

CHAPTER 3

RESEARCH METHODOLOGY

3.1. Literature Study

In this process the researcher studying journals and research related to face recognizer, This face recognizer have various methods and each method has it's own advantage. The journals used as references in this project.

3.2. Building Face Recognition Program

This program was made using the LBPH method with the help of a haar cascade which has the aim of detecting various kinds of faces. This can be achieved by using various datasets. The dataset is distinguished by various faces that have been separated in each folder.

3.3. Gathering dataset

In collecting the dataset, the seeker divides it into 5 different types of facial photos, each facial image contains high and low-resolution datasets as well as dark and bright lighting. Furthermore, it was differentiated again in gender, namely 3 men and 2 women so that it was proof that this program was not only useful for 1 gender.

3.4. Accuracy Testing

After the program is completed and the dataset collection is sufficient, the next step is to test the accuracy of the program using the dataset that has been collected. Testing is done by comparing photos that have dark and bright lighting, then comparing photos that have low and high resolution. From this test that is compared is the level of accuracy in recognizing a face.

3.5. Analyze

In a comparison of dark and bright levels of lighting, and a comparison of high and low resolution, these results are used to find out which dataset has a higher level of accuracy.