



## **CS5245: Vision & Graphics for Special Effects**

### **Project Update 1 AY 2009/2010 Semester II**

**Team Members:**

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## Revision History

Revision	Date	Description of Change
Update 1	16 March 2010	<ul style="list-style-type: none"><li>• Change all “miniature” to “real” airplane in sections 3.1, 4, 5 and 6.</li></ul>
		<ul style="list-style-type: none"><li>• Change the time taken for all scenes in section 5.</li></ul>
		<ul style="list-style-type: none"><li>• Replace scene 1 – 9, 14 – 16 of the hand drawn storyboard to images captured from actual shooting in section 5.</li></ul>
		<ul style="list-style-type: none"><li>• Describe section 6 on Production Ideas in detail.</li></ul>
		<ul style="list-style-type: none"><li>• Include the technical achievements to be accomplished by each member in section 7.</li></ul>
		<ul style="list-style-type: none"><li>• Update Production Plan/Schedule in section 8.</li></ul>
		<ul style="list-style-type: none"><li>• Add Problems Encountered and Plan to Overcome in section 9.</li></ul>
		<ul style="list-style-type: none"><li>• Add References in section 10.</li></ul>

## 1 Title of Effect Video

**Daddy, I Miss You!**

## 2 Project Team Members

- Chia Teck Seng HT072158E
- Susan Ong Soo Yin HT072178B
- Tay Kar Yam HT072181U

## 3 The Effect

A paper airplane sends message oversea to fulfill a little girl wish.

### 3.1 Effects

- The paper airplane transforms into a real airplane as it flies up to the sky after the girl throws it out of the window.
- The real airplane flies over the building.
- The real airplane flies over the stormy ocean.
- The real airplane flies through the cloudy sky.
- The real airplane transforms back into a paper airplane as it flies down to the destination.

## 4 The Story

Five-year-old Winnie has always been close to her father. Due to work commitment, he has to travel overseas for three months. Before her father left the country, he gave her a paper airplane as to lessen her sadness and also as to serve as a remembrance. A month has gone, and Winnie misses her father so much until an idea has struck her. She would write her message onto the paper airplane which her father has given her on the day of his departure. She is hoping that this paper airplane will somehow help to convey her message to her father in another country. After written the message, she throws the paper airplane out of the window. As if a miracle, the paper airplane transforms into a real airplane as if soars up into the blue sky. It then travel through miles and battled a few thunderstorms, until finally it transforms back into a paper airplane before it reaches Winnie's father and lands on his desk. Out of curiosity, Winnie's father unfolds the paper airplane and found out it was a message written by Winnie. On it, it was written:

"Daddy, I Miss You!"

## 5 The Storyboard

Scene No. 1 (2 sec)



Camera Shot : Wide Shot

Five-year-old Winnie and her parents are at the airport; that is because Winnie's father is going overseas for a business trip and they are seeing him off.

Scene No. 2 (6 sec)



Camera Shot : Wide Shot

Since this is the first time Winnie's father is going for the business trip, everyone in the family is feeling sad to see him go, especially Winnie since there is not a day that her father has ever leave her side, at least not for three months.

Scene No. 3 (5 sec)



Camera Shot : Wide Shot

Not wanting Winnie to feel so sad, Winnie's father took something out from his briefcase. It is a single sheet of blank paper.

Scene No. 4 (7 sec)



Camera Shot : Wide Shot

Winnie's father began to fold the paper into a shape of an airplane.

Scene No. 5 (5 sec)



Camera Shot : Wide Shot

Winnie's father then gave the paper airplane to Winnie, hoping this would somewhat lessen her sadness and that it would at least serve as a remembrance of him.

Scene No. 6 (15 sec)



Camera Shot : Extreme Wide Shot

After some more exchanges and hugs, Winnie and her mother bid the father goodbye before he step into the departure gate.

