

CS5245 Vision and Graphics for Special Effects

Project Proposal

Title: Land of the Wolves

Team members:

Bai QingFeng

Chua Wah Soon

Liu Peng

The effect:

The interaction between real human and computer generated characters.

Novelty: The close and intense interaction which is not yet to be seen. Besides the usual touching as contact point, this effects video will include biting and grabbing between the real and the computer generated characters.

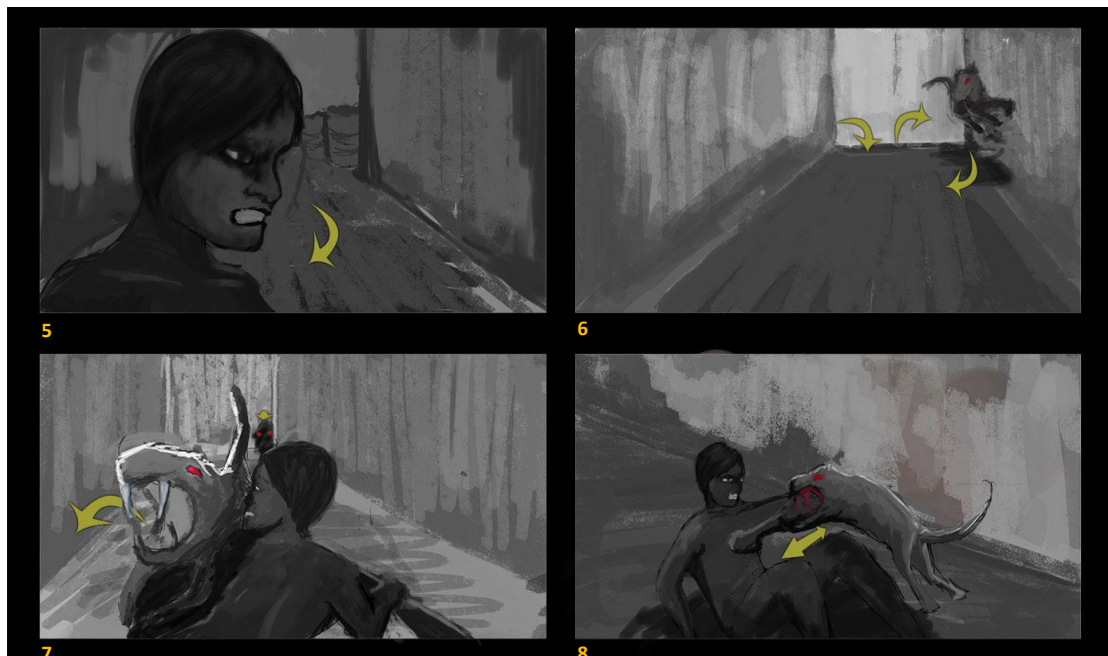
The story:

2 humans are trying to find an escape route from a land infested with wolf-like creatures. They are moving into a deserted alley when they suddenly hear running steps behind them. They turn around to look, but see nothing. Suddenly, a creature leapt on them from the front and caught one of the humans, pinning him to the ground. A fierce fight ensued. The human tries to shake his hand off the creature's mouth bite. The human screams in pain but persists on. Just at this moment, he takes his knife out and stabs at it. He also manages to inch his feet to a good position and kicks the creature away. However, the creature quickly recovers and springs back at him again. Just at this instant, the other human shoots at it squarely and it disappears into smoke. He then proceeds to help his partner up, but at this moment, they realize that a whole army of creatures have gathered behind them, ready to make the kill. Staring hopelessly at the salivating creatures, one human sees an oil drum at the side of the alley's wall. He shouts to his partner to shoot at the oil drum and empties his ammunition on it too. The oil drum explodes and a huge fireball consumes everything in its path, sending the 2 humans flying off their feet.

