

# CS5245 Vision and Graphics for Special Effects

# Progress Update

Project Title: Disturbed

SEMESTER 2, 2008/2009

YUE MEI YUAN, U065284W LIM CHU YAO, U065229B CANISIUS CHING, U065237Y

#### **CHANGES AND UPDATES OF PROJECT PLAN**

Based on the feedback we received from the submitted proposal, we make the following changes to the end our story, our individual workload and technical achievement.

#### Storyline

In place of the violent ending, we make the bully retaliate and send the bullied away.

Here is the link to the raw video (without effects) to view the changes to the storyline and the camera details that we left out in the proposal:

http://www.comp.nus.edu.sg/~u0605284/roughcut2.wmv

#### **Roles of Team Members**

**Canisius Ching** 

• Shattering of glass

Yue Mei Yuan

• Implementing reflection on a moving shard of glass

Lim Chu Yao

· Crushing of a shard of glass with bare hand

#### **Updated Project Plan**

Week No.	Milestones
Mid-term Break	Filming of live footage
Week 7	<ul> <li>Testing of glass shattering in Maya</li> </ul>
	<ul> <li>Explore different method of</li> </ul>
	implementing the reflection
	<ul> <li>Edit the live footage to create the raw</li> </ul>
	video
	<ul> <li>Explore different methods of</li> </ul>
	implementing the crushing of glass
	with hand effect

Week 8	<ul> <li>Reshoot of scenes due to changes made to the storyline</li> <li>Re-edit the raw video</li> <li>Model the reflection glass piece in Maya</li> <li>Model the glass shattering effect in Maya</li> </ul>
Week 9	<ul> <li>Progress Update</li> <li>Implement the crushing of glass with bare hand</li> </ul>
Week 10	Implementation of all effects
Week 11	Fine tune implementations
Week 12	<ul><li>Composition of final video</li><li>Final refinement</li></ul>
Week 13	<ul><li>Create the making of video</li><li>Presentation slide</li></ul>

## **WHAT HAS BEEN DONE**

## **Video Filming**

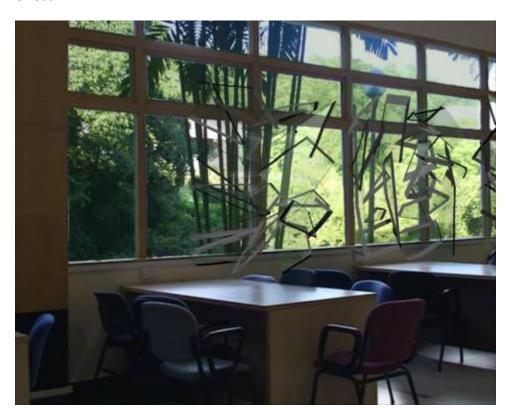
We have edited all the live footages and placed together to form the raw video.

Here is the link to the raw video (without effects):

http://www.comp.nus.edu.sg/~u0605284/roughcut2.wmv

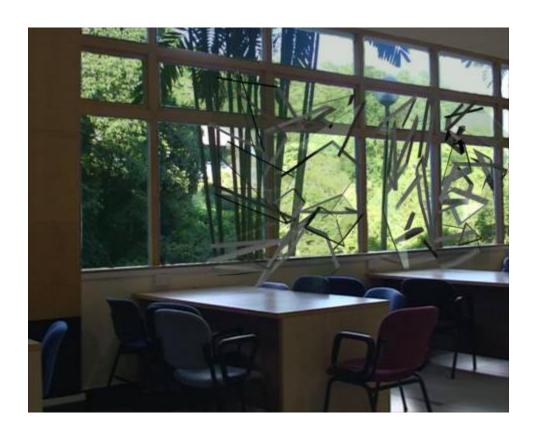
## Modeling the glass shattering

Modeling of glass shattering was done in Maya using the Rigid Bodies feature. The results looks promising, but more have to be done to enhance the visual realism of the glass, and the shatter effect.









## Modeling of glass reflection

Modeling of the glass and the reflection has been done in the Maya using ray tracing. The result looks ok, but more have to be done to enhance the visual realism of the glass and the reflection.







## Removing of glass window panes

The footage recorded of the glass window panes is misty and rather tinted. To achieve the before and after effect of the shattering of the glass window panes, the window pane have to be brighten up. Due to the mist on the glass panes, we decided to remove the background of the window and impose another background. We will then model the glass panes over the edited background

## Before:





## After:





#### **DIFFICULTIES AND PROPOSED SOLUTIONS**

#### **Visual Realism of Glass**

More work has to be done to the increase the visual realism of glass. There are currently different ways of modeling glass material in Maya online, each with different purposes and emphasis. We would have to try which is the best method that is suitable for our effects. For the shattering effect, currently, shattering the glass into more than 25 pieces would cause the system to render for a long time and sometimes crash the software. We are still exploring what ways are there to solve the 25-pieces limit.

#### **Crushing of Glass with Hand Effect**

We do not have a clear idea of how are we going to implement this effect. We roughly know it can be done with computer visions from our consultation with lecturers. We will explore it further on the implementation; the last resort will be using brute force.