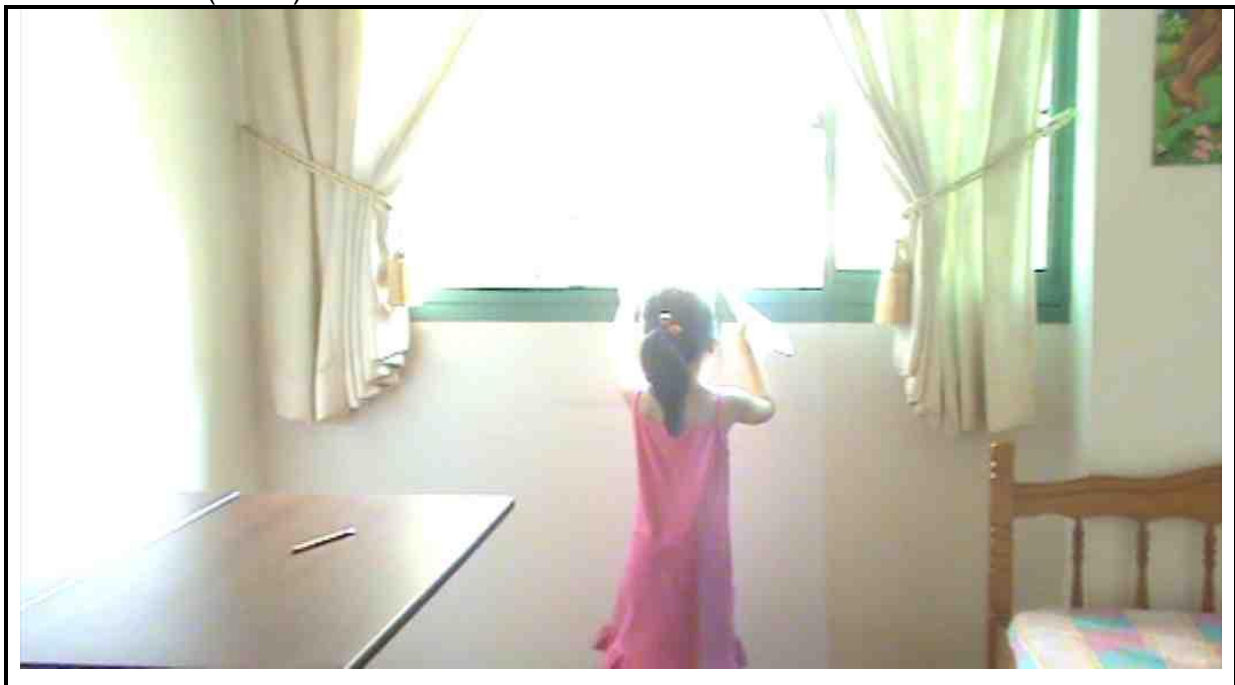
Scene No. 7 (5 sec)



Camera Shot : Wide Shot

A month has left, and it struck Winnie's mind one day that she would write a message onto the paper airplane which her father had made on the day of his departure.

Scene No. 8 (5 sec)



Camera Shot : Wide Shot

After written the message, she threw the paper airplane out of the window.



