U08181 Coursework 1

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**Description of storyboard:**

The animation will be made up of 3 different scenes as follows:

Scene 1: The animation will start off with postman pat driving down the road in his van about to make a delivery. The camera will be looking side on at the van and will follow the van down the road. After a small amount of driving Kenny from south park will come into view.

Scene 2: The camera will switch to view inside postman pats van, Jess will be sitting next to him and the road will be shown as moving. Kenny will then walk out in front of the van and get run over.

Scene 3: The camera will then switch to a view by the side of the road where it will be looking at Kenny dead on the ground bleeding. A rat will then come into view and tug at Kenny's head until it finally comes off and splatters blood all over the place. (Please note this is a standard occurrence in the TV show “south park”).

**Implementation:**

Camera / Scene changes:

In order to give a dynamic and varied feel to the animation the view box will be manipulated to simulate a camera being moved. The scenes are constructed at start up but are translated to different parts of the canvas as shown below:



**Object grouping:**

Objects in the animation, for example postman pats van are manifested by using a group. Complex objects such as the van or Kenny are a group of basic shapes, animation and other groups, for example the group of Kenny also has sub groups such as head. Below is a diagram to display the grouping structure I employed:

Simple groups:



These “simple” groups did not contain any sub groups. They only contain primitive operations.

Complex groups:

kennyFront:



The group “kennyFront” uses “kennyHead“ which in turn uses “kennyDeadParts”. Kenny dead parts are his closed eyes and the blood that drips from his head. The reason these are part of the “kennyHead” group is these parts bare more relation in space to his head than his body, for example, part of the animation at the end will be his head rolling off, I want to keep the blood and eyes with the head and just perform a transform on the head object.

The group “kennyFront” is used a total of 3 times in the animation, one for each scene. Rather than re-defining 3 separate Kenny groups I just use the same group multiple times but keep the ones I don't want to be seen out of the scene.

Van:



The group “Van” is a fairly simple group. It uses the group “wheel” twice to complete the van. The animations for the wheels are declared within the group “wheel”. The animation to rotate the wheel should be kept with the wheel in order to make rotation about it's center easy.

vanFP:



This group is the van from the first person perspective. It uses the objects “patRear” and “jess” which are in turn just constructed from primitives.

Critical assessment:

There are many things I could have done better. This was the first SVG file I have ever written so I didn't realise quite how many lines of code would be needed and how many points in the coordinate system would be used. If I had know the complexity of this task before hand I would have followed a strict protocol for using the coordinate system. The early objects I created may we not necessarily drawn from the same place, the later object were drawn from 0,0 and then used and translated to where they needed to be, this is a much tidier way to do this. Some kind of convention should have been instantiated at the beginning.

I commented earlier on the complexity of this task. If I had more time I would have made use of the more elaborate functions in SVG such as filters, spline motions etc. As it happens I spent the vast majority of my time making the images look good.

I would have liked to have stored the groups in different files as my code is now hard to navigate. I didn't have time to figure out how to do this.

Overall the task I think was successful. The animations were pretty believable and I think I captured kenny quite well, its just a shame it took so long and I ran out of time.

References:

***W3 schools Refsnes Data.*** *(unknown date) SVG Tutorial*

[*http://www.w3schools.com/svg/default.asp*](http://www.w3schools.com/svg/default.asp)

***Jakob Jenkov*** *(unknown date) SVG Tutorial*

*http://tutorials.jenkov.com/svg/index.html*