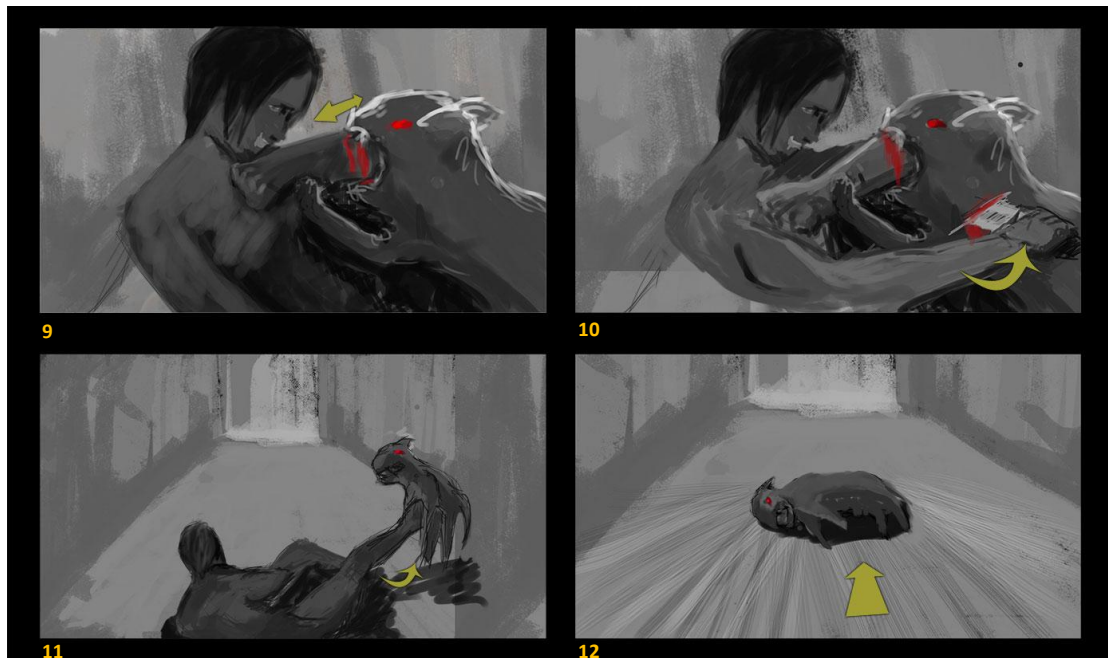
The storyboard:



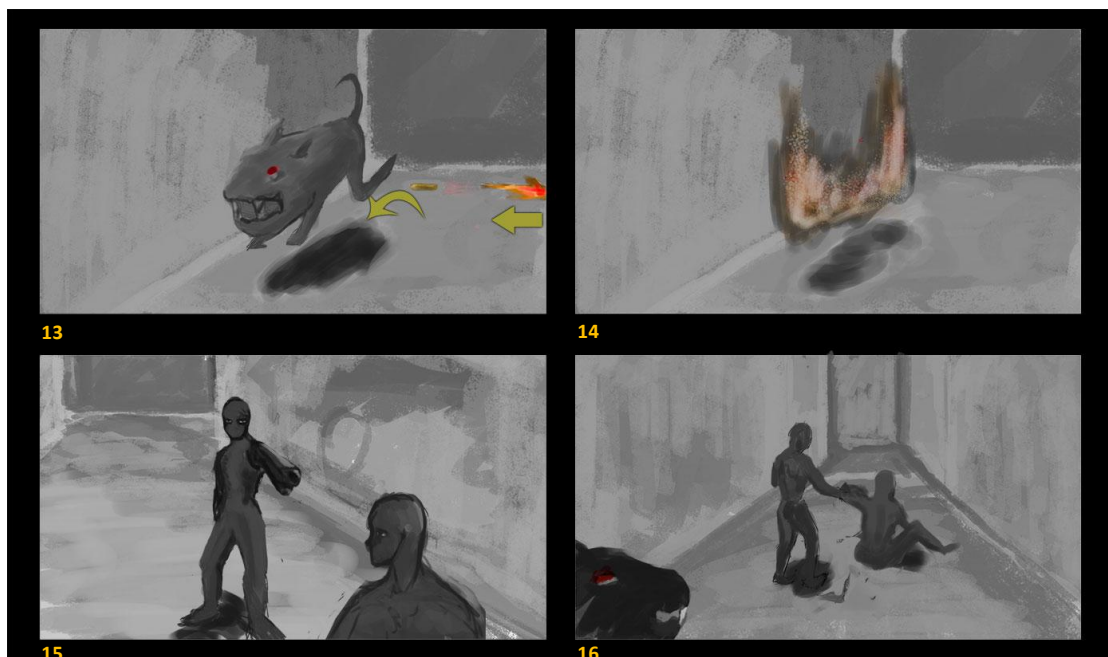
1. Wide shot at eye level, camera moves along with the 2 running humans.
2. Medium shot at eye level, camera static as the 2 humans take a peek into the next alley.
3. Medium shot at eye level, focuses on the human(B) nearer to the camera, moving slightly with him until he turns back to look.
4. Camera cuts to show an empty alley opening. Wide shot at eye level.