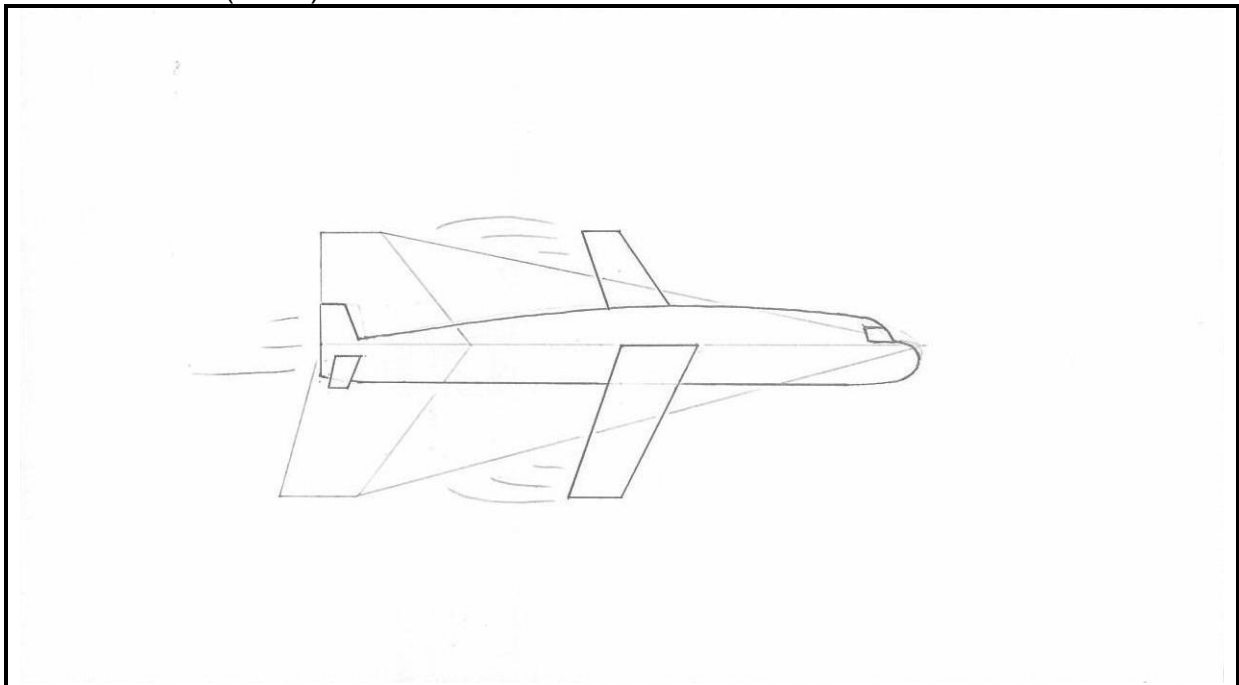
Scene No. 9 (5 sec)



Camera Shot : Medium Shot

She watches the airplane flew out of the window, while in her mind she is hoping that by doing so the paper airplane will bring her message to her father.

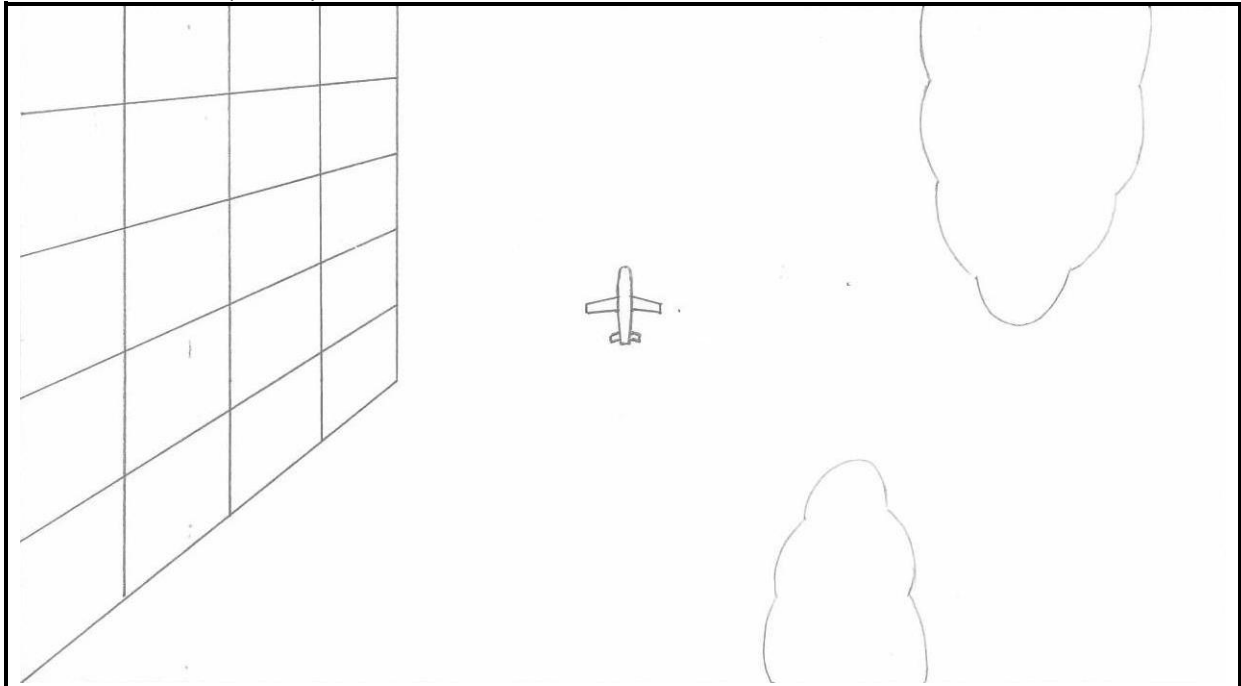
Scene No. 10 (5 sec)



Camera Shot : Medium Close Up

As if by miracle, the paper airplane transforms into a real airplane.

