ABSTRACT

Paper is an item that is widely used in the world of formal education. One

example is used to write the note from the lessons given by the teacher during

the teaching and learning activities. The usefulness of the paper for the note

only temporary. After useless, the paper becomes waste that can harm the

environment. In addition, the raw material for making paper is a tree. If more

paper is used, then the felling of trees will also be getting a lot done. This will

make the forest bare and increase the risk of global warming.

In this final project has created an android application with handwriting

recognition feature on the mini computer. Android was chosen for being a

smart phone operating system that is widely used by many people. Besides

Android also is open source, meaning users are exempted in creating,

executing, or modifying the program. This system will make recognition to

letters and characters entered by the user on the image area. The recognition

results can be saved in a text file. The file will then be used as a note by the

user.

From the results of testing with downsample dimensional parameter values

obtained the highest accuracy in dimensions 7x7, amounting to 96.2% for the

number, 94.69% to lowercase, and 91.30% for uppercase. From the results of

testing with the amount of training data parameter values obtained the highest

accuracy on the amount of training data 1, amounting to 96.8% for the number,

91.53% to lowercase, and 91.23% to uppercase. With this application, the

students do not require a lot of paper in terms of log-recording or processing

tasks (paperless).

Keywords: Minicomputer, android, handwriting recognition, paperless