the reflection of the teacher gradually morphs into a creature. Suddenly the student realizes that the reflection is unnatural.

Wide shot.
The student amuses himself by watching how the creature moves as the teacher moves. The main interest in this shot lies on the teacher and the creature.

We plan to make the teacher point at the whiteboard using a ruler to show a form of interaction between the computer-generated creature and other objects. An alternative to this is by making the teacher stand on the way of OHP light and casting approximately the same light to the creature.

Mid shot.
The fun ends when the student finally decides to shake his head and start paying attention to the lesson. After he shakes his head, the shot shows that the reflection is now a natural one.

For humor, probably the teacher will look into the glass, making him the representative of the audience to “make sure” that the creature was only the student’s imagination. He will then look away and begin giving lesson again while the camera continues shooting the same angle. The scene will then fade away to black screen, concluding our video.

Notes:

- The colours in the storyboard are used only to mark which actors in a particular shot are of interest. The colour scheme in our video will inevitably be different.

- The glassy surface in the storyboard is large, as if the wall itself is made of glass. This is only for exaggeration to make the storyboard clearer. In our video, depending on our venue, the glassy surface may not be as large.

**How many layers? What?**

There will be at least 3 layers: the shot with the teacher and his reflection, the shot without the teacher’s reflection, and the animation of the creature. There may be more layers of filters to make our video look more realistic.
**Who will do what**

<table>
<thead>
<tr>
<th>Denny Iskandar</th>
<th>Jefry Tedjokusumo</th>
<th>Lu Haiyun</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Shooting video</td>
<td>• Shooting video</td>
<td>• Shooting video</td>
</tr>
<tr>
<td>• Compositing animations of morph and creature into video</td>
<td>• Animating teacher’s reflection morph into creature</td>
<td>• Animating creature</td>
</tr>
<tr>
<td>• Helping creature animation</td>
<td>• Helping compositing animation into video</td>
<td>• Animating virtual camera</td>
</tr>
</tbody>
</table>

**Timeline**

- **Week of 6 Sept:** planning the teacher’s movements, mock-up video shooting, finding actors, and casting
- **Week of 13 Sept:** real video shooting, getting used to Maya and After Effects
- **Week of 20 Sept:** animating creature
- **24 Sept:** project progress report
- **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
- **22 Oct:** project update report
- **Week of 25 Oct:** final editing and making “the making of” video
- **Week of 1 Nov:** last-minute editing
- **5 Nov:** project presentation