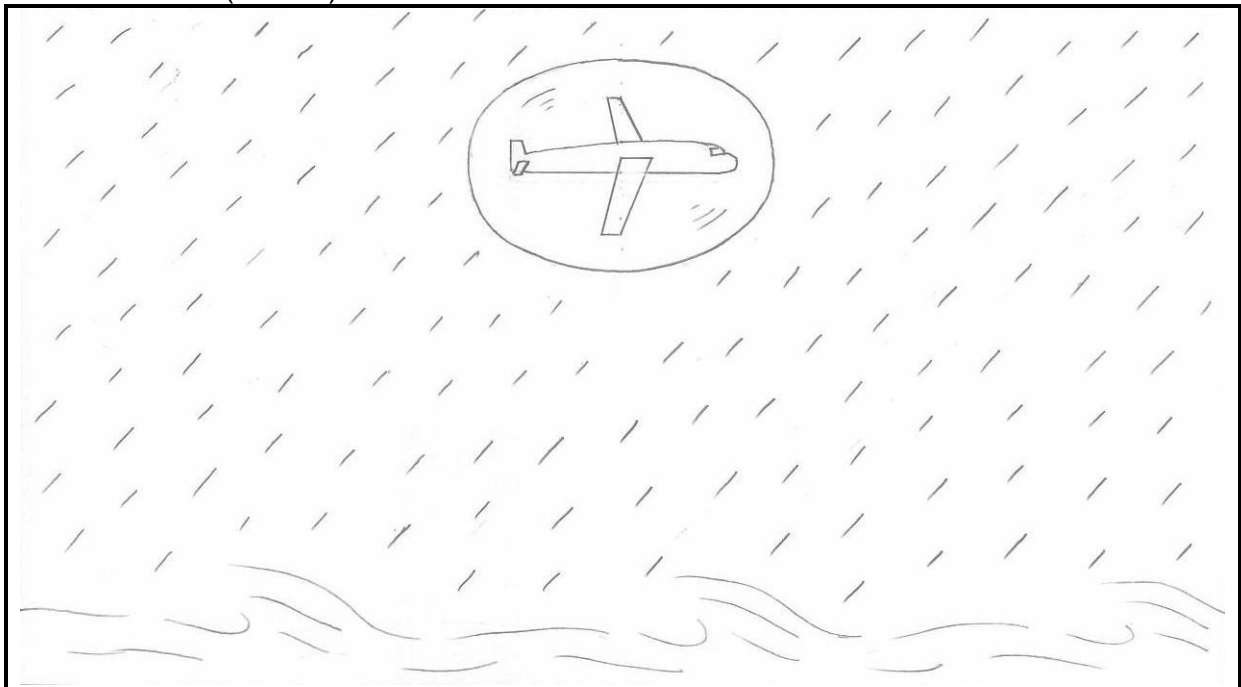
Scene No. 11 (5 sec)



Camera Shot : Low Angle

The real airplane left Winnie's apartment and continues to fly until it has left the neighbourhood.

