CS5245 Project Progress Update

"It's Over!"

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Work done so far

1) Pre-viz

Due to the complexity of the camera and vehicle motion for the car lifting shots, we knew after submitting the proposal that we would need an animatic from which to reference for the effect. As such we produced a playblast animatic.

http://www.youtube.com/watch?v=9amYM69AWYk



2) Made a similar size car front model

We made a car model that only has the front bumper as the car lifting shot only requires the girl to lift the front car bumper. This car model is made with respect to the extra dimensions of the real Nissan 350Z as close as possible. Part of the challenge is to make shape of the car to be around the same as the car. We used cardboard, Styrofoam and masking tape to make the model, including using a blue spray paint to paint the model blue so to facilitate easy keying out of the model in After Effects if we need to.





3) Filming

Filming is done within 2 days during the recess week. Some of the challenges and difficulties we faced so far are setting up of the dolly equipment on the road that we were filming, heavy rain in the midst of filming where we had to continue another day.

4) Rough edit of footage

We edited a rough run through of the footage and find that we need to shoot another extra short scene. Shot number are labeled so that we can know what are the scenes need special effects to do done, etc.

http://www.youtube.com/watch?v=oOZdqQVqggs

There is a close-up shot of the girl being very furious with the guy and the girl starts to lift the car. The difference in the two scenes is too drastic and we have to film this extra transition scene to buffer out this difference.



5) Motion tracking of car

Motion tracking of the car lift sequence (Shot 406) is a crucial part of the main special effect.

Initial Tests with the footage for Shot 406 using Match Mover Pro, did not yield very good results. It resulted in an excessive amount of trackers. Although the results did solve for a rough camera motion, it was rather jerky.

We then proceeded to use Maya Live (a motion tracking plug-in that comes with Maya Unlimited) instead to create manual trackers to track the shot. In total we created about 60 trackers throughout the length of the shot. Using Maya Live, we were able to attain a reasonable track path result but again it suffered from some level of jerkiness as the camera tend to move back and forth for certain frames.

We finally settled to use a manual track in Maya. We used locators to mark out certain key features in the footage and where they should be in relation to the 3D space. We then proceeded to create a manual arc curve and have the camera animate along the motion arc path. Later we would fine tune the motion of the camera and the car.





However, in the end it is still too tedious to use manual tracking in Maya. We decided to reshoot the lifting scene in a blue screen room to make the tracking job a lot easier.

6) Car animation

A rough animation of how the car is going to be thrown in the shot 408 is being done. Part of the difficulty in this animation is getting the right camera angle of car throwing in several different shots such as 407, 408, 409 and 410. One solution is to lock a specific camera angle in Maya, and then using this "set" camera angle, animate the car model into the scene.



Possible difficulties faced in the future weeks:

One difficulty we faced in this lifting scene is that in the later part of the lifting of the car, the girl is in front of the car model. Compositing of the car model behind the girl will be a little tricky as the girl and the background are moving. We proposed to take many photos of the background surroundings where the car will be lifted, and use these photos to texture onto a bend plane in Maya. And then shoot the girl lifting of the car in a blue screen room, with markers on the blue screen. The camera motion of the car lifting will be tracked using Match Mover Pro, and this camera motion will be used to get the correct camera angle of the background setting in Maya.

The car and background will be composited in Maya, and then rendered out and to be composited with the girl in After Effects.

Another difficulty we might faced is in shot 404 which the girl is getting furious, this shot required the car to be in scene, however being a quick zoom shot it is difficult to composite the car in. Hence we proposed to take this scene in HD in a still shot, composite the car model in, then do the quick zoom effect in After Effects.

Schedule

Week	Milestones

3-5 (Completed)	Conceptualization, Storyboarding, Equipment familiarisation
6 (Completed)	Proposal, Scene Inspection, Making of Car Prop
Recess Week	Filming, Digitising Footage
(Completed)	
7 – 8	Camera match moving
(Completed)	Vehicle Lifting Animation and match-moving (Draft)
	Vehicle Spinning Animation (Draft)
9 - 10	Vehicle Spinning Animation (Final)
	Reshooting of lifting scene, and scenes needed blue screen
11	Vehicle Lifting Animation and match-moving
	Dust and Debris Effect
	Vehicle Lifting Animation (Final)
12	Compositing
13	Final editing, sound effects, voice-overs
Reading week (20 th April)	Submission