## **ABSTRACT**

DirectX is an interface on Microsoft Windows operating system that provides user a multimedia processing function. DirectX is an application programming interface (API) which help developers to develop their multimedia application using hardware features like graphics accelerator and sound card. DirectX provides a hardware abstraction layer (HAL) which using hardware drivers to interacting between software application like games with system hardware.

This final project will create a tweaking tool, this tool provide a synthetic test about hardware ability in graphics processing using directX modules. This synthetic will show graphics processing system performance.

This Synthetic test is perform on Windows XP service pack 2 operating system and DirectX 9.0 as multimedia API platform. DirectX using component to perform graphics processing called directX graphic wich is includes directdraw and direct3D, the other components of directX to support multimedia functions is : directInput, directPlay, directSound, directMusic, directShow and directMediaObject.

The data result of this synthetic test will be saved as a batch and profile of graphics processing system, by using this profile we can analyze and use a right profile to perform optimation on system. There are two synthetic test modules used in this tool, which as: Geometry processing speed and Hidden surface removal, Synthetic test on this application using direct3D API.

Key words: Multimedia, application programming interface (API), application programming interface (API), directX graphic, Synthetic test, tweaking tool.