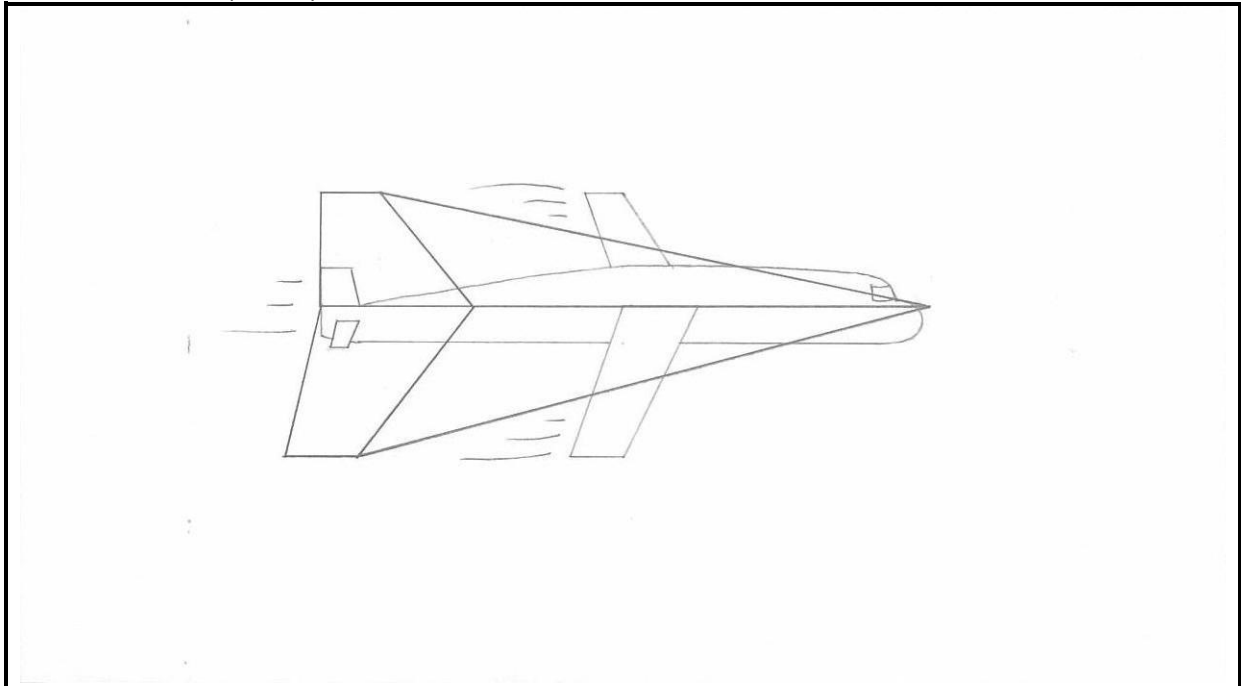
Scene No. 12 (10 sec)



Camera Shot : Extreme Wide Shot

The real airplane then travels through miles and encounters a thunderstorm. It protects itself from the rain and lightning with a shield surrounding it.

Scene No. 13 (5 sec)



Camera Shot : Medium Close Up

Finally, the real airplane has reached its destination and it began to transform back into a paper airplane.

Scene No. 14 (10 sec)



Camera Shot : Point-of-view

Meanwhile, Winnie's father is starting at some pictures on his iPod Touch because he is thinking of his family.

