CHAPTER 1 – INTRODUCTION

1.1 Research Background

In improving the quality of a presentation, Interactivity is an important aspect. With higher interactivity, better knowledge transmission and audience attention can be achieved.

One of the ways to achieve high interactivity in a presentation is by using Interactive Whiteboard technology. With its use in a presentation, it can give other benefits like the ability to deal with more complex concepts and reduce the need for note making.

Unfortunately, it is not possible to widely use Interactive Whiteboard due to its high price. One unit of Interactive Whiteboard can reach the price of thousands of dollars and even more.

1.2 Research Scope

The research will firstly explain about the Wii remote, Wii remote specification and how to use the Wii remote on the application. Afterward it will be followed with making analysis and design for the application. UML will be made to be used to design the application.

The application makes use of a Wii remote and an infra red pen to replicate the work of an interactive whiteboard.

This research use Java SE Development Kit 1.6 for its development. Few other software are also used such as:

- WiiuseJ 0.11

  WiiuseJ is a Java API which enables the use of a Wii remote on a computer. This API has the capability to run on Windows and Linux.

- Notepad++

This software is used to edit the source code.

- Jude Community

  This software is used to create the UML(s)

1.3 Research Purpose and Goal

The primary purpose of this thesis is to build a virtual interactive whiteboard application with the usage of a Wii remote and an infra red emitting pen. This application meant to act as a solution for those who need an interactive whiteboard with an affordable price.

1.4 Research Limitation

For the communication between the Wii remote to the PC, Existing API will be used. In depth API will not be detailed discussed. This application will only work in Windows XP due to time limitation for the development process. The application will apply left click only due to the method used. The application performance will vary depends on quality of the infra red quality