

CHAPTER 6

CONCLUSION

6.1 Conclusion

Based on the results of the tests conducted in Chapter 5, it can be concluded :

1. The more training data is stored, the higher the similarity of description patterns in each category will result in bigger accuracy.
2. Learning rate can affect the accuracy of Learning Vector Quantization (LVQ) implementation. The smaller learning rate value will produce higher accuracy values.
3. In table 5.1 above, it can be seen that at the MaxEpoch value reaching 50, the program achieves the highest accuracy at each learning rate. But that doesn't mean the bigger the MaxEpoch value the higher the accuracy value, because the MaxEpoch optimum value depends on the dataset and iteration.
4. The value of initial weights in each category can also affect the accuracy value.
5. Books can be classified in the wrong category if the value of the book description pattern is more inclined in the other categories. Therefore this result proves the hypothesis made in sub-chapter 1.3.

6.2 Suggestions

For futher research, there are some suggeststion to improve this program in the future :

1. To determine the initial weights can use the help of an algorithm (e.g. K-Means algorithm) so that the accuracy result of the program can be more precise.
2. The program need a hardware that has bigger memory and RAM in order to store more training data hence the program will work faster.