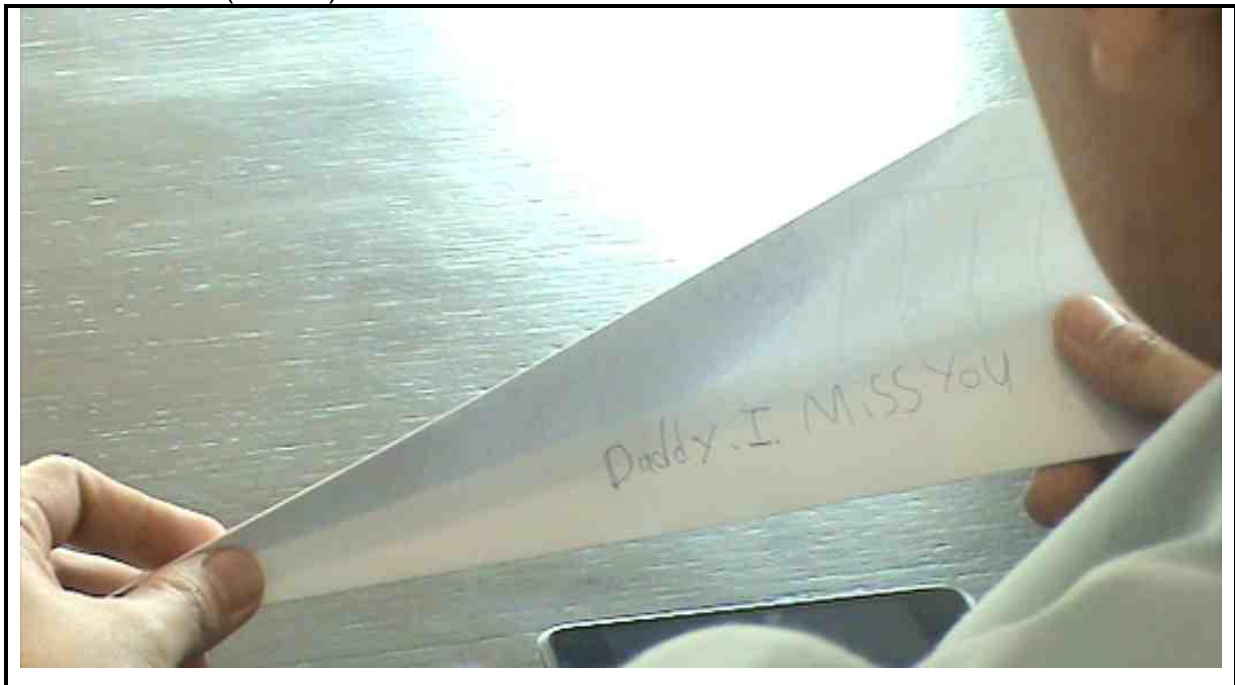
Scene No. 15 (5 sec)



Camera Shot : Wide Shot

While Winnie's father is still viewing the pictures, the paper airplane flew into his room and landed on his desk.

Scene No. 16 (10 sec)

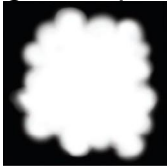


Camera Shot : Over-the-shoulder

Out of curiosity, he unfolds the paper airplane and saw the following message:  
"Daddy, I Miss You"

## 6 Production Ideas

Description	Scene
1. Capture video of the girl's father departing at Changi Airport.	1 – 6
2. Capture video of the girl throwing the paper airplane out of the window at her home.	7 – 9
3. Capture video of sky outside the window of the girl's home for the paper airplane transforming into a real airplane.	10
4. Capture video of sky for the real airplane flying over building.	11
5. Capture video of sky outside the workplace of the girl's father for the real airplane transforming back into the paper airplane.	13
6. Capture video of the girl's father receiving the paper airplane at his workplace.	14 – 16
7. Search and download free 3D model of paper and real airplanes for 3D Studio Max.	
8. Use 3D Studio Max to create 3D model of paper and real airplanes if they could not be found.	
<p><b>Using 3D Studio Max</b></p> <p>9. Create a new project.</p> <p>10. Set the environment to green colour.</p> <p>11. Import the real airplane model to project.</p> <p>12. Set the key frames of real airplane placed at the required positions.</p> <p>13. Render it into a video clip with the required viewing angle.</p> <p>14. Repeat step 11 – 13 for the paper airplane.</p> <p><b>Using After Effects</b></p> <p>15. Import the video files to project.</p> <p>16. Create composition for the paper airplane transforming into a real airplane.</p> <p>17. Drag and place the foreground footage in composition.</p> <p>18. Drag and place the background footage in composition.</p> <p>19. Key away the green colour on the foreground footage with Keylight.</p> <p>20. Apply Reshape filter effect to morph the paper airplane into a real airplane.</p> <p>21. Render the composition to create the video.</p> <p>22. Repeat step 16 – 21 for the real airplane transforming back into a paper airplane.</p>	10 & 13
<p><b>Using 3D Studio Max</b></p> <p>23. Repeat step 9 – 13 for the real airplane flying over building.</p> <p><b>Using After Effects</b></p> <p>24. Import the video files to project.</p> <p>25. Create composition for the real airplane flying over building.</p> <p>26. Drag and place the foreground footage in composition.</p> <p>27. Drag and place the background footage in composition.</p> <p>28. Key away the green colour on the foreground footage with Keylight.</p> <p>29. Render the composition to create the video.</p>	11