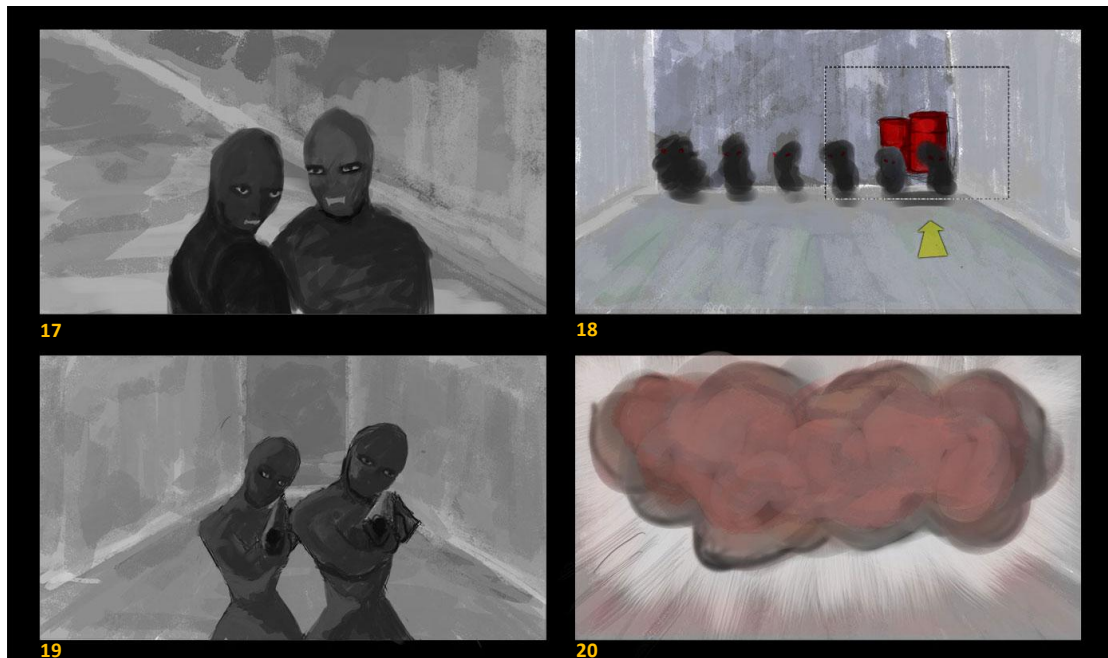
5. Close up shot of the human A's face at eye level as he turned his head sharply to look back.
6. Wide shot of creature pouncing from wall to wall, and then towards the camera.
7. Over the shoulder shot of the creature jumping over A, as he ducks at the last minute.
8. Wide shot of A, as he is being pinned down by another attacking creature.



9. and 10. Medium close up shot of the creature biting on A's hand, while A struggles to get it off. A takes out a knife and jabs it into the creature, causing its bite to loosen.
11. Wide shot of A kicking the creature away.
12. Wide shot of the creature landing on the ground, but quickly recovers and jumps towards the screen again.



13. and 14. Medium shot of the creature pouncing, while a bullet flies from the camera, hitting it squarely, and it disintegrates into debris.
15. Medium close up shot of A, as he turns around to look at B, who has just saved him.
16. Wide shot of the 2 humans' back, as another creature's shadow appears in the camera's foreground.



