CHAPTER III

PLANNING

3.1. Research Methodologies

This project will be done using an incremental approach. Below are the steps of the project:

1. Search and Collect references as a guidance, includes algorithm and data structure used in this project. The internet and Advanced Programming modules used to look the information.

2. Analyze the algorithm and data structure to finish this project. This project uses basic algorithm for text compression, that is LZW, Huffman, and Shannon Fano algorithm. Caesar and custom byte manipulation algorithm for encryption. Data structure using array, arraylist and binary tree.

3. Implement the data structure and algorithm that have been analyzed.

4. Test all the functions and compression result in this project. Testing functionality consists of send sms to another platform, send sms to android device without this application, send sms to android device with this application.

3.2. Project Management

The project was done for three months, which divided into several steps as below:

Table 1. Project Management

ACTIVITIES	April				Mei				Juni				Juli	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Finding Data	■	■	■	■										
Analysis and planning		■	■	■	■									
Implementation							■	■	■	■	■			
Testing									■	■	■			
Project Presentation													■	■