Description	Scene
<p><b>Using 3D Studio Max</b></p> <p>30. Create a new project for the real airplane flying through cloudy sky.</p> <p>31. Add a wavy line for the path of airplane.</p> <p>32. Add a camera with Path Constraint motion to the wavy line.</p> <p>33. Import the airplane model and add with Path Constraint motion to the wavy line.</p> <p>34. Add a cylinder with Path Deform (WSM) modifier.</p> <p>35. Add TurboSmooth and Noise modifiers to the cylinder to collapse the tunnel.</p> <p>36. Add a Push modifier to the cylinder to make its walls bulge out in round shapes.</p> <p>37. Using Particle View, add a flow with a Birth event, Position Object, Shape Facing and Material Static.</p> <p>38. Select the cylinder as Emitter Object in Position Object.</p> <p>39. Select the camera as Lookat Object in Shape Facing.</p> <p>40. Using Material Editor, create a material with a solid white colour and use the following image as Opacity Map.</p>  <p>41. Drag this material to the Material Static event in the Particle View.</p> <p>42. Add a Target Direct light to light up the cloud tunnel.</p> <p>43. On the Perspective view, render it into a video clip.</p> <p>44. Repeat step 9 – 13 for the real airplane flying over stormy ocean.</p> <p><b>Using After Effects</b></p> <p>45. Import the image and video files to project.</p> <p>46. Create composition for the real airplane flying over stormy ocean.</p> <p>47. Drag and place the foreground footage in composition.</p> <p>48. Key away the green colour on the foreground footage with Keylight.</p> <p>49. Add a layer for ocean with Fractal Noise, CC Toner, CC Drizzle and CC Glass effects.</p> <p>50. Add a layer for cloudy sky with Fractal Noise and CC Toner effects.</p> <p>51. Add a layer for rain with CC Rain effect.</p> <p>52. Add a layer for lightning with Advanced Lightning effect.</p> <p>53. Specify this lightning layer to last for a short period.</p> <p>54. Add another layer to light up the ocean during this short period.</p> <p>55. Render the composition to create the video.</p>	12
<p><b>Using After Effects</b></p> <p>56. Import the music and video files to project.</p> <p>57. Create composition for overall video.</p> <p>58. Drag and place the video footages in composition in the correct sequence.</p> <p>59. Drag and place the music in composition at the required position.</p> <p>60. Type the subtitle in the appropriate frames.</p> <p>61. Render the composition to create the video.</p>	Overall

## 7 Roles of Team Members

Scene	Technical Achievements	Resources
10	The paper airplane transforms into a real airplane as it flies up to the sky after the girl throws it out of the window.	Chia Teck Seng
11	The real airplane flies over the building.	Chia Teck Seng
12	The real airplane flies over the stormy ocean.	Tay Kar Yam
	The real airplane flies through the cloudy sky.	Tay Kar Yam
13	The real airplane transforms back into a paper airplane as it flies down to the destination.	Susan Ong Soo Yin
	Create CGI of paper airplane.	Susan Ong Soo Yin