17. Medium close up shot of the 2 humans looking towards the camera.
18. Wide shot of the army of creatures all lined up, blocking the entrance of the alley. The camera will then zoom in on the oil drums behind the creatures.
19. and 20. Medium shot of the 2 humans raising up their weapons and start shooting towards the camera. A big explosion follows.



21. Medium close up shot of the 2 humans looking towards the camera, at the debris and smoke from the explosion.

Production ideas:

- Describe the visual elements needed to achieve the effect

The visual elements needed to achieve the effect will consist of real life video footage: of the human actor struggling, kicking, stabbing with a knife, background environment scenes — and computer generated footage: of the animated creature, biting, being stabbed and being kicked away.

- Describe how to create the visual elements

The visual elements will be created through the following means: real life footage will be recorded by a video camera; footage that involves usage of green screen will also be recorded on the actual location, using the actual environment lighting condition. This is so that we need not duplicate the

same lighting conditions in another different location. The computer generated creature will be modeled, rigged and the animation exported into video clips using Maya.

- Describe how to put the visual elements together to achieve the effect

The various visual elements will be assembled by first rendering the creature, with animated objects of the screen color attached to it. These objects are to represent objects in the actual footage, and having them in the screen colour facilitates the keying out process during blending of the 2 footage. The green objects' motion will be made to synchronize with the real footage movements, for example, the arm, legs and knife. We will then place the computer-generated graphics layer on top of the real footage, followed by performing shadows and color-correction adjustments to ensure the light balancing of the whole video is constant. In addition, computer generated scenes will also have their lighting effects rendered, all with the help of After Effects, Maya, and Premiere Pro.

Roles of team members:

- Each of us will be responsible for the following technical tasks:

Bai QingFeng: 3D modeling, 3D animation, CG and human interaction compositing

Chua Wah Soon: Filming of real life footage, CG and human interaction compositing, overall video editing

Liu Peng: 3D rigging, 3D animation, environment interaction, overall video editing

- The descriptions of the technical tasks stated above are as follows:

3D modeling:

Setting up of model of the creature, including detailed features such as hair, teeth and other related texture mappings.

3D animation:

Animating the creature according to the actions depicted on the storyboard.

3D rigging:

Setting up the skeleton and tying it to the body and skin of the creature.

Environment interaction:

Blending of CG animation with real life environment footage, and ensures realistic environmental interaction, for example, footprints, scratch marks etc.

CG and human interaction compositing:

Focuses on the interaction between human and creature, motion co-ordination, light balancing, shadow and dirt effects that arise from that part of the video.

Overall video editing:

Selecting and editing of the raw footage, compiling it with the computer generated parts to produce the final video. Light balancing and colour correction on the final video, including other additional touch ups if required. Addition of sound effects.

Production plan/schedule:

February 2010							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	1	2	3	4	5	6	
7	8	9	10	11	12	13	
14	15	16	17	18	19	20	
21	22	23	24	25	26	27	
	trial shooting, testing out keying, compositing with simple cg elements						
28	Recording real life video footage						
						Selection of props and venue for real life scenes	

January 2010
 S M T W T F S
 1 2 3 4 5 6
 7 8 9 10 11 12 13
 14 15 16 17 18 19 20
 21 22 23 24 25 26 27
 28 29 30 31

February 2010
 S M T W T F S
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 7 8 9 10 11 12 13
 14 15 16 17 18 19 20
 21 22 23 24 25 26 27
 28

March 2010
 S M T W T F S
 1 2 3 4 5 6
 7 8 9 10 11 12 13
 14 15 16 17 18 19 20
 21 22 23 24 25 26 27
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March 2010

February 2010							March 2010							April 2010						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6		7	8	9	10	11	12	13	14	15	16	17	18	19	20
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
28																				

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
20	1	2	3	4	5	6
	learning and starting of composition of cg and real life footage (postproduction) putting lighting, particles, and animation					Meeting and resolving any technical issues
7	8	9	10	11	12	13
Re-shoot of any scenes if necessary	further composition of cg and real life footage (postproduction)					
14	15	16	17	18	19	20
overall video editing and touch up, putting in of sound effects						
21	22	23	24	25	26	27
28	29	30	31	1	2	3