U08181 Coursework Part 1: 2D Animation

1. INTRODUCTION

For this coursework you are required to design and develop a 2D animation, using the animation capabilities of **Scalable Vector Graphics** (SVG).

This must be **individual** work.

Submission, to Moodle, advised by end of Friday Week 6 (7 March 2014).

Final deadline Sunday 9 March 2014 17:00

Assessed on-line during the practical sessions of Week 7.

This piece of coursework is worth 30% of the marks for this module. A second piece of coursework, using 3D graphics, will be issued later in the course. The two pieces of coursework for this module will each be marked out of 100 and the two marks will be combined.

The two pieces of coursework together constitute 50 percent of the module assessment. The two-hour examination constitutes the remaining 50 percent.

It is anticipated that the total coursework will take you approximately 30 hours to complete and write up.

The first piece should take approximately 20 hours and the second 10 hours. You should be careful not to spend too much time on coursework to the detriment of your performance in the examination.

The theme of the animation is '**Postman Pat and his Van**'.

2. COURSEWORK SPECIFICATION

2.1 General

2.2 The animation

The aim of the coursework is to test your competence in the use of 2D graphics terminology, SVG and animation.

An outline of the animation will be demonstrated in the lectures.

In its most basic form, a scene with sky, landscape, buildings and Pat arriving in his van and delivering letters.

Extra marks will be awarded for adding more to this basic story board.

We are looking for an animation that is **convincing**, rather than mathematically accurate. You should think carefully about the viewing direction, for example, as it will be a **2D** animation not a 3D model.

In order to write this application you will need to think carefully about how to use SVG group (<g>) elements to structure the objects in the picture and animation elements to realise your storyboard. To achieve high marks you will need to demonstrate thorough knowledge of SVG, making use of the primitives available and the animation functionality, including motion control.

3. ASSESSMENT

3.1 Coursework report

3.1.1 Content

The report will be individual for each student. The work must be your own. You must reference any sources consulted. The format of the report that you hand in should be:

1. Description of the storyboard of your animation – what should happen and when.
2. Description of how you translated the storyboard into an animation using SVG, with particular attention to the structure of the SVG.
3. Critical assessment of your animation. What do you think is good and bad about your design?
4. You do **not** have to include a full listing of the code in your report.
5. References.

The length of the report should be around five pages of A4.

You **must** upload your report and full SVG code and any auxiliary files to the module Moodle site.

All file names should be prefixed with your student number and the entry point should be named **studentnumber_8181_cw1.svg**.

Each file you submit must contain a comment with your name and student number.

3.2 Coursework demonstration

3.2.1 Form of the assessment

The purpose of on-line assessment is for you to demonstrate your animation thereby demonstrating what you have learnt about 2D graphics, SVG and animation. It also gives you a chance to gain marks for your use of SVG technology in imaginative ways.

You may like to draw your assessor's attention to interesting features of your animation that are not immediately observed.

At the time of on-line assessment your animation should be working. You will demonstrate it in the room where your practical session takes place, on the practical room machines or your own laptop. If you are bringing in equipment, leave enough time to get it set up.

If there are parts of your design that you would have liked to have implemented but didn't have the time, be ready to describe them in detail to your assessor.

A timetable for the on-line assessment will be constructed nearer the day.

3.3 Marking scheme

1. Storyboard [20]
2. Visual design and quality of the animation [20]
3. Quality of presentation to the assessor [10]
4. Translation of storyboard concept into SVG [30]
    - range of SVG elements used
    - use of animation elements
    - use of structuring elements
5. Critical assessment and written report [20]

4. COMPUTER SYSTEMS

You will need to use SVG to implement your design. If you wish to use SVG on your own computer, the Opera browser http://www.opera.com/ has native support for SVG and good support for animation. Chrome, Safari and Firefox also support SVG. Versions of Internet Explorer (IE) prior to version 9 do not have SVG support. You are strongly advised not to use IE.

SVG code must be created "by hand"; The use of drawing tools that export SVG, such as Inkscape, is prohibited.

5. USEFUL REFERENCES

- World Wide Web Consortium (W3C) specifications: http://www.w3.org, and SVG page, http://www.w3.org/SVG/