## 8 Production Plan/Schedule

No	Tasks	Planned Date	Actual Date	Resources
1	Prepare Project Proposal for submission	24 Feb 2010 (Wed)	24 Feb 2010 (Wed)	Kar Yam Susan Teck Seng
2	Finalize storyboard and shooting scenes	27 Feb 2010 (Sat)	1 Mar 2010 (Mon)	Kar Yam Susan Teck Seng
3	Filming at ISS, Kar Yam's house and Changi Airport Departure Hall	6 Mar 2010 (Sat)	7 Mar 2010 (Sun)	Kar Yam Susan Teck Seng
4	Search and download free model of real airplane <sup>i</sup> for 3D Studio Max	13 Mar 2010 (Sat)	5 Mar 2010 (Fri)	Kar Yam
<b>Note:</b> Model of paper airplane could not be found				
5	Complete trial animation of stormy ocean	17 Mar 2010 (Wed)	14 Mar 2010 (Thu)	Kar Yam
<b>Note:</b> It could be downloaded at <a href="http://www.actselite.com/trialAni02_StormyOcean.zip">http://www.actselite.com/trialAni02_StormyOcean.zip</a>				
6	Complete trial animation of an object flying through the cloudy sky	17 Mar 2010 (Wed)	18 Mar 2010 (Thu)	Kar Yam
<b>Note:</b> It could be downloaded at <a href="http://www.actselite.com/trialAni01_Cloud.zip">http://www.actselite.com/trialAni01_Cloud.zip</a>				
7	Edit live shots in sequence and create video for submission of Project Update 1	17 Mar 2010 (Wed)	18 Mar 2010 (Thu)	Teck Seng
<b>Note:</b> It could be downloaded at <a href="http://www.actselite.com/v01.zip">http://www.actselite.com/v01.zip</a>				
8	Prepare Project Update 1 for submission	18 Mar 2010 (Thu)	18 Mar 2010 (Thu)	Kar Yam
9	Create CGI of paper airplane	20 Mar 2010 (Sat)		Susan
10	Complete video of scene 10 & 11 using 3D Studio Max	25 Mar 2010 (Thu)		Teck Seng
11	Complete video of scene 10 & 11 using After Effects	1 Apr 2010 (Thu)		Teck Seng
12	Complete video of scene 12 using 3D Studio Max	25 Mar 2010 (Thu)		Kar Yam
13	Complete video of scene 12 using After Effects	1 Apr 2010 (Thu)		Kar Yam
14	Complete video of scene 13 using 3D Studio Max	25 Mar 2010 (Thu)		Susan
15	Complete video of scene 13 using After Effects	1 Apr 2010 (Thu)		Susan
16	Compile video with music and subtitle	3 Apr 2010 (Sat)		Teck Seng



No	Tasks	Planned Date	Actual Date	Resources
17	Prepare Project Update 2 for submission	8 Apr 2010 (Thu)		Kar Yam Susan
18	Compile and finalize video	10 Apr 2010 (Sat)		Teck Seng
19	Complete "The making of ..." video for submission.	13 Apr 2010 (Tue)		Kar Yam Susan Teck Seng
20	Prepare presentation slide	13 Apr 2010 (Tue)		Kar Yam Susan Teck Seng
21	Present video	15 Apr 2010 (Thu)		Kar Yam Susan Teck Seng

## 9 Problems Encountered

No	Problem Encountered	Plan to Overcome
1	Since we could not find the 3D model of paper airplane, we need to create the CGI of paper airplane. However, we have difficulty in creating the CGI of paper airplane using 3D Studio Max.	We have found a tutorial in modeling paper airplane using 3D Studio Max. <sup>ii</sup>
2	We have no experience in morphing paper airplane to real airplane, and vice versa.	We have found a tutorial in morphing using After Effects with Reshape filter effect. <sup>iii</sup>
3	As it is not possible for us to capture video of stormy ocean, we have difficulty in creating realistic scene of stormy ocean.	We have found a tutorial in creating a stormy ocean using After Effects with Fractal Noise, Advanced Lightning and Cycore effects. <sup>iv</sup>
4	We have no experience in modeling an airplane flying through cloudy sky.	We have found a tutorial in modeling an object flying through clouds using 3D Studio Max. <sup>v</sup>

## 10 References

<sup>i</sup> [http://artist-3d.com/free\\_3d\\_models/dnm/model\\_disp.php?uid=1004&count=count](http://artist-3d.com/free_3d_models/dnm/model_disp.php?uid=1004&count=count)

<sup>ii</sup> <http://www.tutorialized.com/view/tutorial/Paper-Aeroplane-Airplane/54187>

<sup>iii</sup> [http://library.creativecow.net/articles/zwar\\_chris/morph.php](http://library.creativecow.net/articles/zwar_chris/morph.php)

<sup>iv</sup> [http://library.creativecow.net/articles/alkattan\\_omar/rainy\\_ocean\\_scene.php](http://library.creativecow.net/articles/alkattan_omar/rainy_ocean_scene.php)

<sup>v</sup> [http://library.creativecow.net/articles/ussing\\_jonas/clouds\\_3dmax.php](http://library.creativecow.net/articles/ussing_jonas/clouds_3dmax.php)