CHAPTER 1

INTRODUCTION

1.1 Background

Multi touch screen Keyboard Table (MTKT) is a generation of computer we used nowadays. As we all know, normal computer used mouse and keyboard as their input, but with MTKT we can interact with the computer by the touch of our finger. The moment we touch the screen, the computer will interact with them to produce input to our computer. Moreover, with MTKT the users can have multiple touches or inputs on the same computer. It will make it easier for the user to have a conversation and interacting with the computer on the same time.

MTKT can be in many different sizes but it must be in suitable to fit a LCD projector and an IR webcam. For some of the products, MTKT is built in standard sizes to make the user easier to use it also as a table. The size is an important factor when building MTKT because it will some space in the room.

The mechanism to construct the touch screen is by reflecting the IR light to the webcam at the bottom of the table. The Frustrated Total Internal Reflection (FTIR) is used. FTIR happen when the IR light trapped into the acrylic and it only reflect in the acrylic. When someone touches the acrylic, the light will bounce back to the IR webcam below the acrylic.
1.2 Problem Statement

Nowadays many people find it hard using mouse and the keyboard while using the computer at the same time. It also limits the user to interact with the computer by one click at a time. Some computers maybe consume too much space for it. Besides that, the conventional keyboard cannot long lasting and it is not suitable for extreme user such as gamers. Although the conventional keyboard is not so expensive, the broken of it may cause people to lay much money to buy the new ones when they are malfunction or broken. Besides that, the designs of multi touch that has been in the market consume to much space and not practical and also the weight is huge and hard to portable.

1.3 Project Objective

To design and fabricate Multi Touch Screen Keyboard Table (MTKT) for multipurpose usage.

1.4 Project Scope

- To test the software for multi touches.
- To fabricate (MTKT) using various manufacturing process.
- To compare ideas with past developers and products.
- To design a new table for multipurpose uses of keyboard

1.5 Thesis outline

1. Chapter II will present about literature review and the history of multi touch screen.
2. Chapter III will discuss about methodology of the project.
3. Chapter IV will discuss about the result and discussion of the project.
4. Chapter V will includes the conclusion of the project.