

NUS School of Computing

AY 2015/16 Semester 2

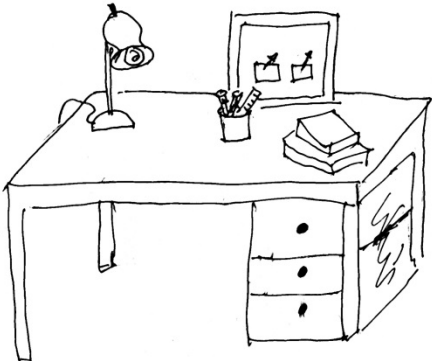
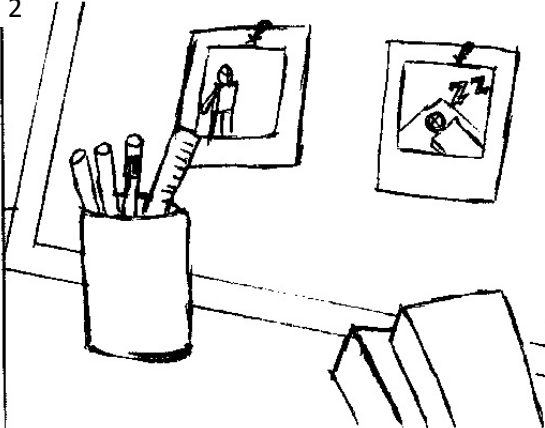
CS4340 Digital Special Effects: Final Project

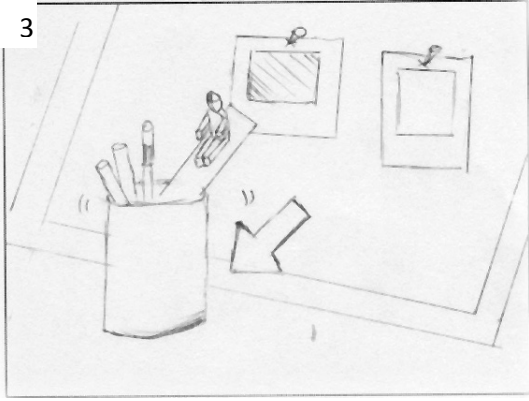
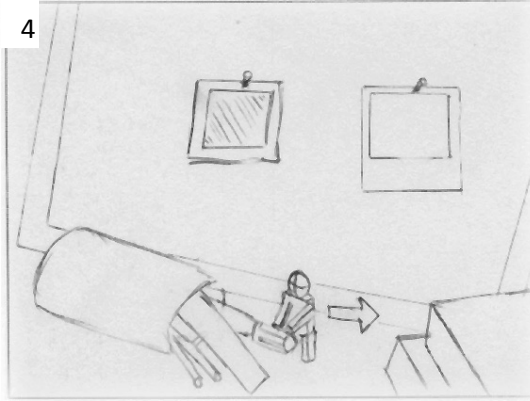
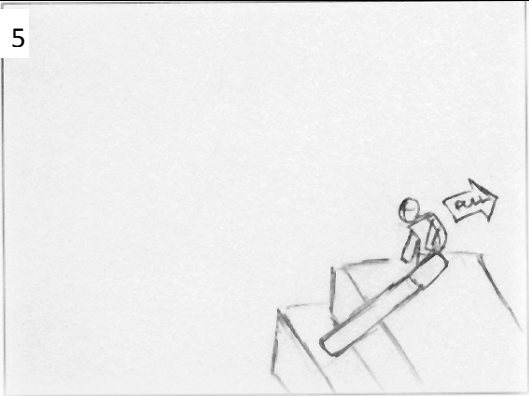
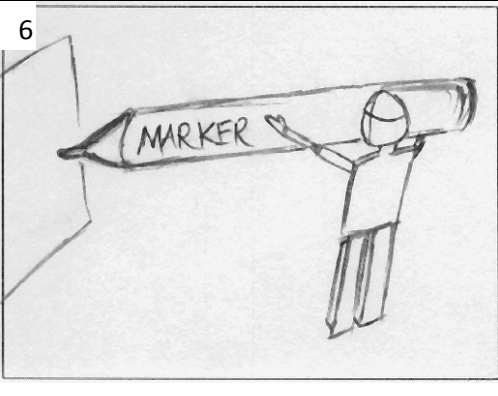
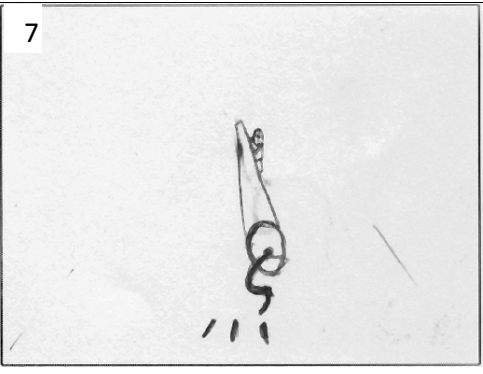
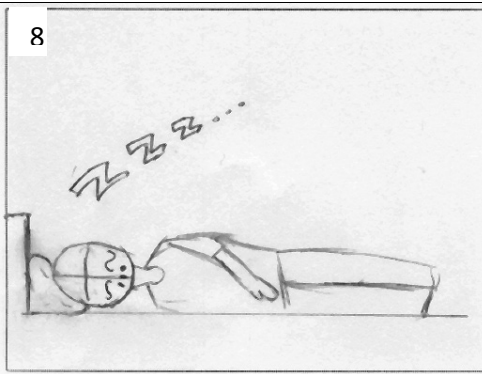
As in previous years, the Final Project in this semester will be focused, and yet still allow for creativity. Please read through this document, and plan ahead with your teammates. Use the IVLE Forum to ask questions (so that other students will benefit; they are likely to have the same questions as you), or to give suggestions.

