

## **ABSTRACT**

Today, computers have become part of everyday life, start from office work such as data processing, presentation, until a means of entertainment like playing games. This is not out of the development of computer input devices as an intermediary between users and computers. Computer input devices are increasingly evolving to bring new forms of interaction in giving commands to the computer. Starting with the keyboard at the first time presence of a computer until to use the mouse as a pointing device currently on the GUI (Graphical User Interface). At the moment, interaction with a computer using the motion of the human body can be regarded as the latest technological developments inputs. With this technology, interaction with the computer is considered to be more attractive.

Motion detection system can be built using simple tools such as a webcam on a computer to be able to perform motion detection based optical / image. In implementation, motion detection based on image could use a variety of methods, one of which is color tracking. Using color tracking so the observations of motion will be focused only on the object with the specified RGB intensity.

From a series of tests performed, showed that applications can run all functions and features are as expected. This application presents a new form of interaction between user and computer for replace some functions of the mouse device, which are move the mouse cursor, click, and holding click.

**Keywords: Motion Detector, Mouse, Color Tracking, Java Media Framework**