

CHAPTER 1

INTRODUCTION

1.1 Background

In this era, image becomes a staple for some people and some professions in the world. Image have many characteristics that can improve image quality. The first of the image size, the image is divided by large size, small and medium. With different length and width the detail of the image is getting visible. The image will not look interesting if it is not colored. In staining images there are so many choices and blend colors that make the image more real. Images have many different types of images, with different formats for different images. Example of image format in digital image JPG/JPEG (Joint Photographic Experts Group), BMP (Bitmap), GIF (Graphics Interchange Format), PNG (Portable Network Graphics) for non-digital images drawn on paper with various image media (pencil, canvas, drawing paper). As time and technology is increasingly sophisticated images that were once drawn / painted on paper and canvas, paper and canvas are now starting to be abandoned and replaced with a smartphone or a laptop with a variety of features that can be used. Images can be used as information for some professions. In this research will be done digital image processing by using some operators and image histogram that aims to produce a better image. The advantage gained from image processing is expected to improve the image with various operators.

1.2 Scope

This project will discuss various image operators. Among other contrast in the picture such as contrast stretching that will change the value of low or high contrast became picture with good contrast. The histogram is the frequency of the pixel values represented by the graph. The graph will know the RGB value in the image. Invert is a merging inputs of two pixel values, which will generate new pixel values. The new pixel value will generate a new image.

1.3 Objective

The final goal to make the system to process the image with the operator and the histogram on the image with the graph. Among other things: operators "and" and "or" combine parts of white and black into new images. The histogram will show the frequency of appearance of color images in graphic form. Contrast stretching to increase contrast on images to be sharper.

