

## **CHAPTER III**

### **PLANNING**

#### **3.1 Research Methodologies**

To complete this project, there are several steps taken :

##### **1. Seek information of data structure and algorithm**

There are many kinds of data structures and algorithms that can be used to implement the idea of steganography. The most basic is array and LSB algorithm. To complete this project, both are applied in most understanding way.

##### **2. List and study the references**

Apparently the LSB algorithm has several kinds of way to be implemented in this project. First, list all the possible ways to implement the algorithm. Then search for references of the algorithm. To explain the idea better, the algorithm is practiced as simple as possible by separate each process into smaller class.

##### **3. Plan the project**

To use the limited time for implementation efficiently, there is project planning. The planning includes time scheduling and choosing which programming language that will be used.

##### **4. Implement the study into an application**

After planning, the implementation can be started. The programming language chosen is Java due to its efficiency. The implementation includes encryption and decryption. Encryption consist of conversion of text and image to 8 bits binary and the replacement of last bit of every pixel of the image to the separated bit of every character of the text.

##### **5. Review**

The project is reviewed to ensure that the direction of this project is on the right way and to repair the wrong implementation and remove the unused code.

## 6. Presentation

The final step is presentation to explain the project details and show the result of the implementation of data structure and algorithm chosen.

## 3.2 Project Management

*Table 3.1 Project Management*

ACTIVITIES	APRIL			MAY			JUNE			JULY		
Seek information	■											
List and study		■										
Planning			■									
Implementation					■	■	■	■	■			
Review										■		
Presentation											■	