**Flash Project Report**

**Review of some concepts in Flash development environment:**

**Layering**:

Layering is very important and very useful feature in Flash development environment. It allows users to organize objects on a stage from back to front which means place an object in front of another object and vice versa. Placing objects in different layers is essential for animation design in order to animate and move every single object over the timeline. There are many features of using layers in a project. They can be named according to the object type. Furthermore, they can be shown or hidden either all of them or separately in order to organize the presentation efficiently and easily.

**The Timeline:**

The timeline is a very important component in Flash development environment to control and organize the presentation over the time. As well as determining when the change of the animation will happen in the artwork. Each layer has its own timeline in order to control the animation of that layer. The timeline is divided into frames which help to control the animation properly and each frame shows the status of the layer at specific time of the presentation. There are different types of frames can be used over the timeline with different functionality such as keyframes, blank keyframes and regular frames.

**Tweening:**

Tweens in Flash is a short form of “in between” words which mean that the Flash create animation frames in between two frames. It is just need to select the beginning and the end of the animation by specifying two keyframes and the Flash will create frames of animation in between them. Tweening animation is more useful than frame by frame animation since it is easy to edit the animation and it saves time. There are different types of tweening animation such as shape tween which animate shapes, motion tween which animate many shapes grouped as a simple and classic tween which animate and move an object between two selected frames [3].

**Vector Graphics:**

Flash application has many tools to create high quality vector graphics. Each tool has different features for more professional graphics. Vector graphics are unlike bitmap graphics to have high resolution graphics based on mathematical equations [1]. The quality of vector graphics remains high even if it is scaled and zoomed in many times. There are many tools in Flash to draw vector graphics such as line tool, pencil tool, rectangle tool and brush tool. According to adobe website “Vector graphics are used for animation, logos, graphics with solid or continuous tone artwork, geometric shapes, screenshots of application interfaces, and cartoon-like drawings” [1].

**Information about my application:**

My project is about a stickman representing a thief and he is escaping from above of some houses when people woke up and detected him at night. He is riding his car and driving quickly then a police car is trying to stop him but it is hit by the thief car and both are exploding. I used many layers for each single part of most of the objects in order to control their animations. I draw some graphics such as houses and streets using Flash drawing tools in order to include vector graphics in my project. As well as I imported some external bitmap graphics and some of them are from the Internet such as police car [4], policeman picture [5], thief picture [6] and signs [7] and the others are draw by Photoshop such as trees and cloud and grass. I placed clouds and trees in the background and I used classic tween to move them to make the cars look moving. Moreover, I placed a picture of camera control sign on the stage at the beginning and two men pictures are placed at the end of the video. I used 3D rotation tool to make the pictures moving around themselves and I used motion tween tool for that. I draw the stickman and I animate him using onion skin tool in the timeline by drawing many different movements in different keyframes. As well as I added some code scripts to stop the video from replaying automatically when it finish and I added other scripts to replay it manually using the replay bottom. I have used many tutorials from YouTube website and Lynda website [2] to learn most of the functions and features that I had added to my project.

**References:**

[1] Adobe.com (n.d) *Flash glossary: Vector graphics.* [Online] Available from: <http://www.adobe.com/devnet/flash/articles/concept_vector_graphics.html> (accessed in 01/02/2012).

[2] Lynda.com (n.d) *Flash Professional Courses*. [Online] Available from: <http://www.lynda.com/Flash-Professional-training-tutorials/204-0.html> (accessed in 25/01/2012).

[3] Perkins, T. (2010) *Flash Professional CS5 Essential Training.* [Online] Available from: <http://www.lynda.com/Flash-CS5-tutorials/flash-professional-cs5-essential-training/59964-2.html> (accessed in 01/02/2012).

[4] Alan (2009) *Gwent Police BMW X5 Traffic Patrol Vehicle* [online] Available from: <http://www.flickr.com/photos/alan215067code3models/3316482834/> (accessed in 31/01/2012).

[5] Mikess (2009) *COP.*  [Online] Available from: <http://www.toonpool.com/cartoons/COP_61206> (accessed in 30/01/2012).

[6] Absolute Xpress (2010) *Thieves and Scoundrels Available.* [Online] Available from: <http://absolute-x-press.com/tag/thieves-and-scoundrels/> (accessed in 01/02/2012).

[7] Efus.eu (n.d) [Online] Available from: <http://www.efus.eu/wp-content/uploads/fileadmin/efus/MESU/smile_you_are_on_cctv.jpg> (accessed in 31/01/2012).