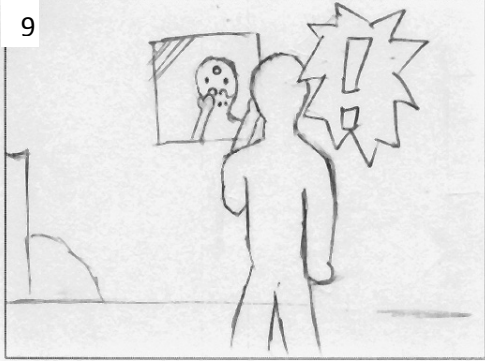
In this Final Project, you are to produce a video containing the visual effects as depicted in the storyboard below. **The main effect is the protagonist using a CG marker pen to draw on her clone.** Your video should begin with a title page showing your group's name, and the words "CS4340 Digital Special Effects". Display this title page for a few seconds, then immediately cut to Panel 1 of the storyboard. No further preamble is required or necessary. The focus of this Final Project lies in the visual effects, not in the plot of the story. There is therefore no need to situate the VFX in a coherent and logical storyline.

Your video should depict all the key characters, actions, and effects in the storyboard, including camera shots and moves. Panels 1 through 9 should occupy at least 20 seconds in your video (i.e. don't rush through these nine panels). After Panel 9, you may further extend the video for at least another 10 seconds, with additional actions and visual effects as your creativity guides you. For instance, you may show P2 acquiring some super power and using it on P1 (e.g. rapidly spinning P1's photo, causing P1 to get dizzy). Let your imagination fly here, as you will be awarded marks for your creativity. Keep the overall duration of your VFX video to under 2 minutes.

Storyboard

1 	2 
Wide shot showing a study desk. On the desk is a notice board, a stack of books, a pen holder containing some pens/ruler, a desk lamp.	Zoom in to a close-up of the notice board. Two photos may be seen pinned on the board. Photo left shows a person (P1) in front of some building or scenery. Photo right shows same person (P2), in different clothes, sleeping.

	
<p>Person in left photo (P1) climbs out of the photo and slides down the ruler to land on the desk. Alternatively, P1 jumps out of the photo and lands on the desk.</p>	<p>P1 topples the pen holder and pulls out a large marker pen from it. Alternatively, P1 picks up a large marker pen lying on the table.</p>
	
<p>P1 climbs up the stack of books and drags the large marker pen along. She then yanks the marker cap off, exposing the pen nib.</p>	<p>Standing on the books, P1 lifts the pen on her shoulder and uses it to draw on P2's photo. With the drawing action still in progress, the camera rotates around P1 to show next panel. Both P1 and marker should be visible at all times during the rotation.</p>
	
<p>POV shot. Camera rotates around to show P2's view. P1 is using the pen to draw something on P2's face.</p>	<p>Medium shot. P2 is still asleep, but now has a moustache on her face, drawn by P1. The moustache was not there previously (in the earlier panels).</p>

<p>9</p> 	<p>10</p> <p>Panel intentionally left blank</p>
<p>P2 wakes up, looks into a mirror, and realizes the marks on her face. Alternatively, without using a mirror, P2 rubs her face and discovers the marks.</p> <p><u>This ends the individual VFX portion.</u></p>	<p><u>As a group</u>: continue the story for another 10 to 30 seconds. P2 gets angry at P1 and retaliates by altering P1's photo (P1 has gone back to her photo) in some funny manner, eg. rotating P1's photo, causing P1 to fall out and hit the desk. Additional characters may be introduced. Use your creativity to include additional VFX.</p> <p>Draw additional panels to convey your ideas.</p>

Tasks

- Shoot the raw footages as a group. You need to act out both P1 and her clone P2 and adhere to the camera views and movements shown in Panels 1 to 9 as much as possible. Dialogue, if any, should be kept to a minimum.
- The 3D model of the CG marker pen will be provided to you; you are required to use this model, and no other. Each individual will be assessed on his/her creation of the VFX depicted in the storyboard from panels 1 to 9.
- Now choose one of these individual VFX video and extend it from Panel 10 onwards as a group project. Continue the story as your group decides.
- Each group should submit a Project Proposal for your video extension, ie. what happens from Panel 10 onwards. This Proposal should contain the following:
 - Your group's name, members' names, and matric numbers.
 - A one-line description of the VFX to be achieved, e.g. "Blowing super power", if you decide to have P2 blow P1's photo off the notice board.
 - A synopsis: in one paragraph, elaborate on the effect. Describe its novelty. It is best to do one major effect rather than many small ones.
 - Storyboard from Panel 10 onwards.
 - Production notes: describe the visual elements needed to achieve the effect; describe how to create the visual elements, and how these are combined together to achieve the effect. For example, shooting P1 acting in front of green screen, matchmoving P1 in Panel 6 for camera move, compositing with CG marker, etc.
 - Roles of each group member: distribute the tasks evenly among all members of your group, and say who is to do what.

- Production schedule: using a table or timeline, describe the tasks in pre-production (e.g. making or acquiring a miniature, or other props), production (where and when to shoot the raw footages, including footage for the “Making of” video), and post-production (e.g. compositing, CG modeling and animation).
- Submit a Progress Update. This is a concise summary of the work done to date, the problems encountered and how you intend to overcome them. Also include a schedule for the remaining work to be done. If your effects deviated significantly from the original one stated in your Proposal, then submit a new storyboard and synopsis as well. Along with this, submit any raw footages you have captured, or partially edited videos, to demonstrate your progress.
- Also produce a “Making of” video (no more than 3 minutes long) that explains the key steps in creating your video extension. You could narrate the steps, or use subtitles, or both. But at least one of these must be present. If you show screen recordings of how you used, say, Maya, to create your effect, please speed up these screen shots lest it gets boring to watch. With careful planning, you can overlap your shooting of raw footages for both the effects and “Making of” video during production so as to save time.

May's and May-not's

May's	May-not's
You may dress P1 and P2 in any way you like, but they should be easily distinguishable for your viewer, eg. by wearing different colored clothes.	You may not substitute P1 or P2 with a CG character or miniature or puppet. P1 and P2 must be real human actors, and P2 is the clone of P1.
You may situate the entire scene outdoor or indoor. You may replace the pen holder, stack of books, or desk lamp, with other stationery items. But have several items on the desk, not just the marker pen.	You may not replace the model of the CG marker given to you. You must use the model provided.
You may refer to this past project video for ideas, but do not copy verbatim: http://www.comp.nus.edu.sg/~cs4340/project-2011/grp4/grp4-effect.mp4	The study desk and most of the objects on it must be real, not CG. But the marker pen must be CG, not real.
Audio is optional, but adding it will likely impress the judges during the competition. Having, or not having, audio will not affect your grade.	Don't depict excessive violence, or blood and gore in your video. Avoid sexual content or themes, racist, vulgar or other objectionable material. Don't use your video to make political or religious statements.

Grading Criteria and Competition

Your individual and group VFX videos will be judged according to these criteria:

- Realism in the visual effects, including secondary effects such as specular reflections on the marker pen, or shadows cast by the pen onto the desk.
- Creativity: Camera work (shot types, camera movements), Novelty
- Technical difficulty in creating the effects.

All group videos will automatically be entered into a competition for the **Best VFX Award**. A panel of judges will decide using their own criteria (unfortunately, these criteria are not known in advance). Prizes will be given to the winning groups. However, this competition has no bearing on your academic grade. We will be participating in SoC Steps this year. Please also read the PPT slides, as listed in IVLE Workbin, for what you need to do for SoC Steps.



Submission and Deadlines

	Item	Deadline	Remarks
Each group	Project Proposal	Sunday, 6 Mar @ 23:59 hrs	Name your file <group_name>-proposal.pdf. Use only PDF format.
Each group	Progress Update	Sunday, 27 Mar @ 23:59 hrs	Name your file <group_name>-update.zip. In this zip file, include a PDF file describing your progress, as well as any videos to demonstrate your progress.
Each individual	VFX video for Panels 1 to 9 of the storyboard.	Sunday, 17 Apr @ 23:59 hrs	Name your file <your_name>.mp4. Please use mp4 format and H.264 compression.
Each group	VFX video containing Panels 1 to 9, plus your continuation of the story.	Sunday, 17 Apr @ 23:59 hrs	Name your file <group_name>-effects.mp4. Please use mp4 format and H.264 compression.
Each group	"Making of" video	Sunday, 24 Apr @ 23:59 hrs	Name your file <group_name>-making-of.mp4. Please use mp4 format and H.264 compression.

Remarks:

- Submit your files via IVLE into the appropriate Workbin folder.
- Please use MPEG4 file format, and H.264 compression. Do not use AVI format, as these tend to be too large.
- IVLE may have an upload limit (currently unknown). If you exceed this limit, then put your video in Dropbox or Google drive and provide the link.
- Use a consistent aspect ratio throughout your video capture, editing, and final comp to avoid distorting the scene or characters.
- Try to use high definition, e.g. 720p or 1080p. The lowest acceptable resolution is 800x600.

ENJOY!